Annual report of the Medical Department / Uganda Protectorate.

UGANDA PROTECTORATE

Annual Report of the Medical Department

For the Year Ended 31st December, 1957

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Medical Department

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UGANDA PROTECTORATE

MEDICAL DEPARTMENT

Annual Report

For the year ended 31st December, 1957

I.—GENERAL REVIEW

1. Nineteen hundred and fifty-seven was on the whole a difficult year. It was unfortunate that the acceptance of the Frazer Report with its plans for expansion of health services should be followed closely by a change in the financial position of the Protectorate. The 1957/58 Estimates were framed on a "standstill" basis. The position was rendered even more difficult by a shortage of housing which made it necessary to place an embargo on recruitment of expatriate staff required to fill the many vacancies which existed in the establishment.

2. On the credit side it is gratifying to record that the General Medical Council in the United Kingdom granted registrable status to all holders of the Licentiate of Medicine and Surgery (East Africa), and that the Legislative Council approved a scheme for the building of a new Mulago Hospital at a cost of £2,300,000.

3. Miss M. Houghton, the Education Adviser to the General Nursing Council of England and Wales, visited Uganda and reported on the training of nurses and nursing auxiliaries.

4. Early in the year Lord Limerick, Chairman of the Medical Research Council, with Sir Harold Himsworth, the Secretary, paid a visit to Uganda after attending the annual Scientific Meeting of the East African Council for Medical Research in Dar es Salaam.

5. Reference was made in last year's report to the increase in the number of cases of sleeping sickness in the Lango District of the Northern Province. Subsequent surveys revealed 289 cases in a limited area along the banks of the River Aswa and its tributaries.

6. The World Health Organization Nutrition Survey Unit finished its assignment in September: a World Health Organization Malarial Team carried out a survey in the Kigezi District of the Western Province in October, and at the end of the year plans were well advanced for the arrival of the World Health Organization Tuberculosis Survey Team.

7. Government, in its White Paper on the Frazer Report, had already accepted in principle the introduction of fee-charging at medical institutions; during the year a committee was appointed by the Minister of Social Services to advise on the various aspects of the proposal.

8. The Uganda Medical (Grants-in-aid to Voluntary Agencies) Instructions were published during the year, thus promoting closer co-operation between the Medical Department and the mission medical services.

9. In the rural areas the drive for better housing and general improvement of environmental hygiene has met with great success in most areas. In municipalities and townships the application of Grade II and III Building Rules has, it is hoped, facilitated the provision of accommodation at a reasonable rent for urban workers.

10. Policies adopted have been to bring existing medical institutions up to reasonable standards in regard to staff, buildings and equipment, to ensure that health projects to which the Department is committed are efficiently conducted and to increase the facilities for training of ancillary staff.

11. With the limitations of trained staff and of finance it has unfortunately not been possible except in one or two instances to accede to the ever-increasing demand for expansion of services.

STAFF

12. In the 1957/58 Estimates the following new posts in the A, B, and C scales were created:—

1 Specialist Anaesthetist.
1 Pharmacist.
1 Radiographer.
2 Charge Nurses (Mental Hospital).
1 Sister-in-Charge (Mental Hospital).
2 Sisters (Mental Hospital).
1 Assistant Instructor of Hygiene.
1 Health Visitor Tutor.
2 Male Tutors.
2 Nursing Sisters.
1 Laboratory Technician.

13. The first three posts were obtained by sacrificing an equal number of medical officer vacancies in the existing establishment.

14. The Senior Medical Specialist, Dr. H. C. Trowell, O.B.E., retired after 27 years' service in East Africa. Promotions were made to the two Senior Specialist vacancies and an Ear, Nose and Throat Specialist was appointed. The post of Senior Medical Officer (Training) and a newly-created post for a second Anaesthetist Specialist remained unfilled.

15. At the beginning of the year, recruitment to medical officer vacancies was disappointing; later the position improved considerably, and at the end of the year the arrival of nine medical officers was awaited; in addition the names of others possibly available on transfer had been officially mentioned.

16. At the end of the year, despite the improved recruitment, the medical officer vacancies were 15, some of which were temporarily filled by local appointments on a month-to-month agreement. The actual operative strength of medical officers at the end of December was 99, which is approximately five-sixths of established posts. Comparison of the racial distribution of medical trained personnel in 1951 and today is of interest:—

		1951	1957
European doctors	...	29	50*
Asian doctors	...	12	19**
African doctors	...	55	43

Of the 43 African doctors, 28 have achieved registrable status. Six were on study or sabbatical leave in the United Kingdom, and a further two will leave in the new year for Diploma of Public Health courses.

17. Miss M. O. C. Bonthron, O.B.E., Matron-in-Chief, retired in July.

18. The shortage of nursing sisters caused difficulties: 25 vacancies existed at the end of the year. The total appointments to nursing sister posts were seven; of these, four were by transfer from other Colonies and three only were on first appointment.

19. The staff position at the mental hospitals was extremely serious; at the end of December only four of the nine posts of male nurse, one of the two posts of sister-in-charge, and one of the four posts of sister were filled.

20. On the administrative side the shortage of reliable clerks threw additional burdens on the higher grade staff, who had to undertake constant checking and supervision to prevent a serious falling-off in efficiency.

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*3 locally engaged.

**4 locally engaged.

21. Recruitment of dentists improved, although all those appointed have not yet arrived.

22. Private practitioners were employed on a part-time basis in out-patient departments at Kampala, Jinja, Mbale and Masaka, and arrangements with two private dentists relieved Government dental officers of the responsibility for touring work.

23. Vacancies at the end of the year for other professional and technical staff were five health inspectors, two pharmacists, one radiographer, and one laboratory technician.

24. Two Assistant Hospital Superintendents were promoted to Hospital Superintendent and four vacancies were filled.

25. There are still a number of district hospitals which are badly in need of lay assistance on the administrative side. When lay administrative staff of the Assistant Hospital Superintendent category have been posted to stations the number of queries on administrative matters, particularly those concerning establishment and finance, have been very largely reduced, the medical officer in charge of the unit finds more time to devote to his medical duties, and due to closer supervision there is a better standard of discipline among the lay staff, particularly in respect of drivers, cooks and dhobies.

26. The demand for greater control over finance and the increasing requirements in respect of establishment and other matters, as necessitated by the new Protectorate Standing Orders and Public Service Commission, have all tended to increase administrative work at stations and without lay administrative staff, Government's requirements in this respect could not have been adequately met.

27. Shortage of trained ancillaries continued to prevent adequate staffing of existing units and excluded any possible expansion of services.

28. The position in regard to locally trained nursing and midwifery staff is shown in Table I.

TABLE I

	Total 31-12-56	Re-engaged	Entered Government service following training	Upgraded or engaged from other sources	Left Government service	Transferred to other cadres after further training	Total 31-12-57
Medical Assistants ..	243	—	29	10	20	—	262
Nurse/Midwives ..	51	8	1	4	17	—	47
Certificated Nurses ..	114	28	5	32	51	1	127
Midwives	164	29	5	41	42	—	197
Nursing Orderlies ..	138	—	24	27	4	5	180

29. At the end of the year the deficiencies of staff still required to run existing institutions (Frazer Committee estimations) were:—

Medical Assistants ...	...	103
Nurse/Midwives ...	...	13
Certificated Nurses	...	100
Nursing Orderlies	...	113.

30. During the year five Health Inspectors (East Africa), five dispensers, four laboratory assistants and seven hygiene orderlies completed training and passed their qualifying examinations.

31. VISITORS.

General Medical Council

Sir David Campbell.
Dr. E. R. Boland.

Colonial Office

Miss F. N. Udell.

Colonial Medical Research

Dr. R. Lewthwaite, Director.

Colonial Medical Research Committee

Major-General Sir Gordon Covell.
Dr. G. Macdonald.

Medical Research Council

Lord Limerick, Chairman.
Sir Harold Himsworth, Secretary.
Dr. J. Pepys.
Sir Landsborough Thomson.

Great Ormond Street Hospital for Sick Children

Dr. Wilfred Sheldon.

Panel of Medical Visitors

Dr. E. R. Cullinan.

General Nursing Council of England and Wales

Miss M. Houghton, Education Adviser.

U.N.I.C.E.F.

Dr. C. A. Egger.
M. Yves Manciet.

World Health Organization

Dr. J. L. Troupin.
Dr. A. Wallgren.
Dr. W. M. Bonne.
Dr. Kyolbe.
Dr. F. Cambournac.

Dr. A. W. A. Brown.
Dr. Giaquinto.
Dr. Bengoa.
Dr. K. A. T. Martin.
Professor W. Darby.
Dr. Hundley.
Dr. K. Seale.
Dr. I. Vincke and members of a malaria course from Bukavu.
Dr. D. D. Hilton, Nigeria.

St. John Ambulance Brigade

Major-General Kirkman, Commissioner-in-Chief.

British Medical Association

Dr. S. Wand.
Mr. D. E. C. Mekie, F.R.C.S.

Others

The Reverend Mother Alcantara.
Dr. Apted, Sleeping Sickness Officer, Tanganyika.
Dr. Autret, Food and Agricultural Organization.
Dr. Bagster Wilson, Director, East Africa Malaria Institute.
Dr. (Mrs.) Bagster Wilson.
Dr. D. H. S. Davis, Johannesburg.
Dr. J. Garrod, Director, East African Leprosy Research Centre.
Miss Anne Guthrie, New York.
Miss Margaret Hocken, Food and Agricultural Organization.
Dr. Jaques, Basutoland.
Sister M. John.
Richard Johnson, California.
Dr. J. M. Liston, D.M.S., Tanganyika.
L. A. Mathias, Uganda Students' Adviser in United Kingdom.
Mr. R. Milnes Walker, F.R.C.S., University of Bristol.
Dr. Janet Niven, Johannesburg.
Lewis K. Woodward, Washington, D.C.

FINANCE AND ACCOUNTING

32. On 1st July, 1956, a new improved form of self-accounting was introduced giving greater control to the Department over its own expenditure and revenue collections. An advantage of the method which became apparent during 1957 was the speed with which it was possible to calculate the actual annual cash expenditure of the Department in the Protectorate after the close of the financial year. This enabled the Department to make a closer estimate of the gross annual expenditure and to take steps to obviate any excess expenditure.

33. On the 1st July, 1957, control of individual motor vehicle accounts was taken over from the Treasury, together with all below-the-line accounts. This left the Department with full control of all its own accounts

although the Treasury Officer of Accounts continued to arrange for payment of a proportion of bank salary schedules.

34. Details of revenue and expenditure for the year 1956/57 are shown in Appendix III. Departmental recurrent expenditure for the year totalled £1,489,216. This is 8·15 per cent of the Protectorate actual expenditure of £18,260,921. Approximately £1,000,000 of the Medical Department's expenditure was devoted to personal emoluments.

II.—VITAL STATISTICS

35. The next full census will be made in 1959. The last was held in 1948, and some abstracts of medical and health interest were included in the report of this Department for 1955.

General Population

36. Estimated mid-year population figures for the past ten years are given in the following table prepared by the East African Statistical Department.

Table II

De Facto Mid-year Population Estimates

Year	Non-African					African	Total
	European	Indian and Goan	Arab	Other	Total		
1948 ..	3,600	36,000	1,500	800	41,900	4,907,000	4,949,000
1949 ..	4,200	38,200	1,600	900	44,900	4,981,000	5,026,000
1950 ..	4,800	40,500	1,600	1,000	47,900	5,055,000	5,103,000
1951 ..	5,400	42,800	1,700	1,000	50,900	5,131,000	5,182,000
1952 ..	6,000	45,100	1,700	1,100	53,900	5,208,000	5,262,000
1953 ..	6,600	47,400	1,800	1,100	56,900	5,286,000	5,343,000
1954 ..	7,200	49,700	1,900	1,200	60,000	5,365,000	5,425,000
1955 ..	7,800	52,000	1,900	1,200	62,900	5,445,000	5,508,000
1956 ..	8,400	54,300	2,000	1,300	66,000	5,527,000	5,593,000
1957 ..	9,000	56,600	2,000	1,300	68,900	5,610,000	5,679,000

Births and Deaths

37. *Africans.* The committee set up in 1956 to consider means for improving the collection of vital statistics of the African population concluded its deliberations and a report was due for publication early in 1958.

38. *Non-Africans.* The following table gives the numbers of births and deaths recorded by the Registrar General, together with the crude birth and death rates calculated from them.

Table III

Race	Births	Crude birth rate per 1,000	Deaths	Crude death rate per 1,000
European	280	31	30	3
Indian and Goan	2,904	52	233	4
Arab	113	57	3	2
Other	59	45	5	4

A detailed analysis by age, sex, race and cause of all deaths is given in Appendix VI (C).

39. Compared with a standard population there is a relative excess of young adults and lack of old persons. This results in a marked reduction in the death rates and increase in the birth rates.

40. As regards deaths of infants under one year of age, four were recorded for Europeans and forty-four for Indians and Goans. These figures would give infant mortality rates of 14 and 15 per 1,000 live births respectively. There are, however, reasons for thinking that the figures for Indians are far too low on account of failure to notify all deaths. The European rate is to be compared with the latest figure for England and Wales of 24 per 1,000.

III.—PUBLIC HEALTH

A. General

41. The inadequacy of medical statistics at present available makes it impossible to give a comprehensive estimate of the state of the public health, or even of the trends in disease. As in past years, available figures show yet another increase in the number of persons attending hospitals and dispensaries, both as in-patients and out-patients. It is necessary, however, to sound the warning once more, that this increase should not be taken as implying a rise in morbidity throughout the territory in general; it indicates rather that still more people are becoming "hospital-minded". The consequence of this is to intensify further the strain on an already hard-pressed hospital service.

42. The solution lies in concentrating to a still greater degree on the prevention of disease, and here the Health Education Unit is playing an increasingly important part. There are signs that its efforts are meeting with no little response, as a positive attitude towards the maintenance of health and the prevention of disease gains ground amongst the general population. Despite these hopeful trends, a large proportion of the diseases prevalent in the country continues to be preventable, much of it emanating from ignorance and a low standard of hygiene.

43. No serious outbreaks of epidemic disease occurred though there was a considerable rise in the number of cases of sleeping sickness reported from Lango District and also a less significant increase in Busoga and Bukedi Districts. The rise in the number of cases in Lango, though notable, does not present a problem of any great magnitude and is being successfully dealt with by the local district medical team.

B. Food and Nutrition

44. The World Health Organization Nutrition Survey Unit finished its assignment in September. At the end of the year the report was awaited.

45. No serious shortages of foodstuffs were reported. Steps were taken to encourage the inhabitants of the West Nile District to return to the growing of millets and to reduce their consumption of cassava.

46. Plans were made to reconstitute the Advisory Committee on Human Nutrition under the name of the Scientific Advisory Committee on Nutrition. The function of this committee would be to direct and advise on research in nutrition and to assess the results of investigations and research. The next stage will be the appointment of a co-ordinating committee which can take executive action. The membership of the co-ordinating committee would include representatives of the Departments of Agriculture, Veterinary and Animal Industry, Education, Game and Fisheries and Community Development.

47. Efforts continued to build up a Protectorate Nutrition Unit. A nutritionist who arrived in April, married within four months and left the service. A successor could not be recruited owing to the embargo on recruitment necessitated by the shortage of housing. Difficulties were encountered in the retention of local girls as nutrition assistants. All but one left to undertake some form of higher education.

48. A medical officer engaged full-time on nutrition work assisted in the World Health Organization surveys, and at the end of the year undertook a review of the prison diets which were found to be satisfactory.

49. Skimmed milk powder was purchased from departmental votes for use in children's wards, out-patient and child welfare clinics. In the Mubende District 4,800 lbs. of dry skimmed milk powder were sold at various child welfare clinics. Shillings 2,000 was provided by the Buganda Government to be used as a revolving fund. The Red Cross subsidised the milk at the rate of 25 cents a pound. Early next year skimmed milk powder will be supplied as a gift from U.N.I.C.E.F.

50. Provision of additional funds permitted the recommendations of the Trowell Committee on Hospital Diets to be implemented in all hospitals. It may now be safely said that in all Government hospitals diet is adequate in quality and quantity and that there is no longer a need for the relatives of patients to frequent the hospital wards and compounds on the grounds that they are required to provide and cook food for those in hospital.

C. Communicable Diseases

(*1*) *Arthropod-Borne*

Malaria

51. The Entomological Section carried out surveys in Soroti, Kasese, and commenced investigations into the malarial hazards of fish ponds which are being developed all over the Protectorate.

52. A malaria survey was performed by the interterritorial malariologist in part of Ankole District which enjoys a lower degree of endemicity than most of Uganda. Evidence was found that the construction of dams in a previously dry part of the district had resulted in a marked increase in spleen and parasite rates in the local population.

53. The malaria engineer attached to the East African Malaria Institute was able to make a full survey of Mbale Township and detailed recommendations regarding its stormwater drainage. Shorter visits were paid by him to Tororo and Soroti for the same purpose.

54. During the period from mid-July to the end of October a malaria survey was carried out in the resettlement area in north Kigezi by Dr. H. de Rook, Malariologist, and Mr. J. R. Cullen, Entomological Assistant, of the World Health Organization. The purpose of this survey was to determine whether it would be practicable to carry out an eradication scheme having regard to the fact that the area in question is well circumscribed by relatively malaria-free zones. The only vector caught was *A. gambiæ* and this could not be found higher than the 4,300 feet contour. At this level examination of schoolchildren gave a spleen rate of 5·2 per cent, and a parasite rate of 1·4 per cent. These rates increased steadily as one dropped towards Lake George. Between 3,000 and 3,500 feet the spleen rate was 82·0 per cent and the parasite rate 41·0 per cent. It is in these lower reaches that so much difficulty has been experienced in getting the people to settle. Although direct larval control measures would not be practicable in the large area involved, with its scattered population, the experts advised that residual hut spraying would have a good chance of success. It should be supplemented by the administration of anti-malarial drugs to all occupants at the time of spraying each group of huts.

55. Government has accepted this advice and is preparing plans to carry out a compaign with the help of a World Health Organization team. Whilst control is being established in the resettlement area surveys will be extended into the south of Kigezi as well as into parts of Ankole and Toro to assess the possibility of a progressive extension of the area under control in future years.

56. Increasing interest is being taken in all districts in the control of malaria in rural areas, particularly in connection with the construction of new roads and dams. A clause is now included in all contracts for road-making requiring excavations to be left in such a state as to be self-draining. The advice of the entomologist is regularly sought at the planning stage of major new construction programmes where these may affect the breeding of mosquitoes.

57. Malaria has been included in the list of compulsorily notifiable diseases in the Municipality of Kampala. In Jinja and Entebbe an attempt is made to find the source of infection in all cases in non-Africans.

Relapsing Fever

58. Cases reported during the past four years are as follows:—

	1954	1955	1956	1957
Toro ...	73	70	19	10
Ankole ...	26	12	2	7
Kigezi ...	4	1	—	1
Masaka ...	27	22	16	8
Mengo ...	3	—	2	2
Total	133	105	39	28

59. The control of the focus at Katwe in Toro is attributed to the fairly widespread use of a 15 per cent D.D.T. dusting powder in houses since 1955.

60. Other factors affecting all districts are the increasing use made of beds and the transport of immigrant labour by lorry with medical examination at the Uganda boundary.

Trypanosomiasis

61. The number of new cases discovered was more than three times that for recent years. North Lango, Busoga and Bukedi accounted for most of the increase, but a greater incidence was reported from all the endemic areas. No new foci were revealed. Figures for all districts over the past seven years are given in Table No. IV below. Great difficulty is experienced in following up cases after treatment and the true death rate, therefore, is not known. The recorded deaths generally refer to patients who died during the first course of treatment.

Table IV

	1951	1952	1953	1954	1955	1956	1957
Buganda—							
Mengo District ..	7	4	4	4	2	5	9
Eastern Province—							
Busoga (includes Jinja) ..	3	3	35	39	44	33	87
Bukedi	7	12	62	30	37	34	80
Northern Province—							
Lango District ..	9	3	10	—	12	29	289
Acholi District ..	8	10	4	5	5	2	5
West Nile District	2	6	9	20	12	5	20
Western Province—							
Bunyoro District	—	—	6	4	—	—	—
Toro District ..	2	—	4	1	1	—	—
Ankole District ..	—	—	—	—	1	—	—
Total Cases ..	38	38	134	103	114	108	490
Total Deaths	2	2	—	3	2	1	2

62. Cases are discovered as a result of patients applying for treatment at medical units, by mass inspections of the population, and by house to house visits. This work, as well as treatment, is carried out by the normal medical and health staff of the district concerned, assisted by inspectors provided by the Provincial Administration.

63. Acknowledgment must also be made to the valuable assistance which continued to be given by the East African Trypanosomiasis Research Organization, Tororo. The general history of the disease in Uganda since the beginning of the century was worked out, and detailed epidemiological studies were made in Busoga, Bukedi, Lango, Acholi, West Nile and Toro by the staff of the Organization. As a result of these studies, it was possible to give expert advice on control measures for each of the main areas. Assistance in the clinical field is noted below.

64. *Busoga and Bukedi.*—Infection occurs on the islands and along the coast-line of these districts. It is of rhodesiense type and it is believed to be transmitted solely by *G. pallidipes*. The majority of patients are male adults engaged in fishing and hunting. An interesting extension of the infection into Buswale, 10 miles inland, which affected women and children, was related to a known movement to the same area of *pallidipes* fly after a period of heavy rainfall. To strengthen the powers of control, Sigulu Island and the lake region of Buswale were declared an "Infected Area" by Legal Notice No. 137 early in the year. No person may enter or remain in such an area without a permit, which is dependent on medical examination. As a supplementary measure both sides of the Buswale road were sprayed by the Tsetse Control Department with dieldrin. It was not, however, possible to say to what extent the subsequent reduction in fly was due to the insecticide or to the natural recession following the onset of the dry season.

65. The Kityerera Road Settlement continued to expand at a very slow rate, insufficient to establish a safe fly-free belt on both sides of the road.

66. Cases responded well to treatment, provided this was commenced within a month of the onset of infection. "Mel B" is now the standard drug for late cases and relapses. The great majority of patients in this area have previously reported in the early stages, but it was disturbing to note that during this year an increasing number of mild infections were arriving in the later stages of the disease and had to be put straight on to "Mel B" treatment. The majority of patients from both districts are first seen at Lumino Dispensary close to Majanji Port and the Kenya border. As a research project of the East African Trypanosomiasis Research Organization, one of their medical officers saw most of the 152 new cases at Lumino and subsequently transferred 130 of these to a small hospital which had been developed in a wing of the laboratory. Other cases were admitted from the contiguous sleeping sickness area in Kenya.

67. *Buganda.*—Precautions are maintained on the islands and on the lake shore which is still heavily infested with *G. palpalis*. Of the nine cases

reported, three were probably infected on Buvuma Island and another four came from the adjoining County of Kyagwe on the mainland. Geographically, Buvuma is closely allied to Busoga and provides plenty of opportunity for contact between man and *G. pallidipes*. That this is the vector here is supported by the fact that the disease is of the clinically rhodesiense type. Elimination of this lingering focus calls for either evacuation of the small population, or intensive resettlement, and the maintenance of an effective barrier between the houses and the heavily forested northern part of the island.

68. *Lango.*—As a result of detailed surveys it was possible to demarcate the limits of the outbreak in the north of the district, which had been noted in 1956. A total of 288 new cases were detected over a wide area watered by the River Aswa and its tributaries. Of these, 247 were found at mass examinations and the remainder turned up at dispensaries. The present form of the disease has a very mild onset and diagnosis is difficult until enlargement of the glands occurs. Blood smears are taken in doubtful cases, but evidence does not suggest that if they were used more generally this would lead to much greater diagnostic accuracy. Reliable evidence was obtained that a number of patients whose disease was still in the "early" stage, must have acquired their infection over a year ago.

69. The Tsetse Control Department continued the work of spraying the river and its tributaries which had been started in 1956, and completed a fly survey over an area of 500 square miles. Dieldrin in 6 per cent solution was sprayed on to the vegetation on the banks of the main river, and this was applied for 76 miles by a power sprayer mounted on a dinghy. In addition, a total of 226 miles of tributaries were treated by knapsack operators.

70. From July onwards, barrier spraying was applied at two-monthly intervals to important branches at the periphery of controlled areas. By the end of the year, the fly in all parts of the area was at such a low density as to make further transmission of the disease most improbable. It is intended to continue this spraying until the number of new cases detected drops to its previously low figure. The cost of insecticide used during the year amounted to £4,700.

71. The main surveys of the people in the affected areas involved the examination of more than 50,000 persons on each occasion.

72. Distinct from the outbreak in the north of the district, an isolated case of rhodesiense type was seen who was presumed to have been infected on the banks of the Nile below Atura Ferry—that is on the Acholi/Bunyoro boundary.

73. *Acholi.*—Three new cases were discovered in the limited River Aswa focus just north of the Acholi/Lango border in mass surveys involving the examination of nearly 20,000 persons. A further two cases in the same area were found at dispensaries. This focus is quite distinct from the affected area of the same river higher up-stream in Lango.

74. *West Nile.*—Twenty cases were reported, compared with five in 1956. All came from the same circumscribed focus around Wolo and Udupi in Aringa County. Clinically they were of the same type of infection as that seen in north Lango. The work of control is carried out by a small mobile unit which has its own Medical Department lorry.

75. *Bunyoro.*—There have been no cases for the past two years. Those found in 1953 and 1954 were of rhodesiense type and are likely to have been infected by *G. pallidipes* near the banks of the Nile which runs between Bunyoro on the one side and Lango and Acholi on the other.

76. *Toro.*—Although there were no cases found in 1956, the old Gambiense endemic focus in south Busongora is being watched and a six-monthly examination of the population was carried out. The density of fly along the main rivers is less than it used to be, on account of an experimental spraying of the banks carried out by the Tsetse Control Department in 1956.

77. Gambiense cases respond most satisfactorily to a course of Antrypol followed by Tryparsamide. No trouble has been experienced as a result of the toxicity of the latter drug.

78. The areas referred to above are named in the map at the end of this report.

KALA AZAR

79. This disease is still limited to Karamoja. Thirteen new cases were reported compared with eight in 1956. More came from Pian County than from Upe this year. A survey was made in November by a Medical Specialist, the Senior Entomologist and the District Medical Officer. Sternal punctures were taken from a number of persons with large spleens, but all were negative.

80. It was noted that even in the dry season sandflies could be caught in large numbers. The specific vector in Karamoja is not yet known.

(2) *Helminthic Diseases*

ONCHOCERCIASIS

81. The number of cases of onchocerciasis treated during the last five years in Government hospitals is as follows:—

	In-patients	*Out-patients*
1953	38	70
1954	156	445
1955	143	415
1956	189	472
1957	130	649

Only a small proportion of infected persons seeks treatment.

82. As in previous years the staff of the Entomological Section devoted a large part of their time to Simulium control work and surveys.

83. *Busoga.*—Many patients continue to apply for treatment but it is believed that they were all infected before the dosing of the Nile, and that the disease is no longer being transmitted. There have been no signs of further fly-breeding on the Nile.

84. *Bugisu.*—Following a survey of the Bufumbo area in 1956 an attempt was made early in the year to secure effective control of *Simulium neavei.* Weekly applications of D.D.T. were made in the form of "Arkotine" to 140 dosing points over a period of three months. The work involved very strenuous physical effort. Many new paths had to be cut through the forest to reach the headwaters of smaller streams. It is therefore disappointing to report that although this measure resulted in a marked reduction in the number of fly caught, complete eradication failed. Expressed as flies per hour the incidence dropped from around 150 before the spraying to 10 afterwards: this low level was still maintained up to the end of the year.

85. Further investigations indicated the following reasons for the failure. Based on work elsewhere it had been presumed that *S. neavei* developed only in association with the crab *P. niloticus* which is confined to the more open stretches of the larger, free-flowing rivers. It has now been demonstrated that on the west of Elgon the crab *P. granviki* is also involved, and that the association is successful in the ultimate wet season tributary streams running through the densest forest cover. It has also been proved that the pre-adult life cycle is much longer than previously supposed. Dosing intervals of three to four weeks would probably be adequate, but because it is likely that the adult life is also extended, it might be necessary in a future attempt to prolong the dosing schedule for six months.

86. *Bunyoro.*—Control measures in which Buchanans Estates have closely co-operated have continued in the Budongo Forest surrounding the sawmills and the forest school. Fly rounds revealed an average of less than three flies per month and, therefore, a small risk of transmission of the disease. Complete eradication from the forest is impossible as it would entail control measures being extended for the whole length of the "Western Rift".

87. *Toro.*—Investigations have continued in the Kibale Forest area to the east of Mount Ruwenzori, where the vectors *S. damnosum* and *S. neavei* are both found. Control measures are likely to be required in this region, but will be difficult on account of the large number of small streams which are involved.

Dracontiasis

88. This disease is only contracted in the Northern Province, principally in east Acholi and Madi. Over 100 new cases were reported

from dispensaries and the following table gives hospital statistics for the past five years:—

	In-patients	*Out-patients*
1953	72	320
1954	97	335
1955	27	196
1956	36	191
1957	34	224

SCHISTOSOMIASIS

89. There has been no change in the endemic areas of the two forms of the disease. *S. haematobium* infection is limited to the shores of Lake Kyoga and nearby swamps. The majority of cases are reported from Lango, followed by Acholi, Busoga and Bunyoro, in that order. The disease is rarely reported by patients, but is found at surveys, schoolboys being most affected owing to their love of bathing in pools and swamps. It is rare to hear of any late complications.

90. *S. mansoni* infection is reported from all districts excluding the hilly areas of Kabale, Ankole and Toro in the west, and Bugisu in the east. Over 90 per cent of cases, however, come from the Northern Province, particularly from Acholi and Madi. Opinions vary as to the degree of morbidity for which this infection is responsible. Although, in the major endemic areas, many young adults appear to be symptomless carriers, experienced clinicians consider this infection is an important factor leading to cirrhosis of the liver and ascites.

(3) *Direct Infections*

ANTHRAX

91. A total of 24 cases in which the diagnosis had been confirmed by a medical officer were notified: Toro five, Ankole six, Mubende five, Mengo five, Karamoja two, and Teso one. As in previous years information was obtained that a number of persons in Ankole and Toro contracted the disease as a result of eating and handling the flesh of hippopotamus which had died of the disease. The majority developed typical malignant pustules and a few acute haemorrhagic dysentery. Treatment with penicillin was effective, all cases recovering.

CHICKEN-POX

92. This disease was notified from all districts except Bugisu. Out of a total of 2,000 cases, 935 came from Acholi and West Nile districts. There were no deaths.

DIPHTHERIA

93. Eight cases with one death were recorded.

CEREBRO-SPINAL MENINGITIS

94. A total of 125 cases with 32 deaths were recorded. The main incidence was in the Western and Northern Provinces.

SMALLPOX

95. The incidence of this disease during the past six years is as follows:—

	Cases	*Deaths*
1952	243	4
1953	341	2
1954	199	2
1955	101	2
1956	231	8
1957	477	4

96. The great majority of cases were very mild and often difficult to distinguish from chicken-pox. All districts were involved except for Lango, Ankole and Bunyoro.

97. In addition to mass vaccination campaigns in the infected areas an attempt has been made in all districts to encourage the people to bring young children for primary vaccination at regular monthly sessions held at hospitals and the main dispensaries, but the number so brought falls far short of the number of infants reaching the age of one year annually. An estimated total of 524,000 vaccinations were performed in the Protectorate, 376,000 of these being in the Eastern Province.

98. Some opposition was shown by members of the Malakite sect in Bukedi, but this was successfully overcome.

99. Under section 40 of the Public Health Ordinance it is compulsory for all children born in the Protectorate to be protected against smallpox within twelve months of birth.

POLIOMYELITIS

100. New cases of acute paralytic poliomyelitis, and deaths, reported since 1953 are as follows:—

	Cases	*Deaths*
1953	45	3
1954	44	5
1955	180	12
1956	75	7
1957	114	7

101. Increasing interest is being taken in the reporting of this disease and from the beginning of the year basic details regarding race, sex, age at onset and outcome have been supplied in respect of each case.

102. During 1957 cases were reported from every district, numbers being roughly proportional to the populations, e.g. Northern Province 35, Eastern Province 39, Western Province 14, and Buganda 36.

103. There was no indication of any definite seasonal variation. The actual totals for the thirteen four-weekly periods were as follows:—

14, 7, 8, 6, 10, 13, 8, 8, 10, 4, 5, 14, 7.

104. Analysis by race indicates that six European cases were treated, with one death in a male adult of 26 years of age. Numbers were insufficient for calculation of the average age at onset. The actual ages were: 3, 3½, 11, 12, 26 and 32. There were ten Asian cases, with no deaths. Nine of these gave an average age at onset of 4·5 with limits of nine months and fourteen years. The remaining case was an adult of 22. The majority of the 99 African cases were children under 14 and gave an average figure for the age of onset of 3·5. Two cases, both Baganda, were 20 and 23 years of age.

105. Poliomyelitis vaccine of British manufacture was available throughout the year for all who asked for it and was supplied at a charge of Shs. 7 an injection. The course consists of two injections at an interval of four to six weeks with a third booster dose after one year. About 5,000 injections were given in all compared with 12,000 in 1956.

106. Young immigrant adults from the United Kingdom are known to be a particularly vulnerable group and for this reason all newly-appointed officers are advised to obtain protection before coming to Uganda. To permit this to be done arrangements have been made by the Colonial Office whereby immunisation is made available on payment and irrespective of age.

Typhoid Fever

107. The figures for cases of typhoid fever treated in Government hospitals for the past six years are as follows:—

	Cases	*Deaths*
1952	371	31
1953	764	95
1954	576	53
1955	567	65
1956	762	76
1957	736	51

108. As in previous years the majority of cases were reported from the heavily populated rural areas of Mengo and Masaka. Reference is made elsewhere to a small outbreak in a temporary prison at Jinja.

109. Despite the increased use of antibiotics deaths continue to occur in cases who come under treatment at a late stage of the disease.

Venereal Diseases

110. The general opinion is that there has been a decrease in the incidence of syphilis in its infectious stages, and that the number of cases of gonorrhoea presenting themselves for treatment continues to increase. Deaths recorded as due to gonorrhoea were generally due to the complications of urethral stricture.

111. Figures for the past five years are as follows:—

	Gonorrhoea (includes cases attending with complications)		Syphilis (all forms)	
	In-patient	Out-patient	In-patient	Out-patient
1953	2,800	16,659	965	22,725
1954	1,838	17,550	725	19,365
1955	1,562	20,083	457	19,518
1956	1,270	24,437	333	16,891
1957	1,250	28,685	224	16,275

Yaws

112. The incidence of yaws continues to fall. Pockets of infection still remain but are being gradually cleared up.

113. In 1955 an attempt was made to eradicate yaws at Kayonza, an isolated gombolola in the middle of western Kigezi. The scheme was to give penicillin to all cases of yaws found and to contacts. The project was not a success as about 400 schoolchildren never turned up. In May 1957 a reassessment of incidence was made by examination of everyone under 20 years of age, but the turn-out of selected population was not altogether satisfactory. In all 1,080 people were examined. Of these 82 had primary yaws, 141 secondary and 95 tertiary. The District Medical Officer comments in his report on the low standard of personal cleanliness, and the prevalence of flies. Kayonza is no longer an isolated pocket of population as there is now a through road to gombolola headquarters.

114. Cases recorded, and this includes that repository for many chronic aches and pains—tertiary yaws—are:—

	In-patients	*Out-patients*
1954	241	14,195
1955	131	13,716
1956	106	10,774
1957	165	10,364

Tuberculosis

115. Nothing is known for certain of the time at which tuberculosis entered Uganda. Isolated from the outside world by natural barriers of desert and jungle, by aggressive native tribes and fear of the far-ranging Arab slavers, Uganda remained a land unknown to the outside world until

about a century ago. But in the heart of the continent vast migrations of peoples went on unceasingly; and one of the tribes who entered Uganda three or four hundred years ago was the Hamitic Galla from Abyssinia, who came in from the north-east and whose descendants are now found in the south-west of the country. They, best of all the immigrants, had had the opportunity of coming into contact with Middle Eastern civilization, and perhaps even with the Portuguese invaders of the Eastern African seaboard; and of thereby acquiring tuberculosis. They brought with them their long-horned cattle, still the only indigenous tuberculosis-susceptible cattle in East Africa.

116. There is no doubt that tuberculosis has been known in this country for a long time. Native tribes have their own names for it, and recognise it as a disease entity. The vastly-enhanced onslaught of tuberculous infection produced by the ever-increasing flood of alien invaders in the last hundred years has failed to provoke widespread epidemics of the disease; nor does local folklore contain any record of such an epidemic; presumptive evidence that the onslaught found a population already resistant to tuberculosis. This is a state not found in "virgin" populations, and indicative of a long-standing experience of the disease.

117. Tuberculin surveys carried out recently have produced the picture of a people in whom the vast majority of the adults are tuberculin positive, without an undue proportion of hyper-reactors. The incidence of active disease is low in proportion to the number exposed to infection; the occurrence of extra-pulmonary forms of the disease is uncommon; and the clinical picture of pulmonary disease shows an increasing incidence of the fibrotic type, especially in the north. These findings confirm the picture of a population with, at present, a considerable degree of natural resistance to tuberculosis. At the same time, the increased opportunities for contact produced by the conditions of modern life may be expected to produce a slow but steady increase in the number of active cases requiring treatment.

118. It is against this background that the present system of tuberculosis control is set. Two years ago the following decisions were made: that the approach to the problem should be the public health one, of finding and rendering sputum negative as many active and open cases as possible; that each district would be responsible for the treatment of its own cases; that treatment would be carried out by a combination of in-patient and out-patient regime; that this treatment would depend mainly upon the modern anti-tuberculosis drugs, administered on fixed schedules; and that the district health staff would, for the present, be responsible for domiciliary visiting and contact tracing. To assist the districts in their work, a programme was laid down for the construction of special tuberculosis wards, the extension of X-ray services and the specialised training of selected nursing staff; and district votes were increased to meet the cost of the drugs to be used. A medical officer was appointed to supervise the administration of the system of control.

119. This scheme was put under way in 1956 and experience in 1957 has shown that the decisions made were the correct ones. The system of treatment is working well, and no major faults have developed. It has shown that prolonged out-patient treatment of the African is both possible and successful; and that no case can be considered incurable until chemotherapy has been tried and failed. In 1957 a total of 1,353 cases of tuberculosis were diagnosed at Government hospitals, of whom 1,243 received varying periods of in-patient treatment. Of these 115 (9·25 per cent) died; this compared favourably with, for example, 1955, when of 804 in-patients, 123 (15·3 per cent) died.

120. More encouraging is the fact that, while many of the in-patients in 1955 discharged themselves to die at home, in 1957 most of them proceeded to out-patient treatment; and to these must be added the 500 who were already on out-patient treatment at the end of 1956.

121. Four tuberculosis units were opened during the year, at Jinja, Kabale, Fort Portal and Mbarara. One unit at Lira is expected to be in operation early in the new year. The two medical assistants in training at Mulago completed their course satisfactorily and are proving their value in the tuberculosis work in their districts. Three more medical assistants are at present in training. Three static X-ray units are now in operation, at Jinja, Mbale, and at Masaka, and one at Mbarara is nearing completion.

122. No surveys were undertaken during the year, but towards its close planning was completed for the projected visit of a World Health Organization Tuberculosis Survey Team in 1958. Plans were also prepared for a tuberculin survey, with X-ray follow-up, in Jinja Municipality. Investigations continued in Makerere College into various aspects of tuberculin and B.C.G. vaccinations. An order was placed with the Crown Agents for a mobile X-ray unit, which will be capable of full-scale photography and mass miniature radiography.

123. In Mulago Hospital the Medical Division put in hand a trial of "INAH" alone in high doses, and carried out preliminary discussions on further drug trials. The specialists of this division also undertook the investigation of cases referred to them from district units, as well as the in-patient treatment of cases from the surrounding districts. The Surgical Division carried out some very successful surgery of tuberculous chests and bones.

Leprosy

124. The estimated number of patients in Uganda is about 70,000, a prevalence rate of 13 per 1,000. The highest incidence recorded in surveys is 43 per 1,000 in a limited area in the Eastern Province. More than half the total number of patients are in the districts of Busoga, Bukedi, Bugisu and Teso, in the south-east corner of the Protectorate. There is also a heavy infection in Toro District in the Western Province among the Bwama and Bakonjo who live in the forest and foothills of the Ruwenzori Mountains.

125. Treatment continues with oral sulphones as the method of choice. Simplicity of administration is the essential principle in a mass compaign where staff and materials are limited. Injection with depot preparations may be introduced for patients who do not respond satisfactorily to oral sulphones, but only where supervision can be relied upon.

126. The system of leprosy treatment villages continued to expand and reached the total of 73.

West Nile	3	Busoga	21
Acholi	10	Bunyoro	2
Lango	10	Toro	4
Teso	6	Mubende	5
Bukedi	3	Mengo	5
Bugisu	3	Ankole	1

127. Others are being built but some are being closed either because they are no longer needed, or because alternative sites have been chosen. It is not expected that the number of villages will greatly exceed those in operation at the present time. They continue to be maintained by communal effort with matching assistance from Protectorate Government. The more infectious patients and those needing special care are accommodated in the settlements of Nyenga, Buluba, Kumi-Ongino, Bunyonyi and Kuluva. Out-patient clinics are held at Government dispensaries, the treatment villages and the settlements. Attendances in some areas are not as regular as might be wished because distances are great, but there is evidence that the incidence of new cases is falling. Fewer children are presenting with the disease, and the more serious cases are less common. As far as can be ascertained 30,000 are under treatment.

128. Investigations have continued into the epidemiology of the disease, the factors influencing transmission and ways of detecting those who are more liable to develop the disease after exposure to infection. Co-operation between the district councils, the missionary societies, the British Leprosy Relief Association and Protectorate Government continues to be very satisfactory. Assistance with essential drugs, laboratory and teaching equipment and transport has been provided by U.N.I.C.E.F.

D. Health Education

129. A new Senior Medical Officer (Health Education) was appointed in October 1956, and with the subsequent appointment of a commercial artist to this section of the Medical Department in January 1957, it was possible to accelerate the pace of production of visual aids. At the end of 1957 over 10,000 posters had been produced on the silk screen machine supplied by U.N.I.C.E.F. These were distributed through many outlets, including Medical Department units, the Community Development Department and the Education Department. Favourable comment on these

has been received from many sources. During the year the Health Education Section acquired a Roneo duplicator for colour mimeographs and the first examples of cyclostyled sheets in colour were produced from this machine. These were designed to be complementary to some of our posters and film strips.

130. Another successful project was the production of eight film strips on subjects ranging from "Good houses" to "Hookworm". These were drawn, photographed and produced entirely by the staff of the Health Education Section. Suitable small film-strip projectors were available on the commercial market, and by the end of the year, some units had been supplied with these. It is hoped eventually to be able to supply these projectors to all districts. Other departments have been encouraged to buy the same type and use the film strips which are distributed free of charge. In connection with the production of film strips, a small but increasing library of photographs is being built up in the Health Education Section. This will serve the purpose of making available on the spot suitable material for future film strips, and for other visual aids, such as flannelgraphs, flash cards, calendars, etc.

131. During the year material was put together for the production of a health calendar for 1958. The subject chosen was "Baby's First Year" and the calendar consists of 12 pictures drawn in colour. It is designed so that the picture can be preserved and used by private persons for hanging up in their homes, or by the Medical and other departments as visual aids for lectures on maternal and child welfare. Underneath each picture of the calendar, a small lesson of 50/60 words was printed in English and five vernacular languages. The calendar was put on the market early and had a good reception. Unsold copies are bought back by the Medical Department and are held against future demands for visual aids of this type. The calendar part can be torn off and the pictures used to illustrate a lecture.

132. Three county shows were attended during the year. Assistance was given to the local medical and health authorities in the form of supplies of display material such as soft-board, stick-on lettering, posters, booklets and various visual aids. A "Pest Week" directed against the housefly, the mosquito, and the rat, was held in Masaka under the auspices of the Township Authority and the Medical Department. The Health Education Section was able to help with material for this very successful week of health education.

133. A close and profitable co-operation was maintained with the Department of Community Development and its women's clubs, the Department of Education, and the nutritionists attached to the technical schools and teacher training centres. This co-operation led to the giving of a great number of lectures by the Senior Medical Officer (Health Education). Lectures were given to the Red Cross Society, to the Catholic Doctors Guild, to many schools and a long series was delivered

throughout the year to the various groups who attended courses at the Community Development Training Centre at Nsamizi in Entebbe. This work proved to be very valuable since important groups of the community pass through this training centre each year, e.g. police, trainees, chiefs, Community Development Officers of all races, members of the African Local Governments, African members of the Protectorate Civil Service and health visitors. Lectures were also given to nurses in training, and to the various departmental refresher courses which were arranged for nurses and medical assistants.

134. A special course for traders was initiated during the year with the co-operation of the Trade Development section of the Ministry of Rural Development. Nine sessions were held with traders from different parts of the country and six hours were devoted to each session. The regulations governing the sale of drugs and medicines were explained fully to these classes and three of the lectures of each session were devoted to health education and environmental hygiene. This course was very popular with students.

135. Health films were shown to audiences at training schools, county shows, and elsewhere, on numerous occasions throughout the year.

136. In March 1957, the Senior Medical Officer (Health Education) visited Dakar in French West Africa at the invitation of the World Health Organization to attend the Health Education Seminar at which he read a paper. In July the Senior Medical Officer (Health Education) and the Artist visited Nairobi to see the work of the Health Education Unit. Many useful contacts were made and discussion took place with a view to avoiding duplication of work by the two units. Much useful information was gained, regarding silk screen and printing processes, which was put to good use later in the year in Uganda.

137. The sale of existing booklets on the health education subjects was encouraged throughout the year and in conjunction with a film strip and wall charts on tuberculosis a booklet on the same subject was produced in three colours on the Roneo 750. This was a limited edition and was very well received. The advice and comments expressed were incorporated into a new text and a booklet will now be published by a commercial firm. A tape recorder was acquired by the Department and has been found useful at county shows and, in particular, for recording messages from prominent personalities throughout the Protectorate, directed to their people and encouraging good health.

138. On the photographic side, in addition to the film strip library, the usual work of the Department has continued. A dark room assistant has been recruited and trained, and photographs are available for Press and propaganda purposes.

139. Close liaison was maintained through the year with the press and the Government Information Department. Several radio scripts on the

work of the Medical Department and on training were prepared and read during the year. A series of weekly talks on health subjects and entitled "Your Good Health" was in the planning stage during the latter months of 1957. A monthly article under the title "Newsletter Doctor" was produced for the Information Department "Schools Newsletter". This magazine is estimated to have a reading public of 30,000 people in the Protectorate each month. It is distributed free to all schools.

140. Visitors to the Health Education Section during the year included Western Province members of the Legislative Council, Community Development Officers from all over the Protectorate and the Minister of Health and Works in His Highness the Kabaka's Government, Mr. A. K. Sempa. We were happy to welcome delegates to a conference on nutrition in Kampala under the auspices of the World Health Organization and the Food and Agricultural Organization.

E. Maternal and Child Welfare

141. Maternity work done in hospitals and rural maternity units of both Government and missions is shown below.

Table V

Summary of Maternity Services, 1957

	Government					Missions
	Buganda	Eastern Province	Northern Province	Western Province	Total	Protectorate Total
Units with maternity beds (including rural units) ..	19	20	5	17	61	44
Maternity beds ..	359	290	66	181	896	1,072
Total Admissions ..	15,695	12,108	2,853	5,222	35,878	—
Women delivered* in hospital ..	11,546	8,265	2,429	4,135	26,375	16,763
Live births ..	11,052	7,783	2,294	3,914	25,043	16,383
Stillbirths ..	629	563	150	285	1,627	590
Neo-natal deaths	266	170	74	127	637	376
Abortions ..	1,093	637	246	388	2,364	695
Maternal deaths	97	164	47	61	369	76
Ante-natal—New cases ..	36,195	41,768	5,044	26,540	109,547	53,106
Ante-natal Total Attendance ..	95,702	103,531	11,824	59,903	270,960	117,771

*After 28th week

142. The provision of maternity services has been limited by the number of trained midwives available. All deliveries are carried out in institutions and there is no domiciliary service other than that recently initiated by the Ngora Mission.

143. Almost everywhere the problem of overcrowding increases. Mention is made later of the difficulty of admitting to Mulago Hospital all those who wish to avail themselves of hospital facilities. Ante-natal clinics are conducted at hospitals and dispensaries where there are nursing sisters or midwives.

144. The vicissitudes through which ante-natal clinics pass is demonstrated by a report from the West Nile:

> "An experiment was tried with ante-natal clinics at Yumbe and Maracha dispensaries after vociferous demands from the local people. The nursing sister attended these monthly. On the first occasion between two and three hundred people came to each clinic. The next month attendance dropped to eight and one respectively, after which the trial was abandoned."

Child Welfare Work

145. It has been possible to post a nursing sister with health visitor's qualifications to Busoga, and in two districts of the Kabaka's Government full time health visitors are employed.

146. In other areas the nursing sisters from the district hospitals spend as much time as their other duties permit conducting infant and child welfare clinics in hospitals and in rural units.

147. The great difficulty is in persuading the African public to appreciate the proper functions and use of infant and child welfare clinics. The persistent complaint from organisers is that the sessions tend to become sick children's clinics. Some of the workers bear their burdens with fortitude and eventually succeed in establishing the nucleus of a proper clinic. Others find it easier to concentrate on the apparently fit in those groups who are likely to be receptive of their teaching, leaving the sick children to the care of the medical assistants and nursing orderlies.

Child Welfare Unit

148. One medical officer was employed full time on the work of the Child Welfare Unit which is centred on Kampala. As all the work of this unit is done either in the Kampala Municipality or in the Buganda Kingdom arrangements were made for the unit to be taken over by the Provincial Medical Officer of the Buganda Government for the purposes of day-to-day administration.

149. The table below shows attendances at clinics organised by the Child Welfare Unit. Fewer clinics were held in 1957 than in 1956, but the average attendance at each clinic was nearly the same. The proportion of new children to re-attendances remained the same in the two years.

TABLE VI

	1956	1957
New children	3,238 (26%)	2,973 (25%)
Reattendances	9,362	8,824
Total Attendances ...	12,600	11,797
Number of clinics held	319	310
Average attendance at each clinic	39·4	38·0

150. In 1957 there was a notable falling off in the number of Baganda attending clinics, with an increase in the numbers from other tribes, particularly of the Ruanda-Urundi group.

151. The numbers are as follows:—

	1956	1957
Baganda	1,729 (50%)	1,192 (42%)
Non-Baganda ...	1,690 (50%)	1,661 (58%)
TOTAL ...	3,419	2,853

152. The table in Appendix VI (D) shows the incidence of various infections and malnutritional disorders amongst children attending Mengo child welfare clinics for the first time.

153. Very few babies with congenital syphilis were seen. Round worms were commonly reported, both among the Baganda and non-Baganda. One child was treated six times during the year, and in spite of this in December the mother appeared again with a bottle containing several round worms said to have been passed by the child. The home was visited and it was found that, whilst they had a smart latrine with a cement stance for the adults of the family, the children were using a hole about 18 inches deep close to the house—there were several other similar holes covered over with soil.

154. The following table shows the incidence of marasmus and kwashiorkor amongst the groups most at risk.

TABLE VII

Kwashiorkor

First attendance age 1–6 *years*

	Baganda 1957	Non-Baganda 1957	Total 1957	Total 1956
Number examined	154	194	348	539
Kwashiorkor	10 (7%)	14 (7%)	24 (7%)	31 (6%)
Hair changes but no œdema	32 (20%)	33 (17%)	65 (19%)	97 (18%)

Marasmus

First attendance age 0–1 year

	Baganda 1957	Non-Baganda 1957	Total 1957	Total 1956
Number examined	331	463	794	1,026
Marasmus	5 (1·5%)	7 (1·5%)	12 (1·5%)	8 (0·8%)
Under feeding	32 (10%)	23 (5%)	55 (7%)	56 (6%)

F. School Hygiene

155. Whenever possible schools were visited, advice was given on hygiene and sanitation and opportunities for health education were taken.

156. There was an increasing interest in the provision of midday meals for schoolchildren. In the majority of cases the cost was met by the parents of the children.

157. Grade II Buildings Rules were published permitting single storied school buildings, which were used only for day pupils, to be constructed to Grade II specifications.

G. Environmental Hygiene

(1) *Housing and Town Planning*

158. The number of plans submitted to local authorities for approval suggests that the high rate of house building which has been current for the past few years shows signs of slowing down.

159. Additional Grade II and III Housing Areas have been gazetted during the year. The demand for plots in these areas is not as great as was originally envisaged.

(2) *Water Supplies*

160. The municipalities and towns have piped water supplies, the water being treated by coagulation, filtration and chlorination.

161. Many trading centres and minor townships have supplies from powered bore-holes or other sources.

162. Well drilling continues in all districts of the Protectorate under the direction of the drilling section of the Geological Survey Department.

163. Spring protection and maintenance is carried out in all districts under the supervision of Health Inspectorate staff.

(3) *Food Hygiene*

164. *Meat.* Full-time meat inspection is carried out in all urban areas by members of the Medical or the Veterinary Departments, the main cause of condemnation being *C. bovis.*

165. *Milk.* The bulk of the milk now being sold in the urban areas is imported from Kenya in waxed cartons. This milk is becoming increasingly popular among the local population.

(4) *Hotels*

166. The Hotels Board has been reconstituted. Originally the Chairman and Secretary of the Board were Medical Department officials; now, however, the Board comes under the jurisdiction of the Ministry of Commerce and Works.

167. New hotels at Mbale and Masaka are being constructed by the Uganda Development Corporation, and others are being planned for Kasese and Gulu.

(5) *Urban Sanitation*

168. It was recorded in last year's annual report that both Mbale and Masaka have a full-time health inspector working in the town. The development of a small township health department in each has proceeded satisfactorily during the year and the advantage of concentration on township public health problems by a full-time officer is becoming evident.

169. Kampala, Jinja and Mbale now have sewers and sewage disposal works, though the installation at Mbale is not yet complete. It is hoped that connections will be made in 1959.

(6) *Rural Sanitation*

170. Health staff continue to work in concentrated areas of duty, improved housing and water supplies being the main objective.

H. Health and Welfare of Employed Persons

171. The Senior Medical Officer (Labour) returned from a Fellowship granted by the International Labour Office in the United States in the middle of the year. No relief was provided during his absence, but outstanding matters were dealt with by Medical Headquarters.

172. There have been no very great changes in the morbidity pattern of sickness occurring in employed groups. Malaria continues to dominate this picture and minor injuries and respiratory disease are also prominent. The malaria figure has remained very much the same for the past four years in spite of efforts by employers to reduce the mosquito population

by larval and adult control and by providing prophylactic drugs. Malaria continues to be a serious disease as far as the agricultural section of the employed population is concerned, and it particularly affects those who come from relatively non-endemic areas.

173. The high incidence of respiratory disease amongst employed persons was maintained in 1957 by a sharp epidemic of so-called "Asian influenza", occurring in the last three months of the year. The interesting feature of this epidemic was that it broke out almost simultaneously at a variety of places throughout the Protectorate, some of them hundreds of miles apart. Employers with the best conditions of labour seemed to have their labour force as badly affected as those whose labour conditions were poor. The disease itself was not serious, but obviously of a high infectivity. There were no deaths recorded, but in several instances 25 per cent to 30 per cent of the work force was affected. The disease commonly caused absence from work for four to five days, during which time the patients suffered from pyrexia, bronchitic symptoms and aching pains in the limbs. It is not possible to say what effect this epidemic had in so far as loss of efficiency caused during the convalescent period is concerned, but this must have been considerable.

174. The highest incidence of respiratory disease continues to be recorded in the tobacco manufacturing industry, tea and mining industries. It is difficult, if not impossible, to dissociate entirely occupational causes of respiratory disease from those due to climatic changes. Nevertheless, it seems to be definitely established, owing to the consistency of records over the last four years, that there is an increased incidence of this disease in the tobacco manufacturing industry, which appears very likely to be due to some environmental cause within the factories.

175. Medical examinations were carried out on asbestos workers in the dusty processes at the asbestos cement factory in the Eastern Province. In no case was there any indication that chest disease was being caused. Nevertheless, for the first part of the year the dust conditions in the dry processing sections of this factory were most unsatisfactory. In the last few months of the year, however, the installation of suitable local exhaust ventilation was enforced as a result of a court order. Conditions in this factory, with one or two minor exceptions, are now satisfactory. However, as an added precaution, personnel at particular risk will continue to be examined.

176. There has been a maintenance of the comparatively high standards achieved in the living conditions of most employees. The tendency which has been apparent over the last few years for permanent buildings to replace temporary and unsatisfactory ones has continued. The greatest difficulties have continued to be in the matter of supervision and the maintenance of hygiene.

177. Certain amendments to the Employment Rules, particularly those rules dealing with health, were introduced during the year. None

of these amendments were revolutionary in character. Their chief object was to make legal provision for the enforcement of standards which the majority of employers had been observing for some years.

178. Under these amendments metal-walled buildings are only permitted for three years. When these buildings were originally imported ten or more years ago, the intention was that they should be used as a temporary expedient and particularly for the provision of accommodation where labour gangs were moving from place to place. In the event, however, this type of dwelling has become commonly used for long periods.

179. Experience has shown that the surfaces of metal buildings become corroded and tarnished after quite a short time. As far as aluminium is concerned, in certain cases the reflectivity is rapidly lost and untreated corrugated iron has little reflectivity at all. The consequence is that this type of building is frequently too hot during the day and too cold at night. Insulation of these buildings is not very satisfactory and very difficult to maintain.

180. The increased use of insecticides and other toxic chemicals in agriculture has given rise to some anxiety. Over the past few years there has been a great increase in the variety of insecticides on the market and employers have been experimenting with newer types of insecticides. Some of the latter have dangerous properties, particularly to those who are accustomed to handling concentrated solutions and those regularly engaged in indoor spraying. In addition to this, some of the Diels-Alder group of insecticides have been suspected of causing resistance, particularly in flies. Discussions have taken place with the members of Agricultural Department, and research organisations, with a view to considering what steps should be taken to control the sale and use of these chemicals. The present position is that the matter has been referred to the Minister of Natural Resources for him to decide what type of legislation should be introduced to effect control.

181. There has been a considerable reduction in the numbers of migrants entering Uganda along the south-west route, particularly from Ruanda-Urundi. The migrant situation in other parts of the territory remains unchanged. There has been no evidence that any disease has been introduced by this migratory movement and, in particular, no further cases of sleeping sickness have been discovered.

182. The repatriation of incurables and chronic sick to Ruanda-Urundi has been continued, and during the year 45 patients were repatriated. This figure includes six mental patients. The repatriation programme was discussed with the Belgian authorities at the Anglo-Belgian Conference on Migrant Labour which was held in Usumbura in November. A good level of understanding was reached with the Belgian authorities, and in particular agreement was reached at this conference concerning the continuation of treatment in Ruanda-Urundi of tuberculous patients after they had received hospital treatment in Uganda. The fundamental

principle underlying the repatriation programme is that a Ruanda-Urundi national must have a home or family in Ruanda-Urundi and express a desire to return to it, and he must be without family or home in Uganda. These conditions are rendered necessary by the large number of Ruanda-Urundi natives who have become virtually domiciled in Uganda.

183. Since the conference in November a Vice-Consul has been appointed to the Belgian Consulate in Kampala, and one of his duties is to assist with the repatriation programme, particularly as far as the identity of patients is concerned. Already the Vice-Consul has been of great help in interviewing patients, especially as he has served for a long time in Ruanda-Urundi and is familiar with the country and the language.

184. The number of medical orderlies employed by labour concerns continues to increase year by year. The exact number of orderlies employed in this way is not precisely known. It seems now to be necessary to provide for formal approval of these orderlies and, in consequence, towards the end of the year arrangements were being made for their registration. A few of these orderlies are of a high standard and are capable of using a wider range of drugs than that included in the Third Schedule to the Employment Rules. It is probable that in certain cases the range of drugs which these orderlies are permitted to use will be extended, provided that there is at least some supervision by a visiting medical practitioner or medical officer. The small dispensaries run by employers in this way undoubtedly serve a good purpose. They remove a considerable burden of minor cases from Government dispensaries and hospital out-patient departments, and as far as the employer is concerned, it means that very much less time is wasted on this account. It has never been necessary to require an employer to set up a dispensary, except in a few exceptional cases, as the value of a small dispensary is becoming increasingly recognised by employers.

I. International and Port Hygiene

185. Of the diseases covered by the International Sanitary Regulations, smallpox was the only one which occurred during the year. There were 481 cases notified with four deaths. Further details are given in Section C.

186. Out of 2,702 aircraft which landed at Entebbe Airport during the year, 1,665 were sprayed with insecticide. The total rainfall for the year in Entebbe amounted to 64·58″, spread over 140 days. As part of the mosquito control measures 370 gallons of high-spread anti-malarial oil was applied to potential breeding places, much of it in the form of impregnated sawdust. Under a revised scheme for the catching of adult mosquitos at selected points the following figures were recorded:—

Anophelines	...	14
Culicines	...	3,433
Aedes	...	3

Over 46,000 inspections of premises for aedes larvae gave an index of 2·38 per cent for the year.

J. Health of Prisoners

187. The rapid development of new prisons with their own hospital wards presents considerable staffing problems for this department. Particularly is this the case in the Eastern Province. For the first time a medical officer from the district hospital made daily visits to the new Jinja prison. A new hospital at the recidivists prison near Tororo was equipped and also provided with a resident medical assistant by this department.

188. An outbreak of typhoid fever occurred in the prison labour camp at Kirinya, Jinja, in the early part of the year. A total of 51 cases, with one death, was reported during the first four months. The outbreak was attributed to two of the cooks who were carriers. These were taken off duty and subsequently all cooks were medically examined before appointment. As a further precaution all prisoners were inoculated with T.A.B. vaccine. The latter is now standard practice at all Protectorate and some local government gaols.

189. Morbidity and mortality statistics for prisoners in Protectorate gaols during the past five years are given in Table VIII below:—

Table VIII

Prisons

	1953	1954	1955	1956	1957
Daily average in prison	3,476	4,071	4,482	4,894	5,257
Percentage on sick list	2·3	1·5	1·4	1·8	1·6
Death rates per 1,000	7·8	7·1	6·0	4·7	5·6
Hospital admissions per 1,000.. ..	486	378	450	373	412

190. There were 32 deaths in Protectorate prisons, the reported causes of which were as follows:—

Diseases of the heart ...	3
Pneumonia	6
Tuberculosis	2
Cerebral haemorrhage ...	3
Meningitis	1
Encephalitis	2
Typhoid fever	3
Abscess	2
Septicaemia	1
Acute mania	1
Chronic nephritis	1
Epilepsy	1
Malaria	2
Accidental causes	1
Ill-defined causes	3

191. Amended Prison Rules introduced in July embodied revised dietary scales which had been drawn up in consultation with this department and with the help of the World Health Organization Nutrition Survey Team.

192. Although not finished, the new Buganda Government prison at Kigo was opened for the admission of some prisoners to reduce serious overcrowding elsewhere in Buganda. The Buganda Ministry of Health found it possible during the latter half of the year to place one medical officer in charge of prisons.

K. African Local Governments and Municipalities

193. During the year there has been no further devolution of responsibility for medical services to African local governments.

194. The following was the estimated expenditure by African local governments for health services for the year 1957/58:—

	Recurrent	Non-recurrent
	£	£
Northern Province—		
Acholi	4,555	17,860
Lango	7,338	14,575
Madi	1,195	907
West Nile	2,962	5,539
Karamoja	1,852	2,350
Eastern Province—		
Busoga	16,384	3,155
Bukedi	11,505	3,450
Bugisu	10,219	11,050
Teso	9,450	14,868
Western Province—		
Ankole	3,099	13,900
Bunyoro	2,975	2,000
Kigezi	6,892	5,580
Toro	5,760	6,750
Buganda—		
H.H. The Kabaka's Government	52,086	—
*Transferred services	144,183	28,850

*Protectorate Government's contribution.

195. In January Jinja became a municipality with its own health staff, initially composed of Government officers who were transferred or seconded.

196. A most important and significant step forward in the field of rural sanitation was the formation of an Acholi District Council Health Committee which held its first meeting during April. The scope of its deliberations have as yet been limited, but items such as the housing competition, siting of dispensaries, leper camps and proposed trading centre bye-laws have been discussed. At least one other district in the Northern Province has its own public health committee.

L. Devolution to H.H. the Kabaka's Government

197. Transfer of the health services in Buganda to His Highness the Kabaka's Government was completed in November when the Masaka District was handed over. The position at the end of the year was that with the exception of the hospitals at Kampala, Masaka and Entebbe, the municipality of Kampala and the townships of Masaka and Entebbe, and Luzira Central Prison, public health and curative services throughout Buganda became the responsibility of His Highness the Kabaka's Government. The Principal Medical Officer and six medical officers are seconded from Protectorate staff. Four locally qualified doctors have been recruited by the Buganda Appointments Board into the Buganda Civil Service.

198. In Buganda there was one major change in the administrative arrangements. The combination of the ministerial portfolios of Health and Works and the appointment of a Permanent Secretary of Health and Works necessitated a change in the designation of the Senior Medical Officer who had previously held the post of Permanent Secretary to the Ministry of Health. He now becomes Principal Medical Officer with direct access to the Minister as his professional adviser on health matters.

M. Statutory Boards and Committees

199. The Advisory Board of Health which is appointed under the Public Health Ordinance held three meetings. Business was mainly concerned with the approval of Grade II and Grade III housing areas and the rules and regulations necessary to maintain reasonable public health standards in such areas.

200. The Medical Board held three meetings. Matters dealt with included in licensing of six practitioners, disciplinary cases resulting from advertising, a conviction of being drunk in charge of a car and a lack of the care of poisons. The Board considered a complaint from a registered practitioner who had been interrogated by the police whilst giving injections in a public market. The Board considered that such a practice was to be strongly deprecated as it was likely to result in a low standard of medicine, as adequate diagnosis was almost impossible. The complainant was advised to work from a fixed point such as a consulting room or a dispensary.

201. The Nurses and Midwives Council met on two occasions and carried out such essential business as could not await the passing of the revised Nurses and Midwives Ordinance.

202. The Pharmacy and Poisons Board held one meeting but throughout the year much work was done in committee on the amendment of the Pharmacy and Poisons Ordinance and in the drawing up of necessary rules.

203. The amended Ordinance was passed by Legislative Council in September, 1957.

204. The Director of Medical Services, or his representative, is a member of the following boards or committees:—

The East African Advisory Committee for Research.

The Tsetse, Trypanosomiasis and Game Sub-committee of the Natural Resources Committee.

The Standing Advisory Committee on Human Nutrition.

The Central Labour Advisory Committee.

The Factories Advisory Board.

The African Housing Advisory Committee.

The Town and Country Planning Board.

The New Mulago Planning Committee.

205. Representatives are nominated to the Red Cross Society, St. John Ambulance Brigade and the Uganda Council for Voluntary Social Services.

N. Registration of Professional Persons

206. A summary of the entries in the various professional registers is given below:—

Register	Number at 31-12-56	Names added in 1957	Names removed in 1957	Number at 31-12-57
Doctors—				
Registered	290	34	19	305
Provisionally registered	10	8	—	18
Licensed	53	5	4	54
Dentists—				
Registered	15	2	—	17
Licensed	7	1	—	8
Under permit	1	—	—	1
Pharmacists	24	10	—	34
Midwives—				
C.M.B. Standard	163	20	14	169
Locally Trained	803	40	—	843
Nurses—				
State registered	136	14	1	149
Certificated	336	62	—	398
Medical Assistants	284	29	2	311
Nursing Orderies	189	26	—	215

IV.—CURATIVE SERVICES

A. Hospitals

Mulago Hospital, Kampala

207. A detailed list of Government hospitals is given in Appendix VII (A). Mulago Hospital in Kampala with 648 beds is twice as large as any other hospital in Uganda. In addition to its work as a general

hospital it has two other very important functions. The most important is that of a training centre with responsibilities not only to Uganda but to the whole of East Africa. Secondly, it acts as a specialist centre to which patients are referred from all over the Protectorate.

208. Makerere Medical School is the only training school for doctors in East Africa, and is situated in close proximity to Mulago Hospital where the students do their clinical work. The Medical Department staff at Mulago assist the Makerere staff in this training. The close association between Mulago Hospital and its staff and the Medical School at Makerere works smoothly, and it was a cause for mutual satisfaction when, after a visitation from the General Medical Council, the Diploma of Licentiate of Medicine and Surgery (East Africa) was recognised for registration in the United Kingdom under Part III of the Medical Act, 1956.

209. Mulago Hospital is approved for the pre-registration year of doctors qualifying at Makerere, by a number of examining bodies in the United Kingdom, and as providing at least part of the necessary experience for the higher qualifications of the Diploma in Ophthalmic Medicine and Surgery; the Fellowship of the Royal College of Surgeons, and the Membership of the Royal College of Obstetricians and Gynaecologists.

210. Further important functions are the training of nurses, midwives, dispensers and radiographers. Later in the report, under the heading of Training Schemes, reference is made to the concession granted by the General Nursing Council of England and Wales whereby part of the time spent in training at Mulago can count towards the period of training required for S.R.N. in the United Kingdom.

211. There was a slight drop in the number of admissions to hospital as compared with 1956, but an increase in the number of out-patients. Kampala Dispensary, which although not situated in the precincts of the hospital, is run as an integral part of Mulago, and comes under the jurisdiction of the Medical Superintendent.

212. The in-patient and out-patient figures at Mulago for the last four years are as follows:—

	1954	1955	1956	1957
In-patients ...	12,220	13,553	16,885	15,393
Out-patients ...	285,179	265,216	366,582	369,743

213. At Kampala Dispensary the out-patient attendance was 94,776.

214. The number of deliveries at Mulago in 1957 was 3,147, and as with so many other figures in this report was the highest ever recorded. Such overcrowding lowers the standards under which medical students and midwives are taught. As the majority of patients are discharged 24 hours after delivery teaching during the puerperium must be reduced to a mini-

mum. The proposal to build an entirely new hospital at Mulago precludes any suggestions of major additions to the present hospital. Certain essential building work was however carried out during the year:—

(i) A new paying maternity unit of two-bedded wards was completed.

(ii) Alterations to the children's ward to convert it into cubicles, and a laboratory were commenced.

(iii) A new all-electric kitchen was put into operation.

(iv) Alterations were made in the operating theatre.

Medical Division

215. Considerable research work is being carried out in the Medical Division. The main and most important research is on the treatment of tuberculosis where controlled therapy trials are in operation in association with centres in Kenya, Tanganyika and the Tuberculosis Research Unit of the Medical Research Council.

216. Other research projects are studies of the new-born (in collaboration with the Obstetrics Division), on kwashiorkor and on the arterial blood pressure in Africans.

217. During the year, the Infant Malnutrition Unit of the General Medical Council, which works in close conjunction with the Medical Division of Mulago Hospital, increased its status from a "group" to a "unit".

Surgical Division

218. The 1956 Medical Department report referred to investigations into the use of very large doses of testosterone in Kaposi's sarcoma. It has now been shown that this treatment had little effect on the progress of the disease. Trials are proceeding with intra-arterial nitrogen mustard on peripheral Kaposi lesions on limbs. A number of patients have been treated with some striking retrogression of lesions. The results are being followed up.

219. Work continues of the surgery to remedy deformities due to leprosy. This important aspect of the treatment of leprosy is receiving more attention now that the acute phase of the disease can be controlled by chemotherapy. Regular visits are made to Buluba Leper Hospital, and one visit was made to Fort Portal. Makerere College makes a grant for research into the surgical treatment of leprosy.

220. One member of the Surgical Division was in the United Kingdom throughout the year studying for the Fellowship of the Royal College of Surgeons. Two more members of this Division left to study for this examination in the United Kingdom. One was granted a two-year scholarship, and one was granted six months study leave. Arrangements have been completed for a fourth member of this Division to go to the United Kingdom in 1958 for the same purpose.

Department of Obstetrics and Gynaecology

221. Reference has been made earlier to the difficulties resulting from the increase of work. There were 3,147 deliveries in 1957 compared with 2,795 in 1956, 1,912 in 1955 and 1,727 in 1954. The number of "floor cases" increases, and in some cases a patient never occupies a bed.

222. In the gynaecological ward, 1,090 patients were admitted compared with 1,033 in 1956, and 1,153 in 1955. 1,225 operations were performed compared with 1,134 in 1956 and 1,226 in 1955. As in the obstetrical wards the overcrowding places a great strain on the nursing staff, as it is impossible to nurse cases adequately under such conditions. In the gynaecological out-patient department, 8,002 old patients and 5,668 new cases were seen making a total of 13,670 patients. This is an increase of 2,592 on the previous year.

Blood Transfusion Services

223. This service continued to develop during the year in an attempt to meet the increased demands for more blood.

224. The Red Cross gives invaluable help in this service, and has undertaken the function of enlisting donors. In Kampala the grouping of blood is done at the Medical Laboratory and the great majority of the taking of the blood is done by the doctors of Mulago in their spare time. The service has grown up on an *ad hoc* basis and difficulties are steadily increasing as more and more blood is needed.

225. The Red Cross employs a part-time worker to organise the collection of volunteers for giving blood. The time has come when it is necessary to place the blood transfusion service on a properly organised basis. If this is to be done additional staff is essential.

Welfare

226. The welfare work at Mulago is under the care of a medico-social worker who undertakes a variety of duties. Organisation of the repatriation of patients to other East African territories and the Belgian Congo is one of her main tasks. With the co-operation of the Labour Department 38 chronic cases, many of them long-standing cases of tuberculosis, were repatriated to the Belgian Congo.

227. An expression of gratitude is made to the Salvation Army who provide an ambulant sick hostel. This hostel provides beds and food for patients who are not ill enough to need a hospital bed, but who have neither homes nor relatives in Kampala.

228. Run in conjunction with this hostel is an artificial limb making centre and patients awaiting fittings for artificial limbs are accommodated.

229. During the year 172 patients stayed for varying periods at the hostel.

230. Finding homes for orphans who are left in hospital is another duty of the medico-social worker. This problem is not at present a pressing one, but with increasing urbanisation, and a break-up of tribal ties, it may well become more serious in the near future. The Community Development Department has agreed to assist in tracing relations and friends of abandoned children.

231. Efforts are made to find employment for ex-patients, but it is difficult to get employment for cripples and disabled persons. The Rotary Club have been of considerable assistance and have supplied a list of Rotary members and their firms who are willing to take a quota of such people.

232. The medico-social worker also supervises the occupational therapy, in which the Red Cross workers have assisted during the year.

233. The Round Table have been of the greatest assistance in the running of a clinic for post-poliomyelitis patients.

Nakasero Hospital, Kampala

234. There have been few changes in this hospital which provides both Grade A and B accommodation. The Medical Superintendent in addition to his duties at Nakasero Hospital, also undertook the work of Senior Medical Officer (Special Duties), which gave him administrative control of Masaka Hospital, units in Entebbe and the medical work at Luzira Prison.

235. Owing to the shortage of staff, it was not found possible to open the new ward block.

236. Work was started on the building of a new administrative block for the Medical Superintendent and his staff. When this block is occupied the old offices will be converted into a minor operating theatre, and consultation rooms for the specialist staff.

237. The new African nurses hostel was practically completed during the year, and a new house for a medical officer was built in the compound of the hospital.

238. A new and increased scale of charges was introduced on 1st October, 1957. This increase was greatest in Scale B. Whilst there has been no decrease in the number of patients treated, there has been a considerable increase in the number of requests for a reduction in charges.

Other Hospitals

239. A list of hospitals, which includes hospitals in Kampala and in the Kingdom of Buganda is shown at Appendices VII (A) and VII (B).

240. In the last twelve months the total bed accommodation in hospitals outside Kampala has increased by 141 beds. This is very largely due to the increase in beds set aside for tuberculosis patients. At the end

of 1956 there were 145 beds in district hospitals for tuberculosis cases, and by the end of 1957 the number had risen to 232; an indication of the importance attached to this branch of work.

241. There was a considerable amount of building carried out in district hospitals, but apart from the building of tuberculosis wards, the emphasis was more on improvement of facilities rather than an increase in the number of beds.

242. Much of the available funds was spent on such improvements as the introduction of water-borne sanitation (Lira), the putting in of a piped water supply (Kitgum), the extension of the electric lighting system in hospitals (Kabale and Soroti), an X-ray block (Jinja and Mbarara), the commencement of a new kitchen and laundry (Masaka), and new out-patients departments (Tororo and Arua).

243. Blood transfusion services have been gradually built up in Jinja, Lira and Masaka.

244. A blood transfusion service was started at Jinja in February. The hospital staff took the blood and carried out the technical work, whilst the organisation and administrative work was performed by the Red Cross Committee.

245. The sources of blood are as follows:—

Mwiri College	122 pints
Kenya Police Rifles	59 pints
Police	16 pints
Wairaka Technical School ...	12 pints
Jinja College	6 pints
TOTAL	215 pints

B. RURAL MEDICAL SERVICES

246. There were 170 dispensaries in Uganda either run by the Protectorate Medical Department or the Buganda Government Medical Service, providing 2,217 beds. These were situated as follows:—

Dispensaries

	With beds	Without beds	TOTAL
Northern Province	43	3	46
Eastern Province	39	2	41
Western Province	34	12	46
Buganda	33	4	37
TOTAL ..	149	21	170

Beds in Dispensaries

	General	Maternity	Total
Northern Province	335	—	335
Eastern Province	682	179	861
Western Province	451	105	556
Buganda	324	141	465
Total ..	1,792	425	2,217

A list of dispensaries is given at Appendix VII (C).

247. Appendix VIII (A) gives a list of cases treated, both in-patient and out-patient, at all dispensaries run by the Medical Department or the Buganda Government, except Kampala Dispensary which is regarded as an integral part of Mulago Hospital. The returns for this dispensary are incorporated in the returns for Mulago Hispital.

248. It will be noted that none of the dispensaries in Northern Province have maternity wards, due to the insufficient number of trained midwives in that province. However, the starting of a maternity training school at Gulu on 1st January, 1956, should gradually improve the position.

249. The dispensaries vary greatly; some, especially in the more remote areas, are buildings of a comparatively primitive type. Others are large and well built units; many were in fact built as rural hospitals (for instance Serere in the Eastern Province has 50 general beds, 12 maternity beds, an operating theatre and a house for a medical officer). It was considered at the time that the output of Makerere doctors would be such as to allow these rural hospitals to be staffed by doctors. Unfortunately, these plans did not mature. The number of Makerere doctors in the Protectorate service has in fact decreased as these doctors prefer private practice in the towns to work in rural hospitals. The result has been that these well planned little rural hospitals have reverted to dispensaries in the charge of a medical assistant, who refers more serious cases to the nearest district hospital.

250. With improvement in communications and an increased ambulance service, on grounds of economy and administrative convenience, the policy will be to build up the central hospitals where specialist services, laboratory facilities and X-ray apparatus can be provided, and to use dispensary beds for the treatment of minor illness or as holding beds pending transfer to the district hospital. Already the more discriminating patients are tending to by-pass rural dispensaries and are seeking treatment at hospitals.

251. With the provision of additional health staff the opportunity is offered for the gradual conversion of dispensaries into health centres, when in addition to the curative services already available, health education and preventive medicine will play a much-increased role.

252. At the present time an increasing use is being made of dispensary beds for tuberculosis patients who have had their initial treatment in hospital, but who require further treatment and observation before they are fit enough to go home. This system appears to work surprisingly well, though it was by no means for this purpose that the dispensary wards were built.

253. In addition to the Protectorate and Buganda Government dispensaries, there are 53 dispensaries run by missions, and all are licensed by the Director of Medical Services in accordance with the Public Health Ordinance. Unlike the Protectorate Government and Buganda Government dispensaries, the missions charged a small fee to cover the cost of drugs.

254. Details of mission institutions are given in Appendix VII (D).

255. The present position in regard to responsibility for dispensary services outside Buganda is an unusual one. Dispensaries are built and structural repairs are carried out by the African local governments, but with the exception of the wages of menial staff in some districts the recurrent cost of trained staff and drugs, dressings and equipment is met by the Medical Department.

256. The question of the relationship between the Protectorate Government and the African local governments, more particularly in financial matters, is at present under review.

C. Patients and Diseases Treated

257. Appendix VI (B) gives the number of in-patients treated throughout the year with the conditions for which they were admitted. A summary of patients treated is shown by provinces in Appendix VIII (B).

258. The following table shows the number of in-patients treated in Government hospitals during the last five years: —

	1953	1954	1955	1956	1957
African	73,397	74,672	73,495	82,134	85,340
Asian	2,437	2,306	2,729	2,973	2,783
European	1,441	1,354	1,444	1,640	1,617
Total ..	77,275	78,332	77,668	86,747	89,740

259. These figures show a steady rise in the number of in-patients treated. This rise, which has thrown an increased burden both on hospital accommodation and on the medical staff, is chiefly marked in the African group. Despite the increase in population as shown under vital statistics the number of Europeans and Asians treated shows no increase. The most important diseases treated are discussed under the section of this

report which deals with communicable diseases. Other important causes of admission were: —

Kwashiorkor	892 cases
Upper respiratory infections ...	2,194 cases
Lobar pneumonia	2,943 cases
Broncho pneumonia	2,366 cases
Intestinal obstruction and hernia ...	2,782 cases
Maternity cases, with or without complications	16,175 cases

Fractures, burns and other injuries caused 8,374 admissions.

260. The following extracts from two district annual reports serve to illustrate the differences in distribution of disease. The District Medical Officer from Ankole writes:

> "Since my arrival in Ankole I have only on one occasion been called to deal with a strangulated hernia. Hernia is not a common condition in this district. The major cause of intestinal obstructions are either due to volvulus or intussusception."

whereas the Medical Superintendent of the Jinja Hospital, some 250 miles to the east, reports:

> "In all, 2,633 cases were operated on in the theatre last year. The major factor for this heavy turnover has been strangulated hernias, both with and without gut resection, there being respectively 91 and 216 cases of each."

261. The number of out-patients treated is shown in Appendix VI (A). This appendix shows only new cases treated; reattendances are not shown.

262. The following table shows the number of out-patients treated in Government hospitals during the last five years: —

	1953	1954	1955	1956	1957
African	653,163	649,806	781,457	838,067	1,047,914
Asian	13,555	12,349	15,128	21,287	18,518
European	8,773	7,500	14,848	14,788	19,273
TOTAL ..	675,491	669,655	811,233	874,132	1,085,705

263. Two factors must, however, be taken into consideration in interpreting these figures: the great increase in the number of Europeans treated was largely, if not entirely, due to an increase in the number of dental cases. It would appear that in the first two years under review, the number of dental cases was not correctly recorded in the out-patients

returns. The same is true to a lesser extent with regard to the figures given for Asians. Secondly, during 1957, the figures for Kampala Dispensary were incorporated with the out-patients figures for Government hospitals. In previous years the figures for this dispensary were incorporated with the figures for rural dispensaries. As recorded earlier, in 1957 Kampala Dispensary treated 94,776 new cases.

264. The following table shows the number of new out-patients, re-attendances and in-patients treated in Government dispensaries and dispensaries of the Buganda Government during the last five years:—

	New Out-patients	Re-attendances	In-patients
1953 ..	1,630,775	1,615,071	45,631
1954 ..	1,648,183	No record	50,172
1955 ..	1,921,099	1,704,444	52,608
1956 ..	1,923,020	1,756,732	53,353
1957 ..	2,108,511	1,871,811	69,262

265. The new out-patient and re-attendance figures for 1957 do not include those for Kampala Dispensary as was the case in previous years.

266. The most significant fact contained in these figures is the rise in the number of in-patients in Government dispensaries; this is partly due to the system whereby beds in certain dispensaries are utilised for patients with pulmonary tuberculosis.

D. Mental Hospital Services

267. During the year the number of admissions to the mental hospitals increased considerably and despite a more rapid turnover admissions outnumbered discharges.

Buildings

268. Planning of a new ward, laundry and stores at the new mental institution at Butabika was commenced. Most of the buildings at Mulago were redecorated and a compound was fenced to permit segregation of male criminal patients.

Senior Staff	*Established Posts*	*Posts Occupied*	*Vacancies at end of 1957.*
Specialist Alienist	1	1	—
Medical Officer	1	1	—
Chief Male Nurse	1	1	—
Sisters-in-Charge	2	1	1
Charge Nurses	9	4	5
Sisters	4	1*	2
Assistant Hospital Superintendent	1	1	—

*Plus one temporary.

Staff Training

269. One candidate is being prepared for the final nursing examination. During the year, ten males passed the P.T.S. examination and commenced training as Mental Nurses.

Patients Under Treatment

Table IX

Admissions, Deaths and Discharges from Mental Hospitals

Year	Admissions			Deaths	Discharges	Total in Hospital at end of Year
	New	Readmissions	Total			
1950 ..	268	27	295	77	131	477
1951 ..	297	34	331	112	191	505
1952 ..	307	27	334	121	222	496
1953 ..	350	26	376	209	205	458
1954 ..	354	47	401	80	237	546
1955 ..	466	34	500	100	325	622
1956 ..	626	26	652	81	634	558
1957 ..	776	81	857	73	732	610

270. The authorised number of beds at the two mental hospitals totals 447.

271. In September, medical officers throughout the Protectorate were advised that the mental hospitals were overcrowded and were asked to treat as many mental patients as possible locally. As a result there was a temporary reduction in the admission rate.

Treatment

272. Electrical treatment was given to 581 patients. It was noted that the use of this treatment did not materially affect the discharge rate of patients, but it is important as an aid in the management of excited cases.

273. *Chlorpromazine.* This has been found to be an excellent sedative, but its high price has limited its scope.

274. *Leucotomy.* Two patients were operated on during the year. Both were greatly improved. One male patient who had been a most difficult patient improved markedly and was discharged to the care of his people within two months of operation. The other is also considerably improved and will be discharged in the near future.

Deaths

275. There were 73 deaths. Despite the increase in the number of admissions, this is the lowest number of deaths in the last seven years.

Occupational Therapy

276. The majority of patients have been occupied doing work in the wards, on the hospital gardens and helping in the kitchens. The weaker patients have been making rush mats, and several attractive pottery articles have been made from clay dug from a nearby site.

Entertainments

277. Concerts were given by the nurses and student nurses of Mulago and Toc H organised a concert and provided tea and light refreshments for the patients. Ten radio sets were donated to the hospital by various firms in Kampala. An amplifier and loudspeakers have been bought with a gift of £50 from the Red Cross Society. A wireless set, microphone, record-player and a further eight loudspeakers have been purchased out of the patients' comfort fund.

278. Cinema shows were given and the patients were entertained by the school band of St. Peter's, Nsambya. The Asian community came on Diwali night and the patients appreciated their entertainment of singing, dancing, and the distribution of cake, bread and biscuits.

279. A Medical Department athletics meeting was held at Nakivubo Stadium in November, and the patients and staff attending these sports were most interested. A carol service was held on the 22nd December, and concerts of African and light music were given over the Christmas period. Gifts of fruit, cakes, sugar, cigarettes and confectionery were gratefully received for distribution to the patients.

280. The Mental Hospitals Voluntary Association, established in November 1956, continued to give assistance in providing entertainment and welfare visitors, and in dealing with problems of after-care of patients.

281. As a tailpiece credit must be paid to the West Nile District. In the annual report from that district it was stated:

> "No patients were certified insane during the year. There were a few cases of minor or temporary mental upset. One case was referred to Mulago for out-patient advice. Eight cases were seen in prison for assessment of their mental state. It was recommended that all of these be sent home."

E. Dental Services

282. The demand for dental treatment increases each year. Whereas attendances for 1956 were 6 per cent more than the previous year, those

for 1957 increased by 19 per cent. At Mulago one dental surgeon with the help of locally trained assistants has to deal with over one hundred patients in one day.

283. Private practitioners assisted in the treatment of entitled patients both in Kampala and up-country. A private practitioner carried out most useful work by touring the provinces with a mobile dental unit. In addition to the unofficial population, this dental unit treats Government officials who are reimbursed for the cost of their treatment by the Medical Department.

284. During the year there were only four dental surgeons in the Department out of an establishment of seven. This makes no allowances for normal leave. A private dental practitioner was employed on a temporary basis for a few months.

285. Kampala Dispensary Dental Clinic was opened on the 1st February as a part-time clinic and there were over 2,000 attendances in the first 11 months.

286. Instruction in dental surgery was given to medical students at Mulago, and to medical assistants on their annual refresher course at Masaka.

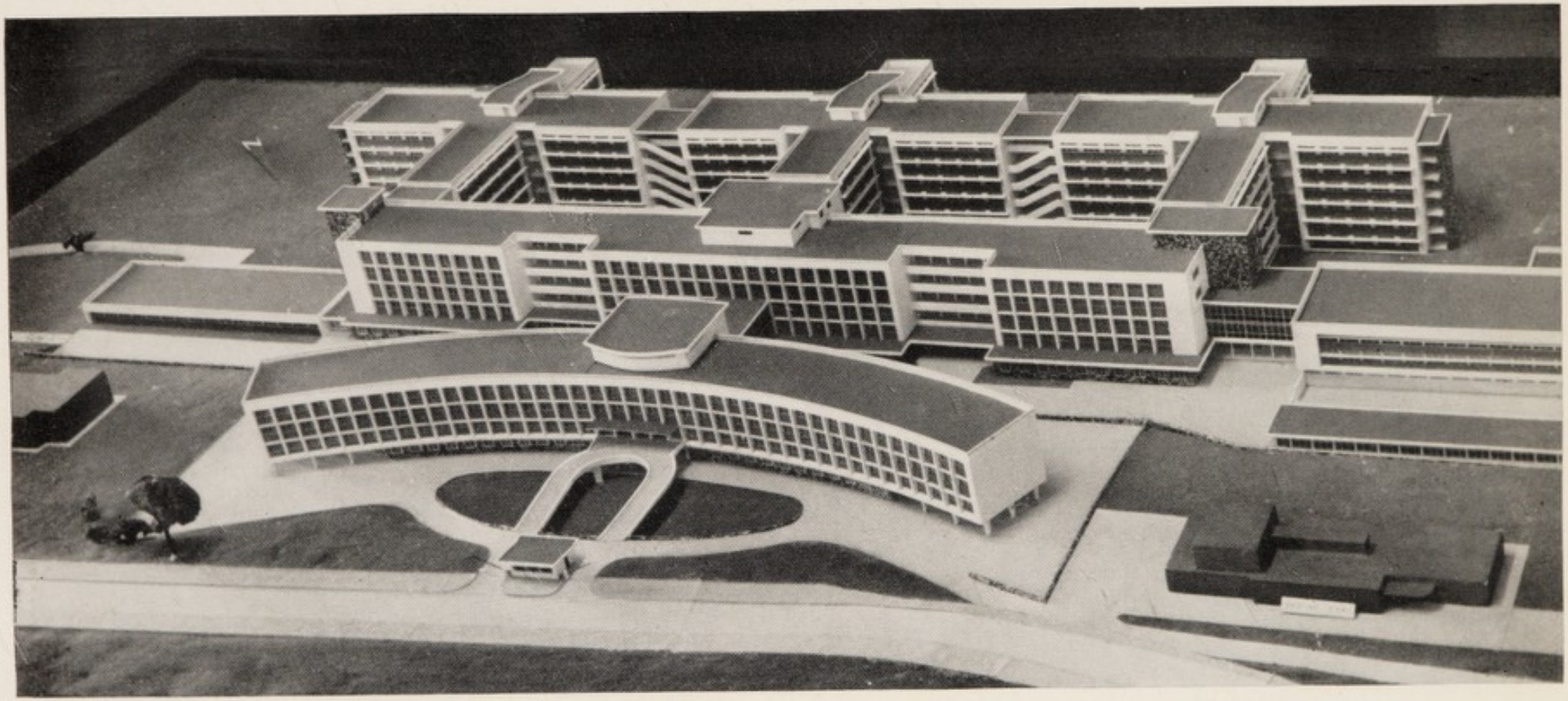
287. Preparations are being made for the projected Dental Training Centre which it is hoped will be producing four dental assistants annually in 1962 and subsequent years. They will be of great service in dealing with the anticipated increase in dental disease due to such factors as bottle-feeding of babies, more clothing and indoor life in childhood, and more frequent meals and snacks (often of highly-processed carbohydrates).

288. Mrs. Darling's investigations in 1946 showed among school-children of representative tribes a caries incidence of A.C.F. index 0·012. A recent investigation of 306 nursing entrants at Mulago showed an A.C.F. of 0·035 for the Baganda girls whereas all the other tribes combined had an A.C.F. of only 0·011. It is expected that the incidence will rise among other tribes as it has among the Baganda.

289. Table X gives a summary of treatments given in dental units.

F. Radiological Services

290. The Radiological Section was in the charge of the Specialist Radiologist throughout the year. During the year either he or one of his

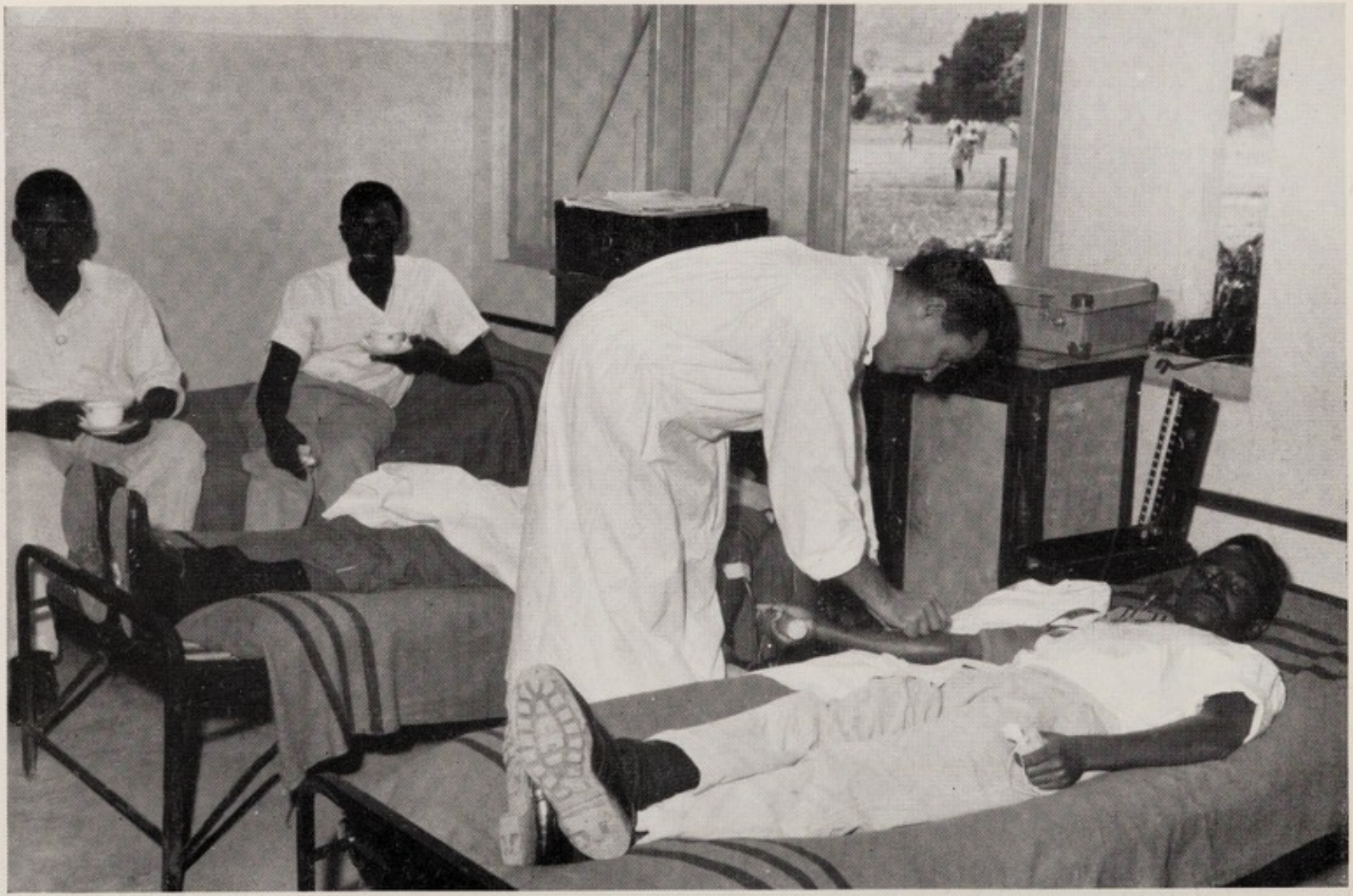


FINAL DESIGN FOR THE NEW MULAGO HOSPITAL

PART OF THE PRESENT MULAGO HOSPITAL

HEALTH EXHIBIT AT COUNTY SHOW

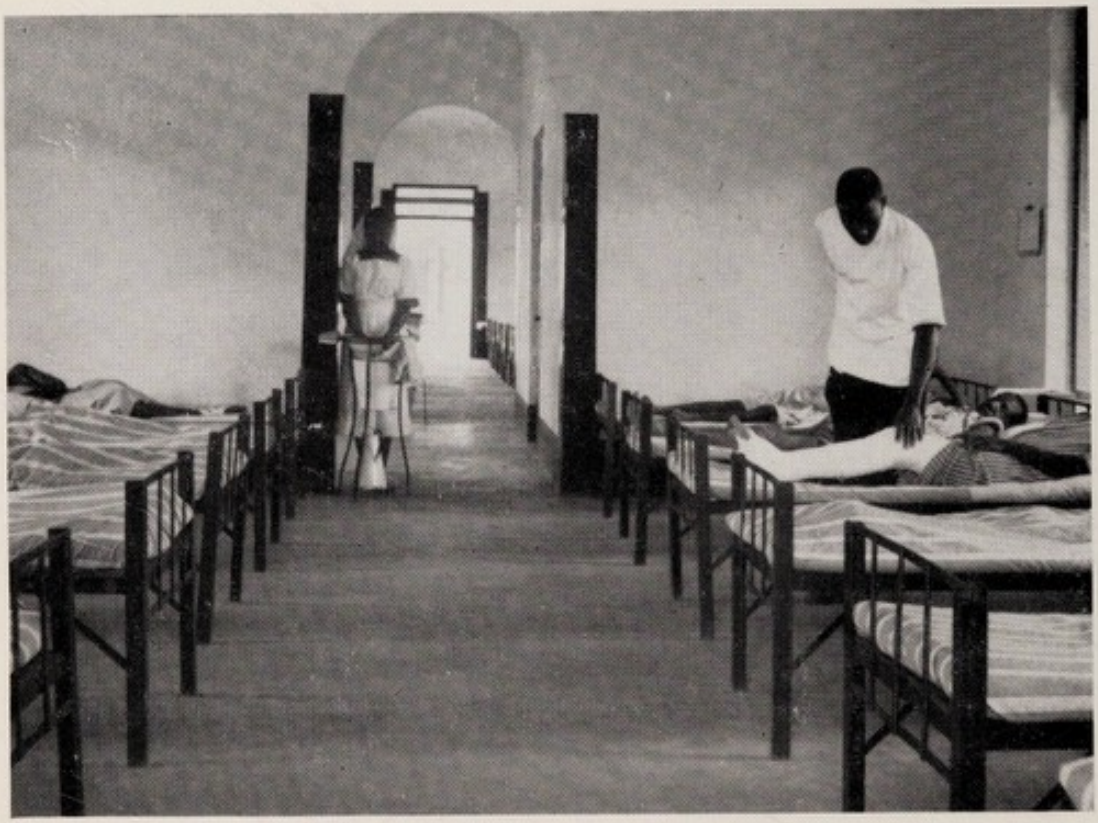
A HEALTH INSPECTOR TRAINEE LEARNING TO VACCINATE



BLOOD TRANSFUSION SERVICE—DONORS GIVING BLOOD

BLOOD TRANSFUSION SERVICE—AT WORK IN THE BLOOD BANK

BUDAKA HEALTH CENTRE—A NEW WARD

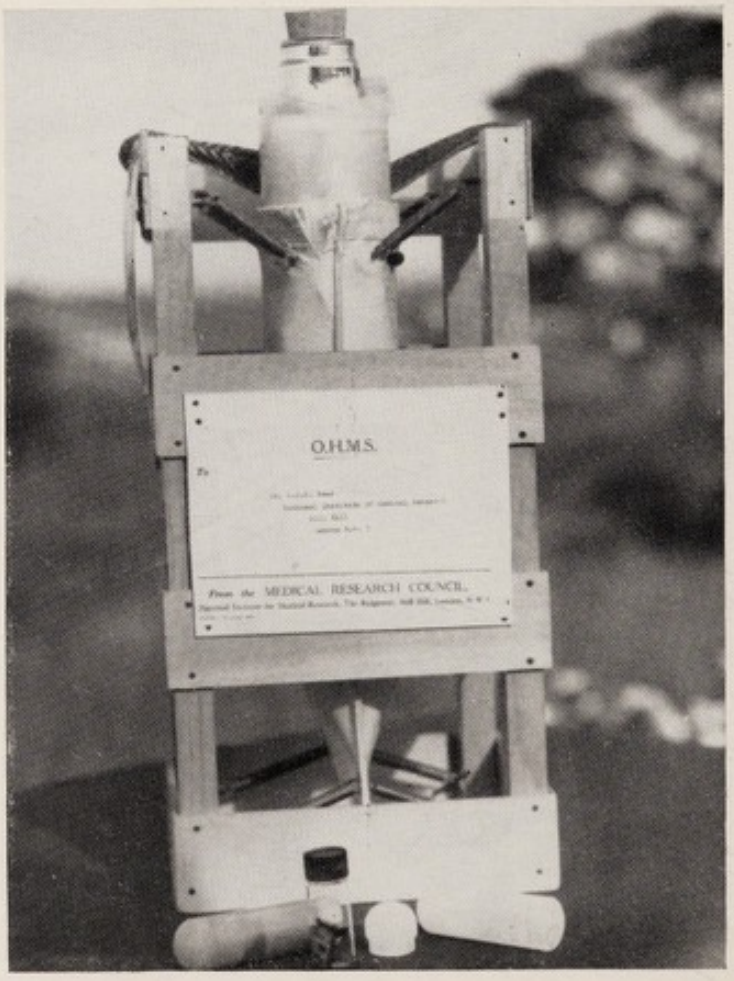


BUDAKA HEALTH CENTRE—INTERIOR OF ONE OF THE OLDER WARDS

BUDAKA HEALTH CENTRE—DISPLAY OF HEALTH EDUCATION MATERIAL

HEALTH CENTRE—STAFF HOUSING

MISS M. HOUGHTON, M.B.E., EDUCATION OFFICER OF THE GENERAL NURSING COUNCIL FOR ENGLAND AND WALES TALKING TO STUDENT NURSES IN THE QUEEN ELIZABETH NURSES HOSTEL, MULAGO



SPECIAL APPARATUS FOR TRANSPORTING FRESH PATHOLOGICAL SPECIMENS TO THE UNITED KINGDOM FOR EXAMINATION IN CONNECTION WITH LEPROSY RESEARCH

TABLE X

Summary of Treatments given in Dental Units in 1956 and 1957

	Nakasero		Mulago		Jinja		Entebbe		Kampala Dispensary		Totals	Totals
	1956	1957	1956	1957	1956	1957	1956	1957	1956	1957	1956	1957
Extractions	475	507	12,449	13,110	562	763	477	540	—	886	13,963	15,806
Conservative Treatment—												
Scalings	150	440	2,158	2,087	183	156	425	302	—	612	2,916	3,597
Fillings	328	1,468	452	594	869	802	1,347	1,414	—	12	3,017	4,290
Crowns, inlays, bridges	15	58	2	—	16	33	11	10	—	—	32	101
Prosthetic Treatment—												
New Dentures	66	79	7	5	56	79	54	44	—	—	183	205
Repairs, additions, etc.	14	94	2	8	62	42	31	42	—	—	109	186
Orthodontic appliances	14	17	1	—	1	5	5	10	—	—	21	32
Surgical, etc., appliances ..	4	3	6	2	—	1	8	—	—	—	20	6
TOTAL ATTENDANCE (including examinations)	1,622	3,809	18,226	18,850	2,770	3,400	3,797	3,468	—	2,013	26,415	31,540

Kampala Dispensary only part-time for part of 1957.

radiographers made 28 visits of inspection to district hospitals where X-ray plants were installed. Several visits were paid to up-country stations to advise on the installation of further plants.

291. The installation of large modern sets was commenced at Jinja, Mbale and Mbarara hospitals. The first two replaced smaller sets which will be sent to other hospitals.

292. The completely new installation at Mbarara has been sited in this station chiefly for tuberculosis work, as the incidence of this condition is high in Ankole. This set will also be used for cases from Kigezi District, and so lift a heavy burden from the X-ray Department at Mulago which previously received patients from both these districts.

293. It is hoped to install smaller X-ray sets at Tororo, Lira and Kabale, and before the end of the year some of the equipment had already arrived. Additional equipment for Nakasero Hospital and for the main unit at Mulago was ordered and received during the year.

294. The completed unit at Masaka was opened in 1957, and has dealt with a large number of cases, which would otherwise have been sent to the overburdened main unit at Mulago.

295. The following are the figures of X-rays taken in up-country X-ray units during 1957:—

Examination	Jinja	Masaka	Mbale	Total
Chest	822	957	951	2,730
Skull	117	114	51	282
Spine	150	76	60	415
Abdomen ..		86		
Pelvis		43		
Limbs	895	422	1,028	2,345
Special ..	—	24	—	24
Total	1,984	1,722	2,090	5,796

X-ray Units, Kampala

296. The present establishment of qualified radiographers is seven, and of these posts five are filled. They are assisted by one assistant radiographer.

297. As a result of local leave and vacation leave, the staff position has remained precarious throughout the year and this has been felt most on the teaching side.

298. The whole of the Mulago X-ray Unit has been redecorated and attempts to improve the present ventilation have been promised for the new year. A uniport hut is at present being erected for class teaching close

to the existing building and this will free the present classroom which will be converted to an additional X-ray room.

299. The X-ray apparatus has been satisfactorily maintained under a local contract with Messrs. Twentsche Overseas Ltd. Since the present system of maintenance was instituted, not only have breakdowns been less frequent, but what is much more important, repairs have been done promptly when a breakdown occurred.

300. Two new machines have been installed, but neither is yet working properly due to the breakage in transit of small but vital components. A Philips set (ACX 150 milliampere output) has been put in at Nakasero Hospital to provide an additional unit, and a Watson 100 milliampere has been put in the classroom of the Mulago X-ray Unit.

301. It is perhaps worth commenting on the cost of "expendable" X-ray items such as X-ray tubes. The purchase cost of one of the larger sizes of these is about £320, the cost of its repair is about £250, excluding freight. During the first three months of this year, three of these tubes burned out. This was not due to any fault on the part of the radiographers, but because the tubes were either old or because a fault developed in the complicated electrical circuit which controls them. As another, but smaller tube, burned out shortly after, the Chief Pharmacist was faced with a completely unpredictable bill for nearly a thousand pounds, late in the financial year.

302. At Nakasero Hospital 3,569 examinations were performed on 3,463 patients (1956—3,371 examinations on 3,301 patients). This represents a rise of approximately 12 per cent in the number of patients examined. With the purchase of X-ray sets by general practitioners the number of patients referred from this source has dropped considerably, but this has been more than made up by the increased number of patients referred from within the hospital. The decrease in the number of Barium Meals is due to the absence of the radiologist during the year. During the year, 40 patients failed to keep their Barium Meal appointments.

303. At the Mulago Hospital X-ray Unit, 11,841 examinations were performed on 11,407 patients (1956—11,973 on 11,382 patients). This is the first year since 1951 that there has been no rise in the number of examinations carried out in this unit. A breakdown of the figures shows several interesting features.

304. There has been a drop of nearly 1,000 in the Mulago in-patient requests, but as a result of the increase in tuberculosis treatment, the number of patients referred from up-country hospitals has risen from 104 to 1,109. There has been little change in the number of patients referred by Mengo Hospital, mainly because they are given a definite quota, but the number referred from mission hospitals is increasing.

305. There has been a very considerable increase in the number of miniature X-ray films used, but this is primarily due to the fact that all up-country tuberculosis cases are X-rayed on these films.

X-ray Division, Mulago Hospital

Return of Patients

(Figures for the year 1956 are in brackets)

Lungs and pleura	3,329	(4,906)
Heart	78	(89)
Sinuses	90	(108)
Tomograms	17	
Barium meals	128	(35)
Barium enema	13	(8)
Pregnancies	183	(292)
Salpingograms	141	(3)
Pelvimetry	4	
Skull	221	(215)
Mandible	127	(114)
Cervical spine	75	(57)
Thoracic spine, ribs	149	(132)
Lumbar spine, pelvis	652	(605)
Shoulder girdle	42	(67)
Upper limbs	1,072	(1,221)
Lower limbs	1,544	(1,639)
I.V.P. and retrogrades	65	(138)
Abdomen	81	(64)
Bronchogram	33	(11)
Gall-bladder	11	(19)
Mouth, pharynx, oesophagus	43	
Myelograms	8	
Splenograms	8	
Mastoids	4	
Others	41	(225)
	8,159	(9,948)
Miniature chests	3,629	(1,989)
Hearts	53	(36)
Total Examinations	11,841	(11,973)

Total number of patients :

Large films	7,725	
Miniature	3,682	
	11,407	(11,382)

Cases sent for examination from:

Mulago I.P.	5,205	(6,105)
Mulago O.P.	3,041	(3,221)
Mengo	370	(342)
Nsambya	234	(191)
Other missions	130	(57)
Up-country	1,109	(104)
Private practitioners	208	(331)
Others	591	(591)
Makerere	123	(169)
Entebbe	376	(271)

X-ray Department, Nakasero Hospital

Number of Examinations

Lungs and pleura	1,132
Heart	62
Sinuses	142
Tomograms	4
Barium meal	179
Barium enama	27
Pregnancies	54
Salpingograms	8
Skull	87
Mandible and teeth	36
Cervical spine	70
Thoracic spine and ribs	87
Lumbar spine and pelvis	237
Shoulder girdle	83
Upper limbs	397
Lower limbs	482
I.V.P. and retrograde	182
Abdomen	46
Bronchogram	3
Gall-bladder	123
Mouth, pharynx and oesophagus	5
Mastoids	19
Others	107
TOTAL	3,569

Total number of patients for 1957—3,371.

G. PHARMACEUTICAL SERVICES

306. A double uniport was built in the Medical Store compound. This was to house U.N.I.C.E.F. goods on their arrival. The only item received in quantity during the year was soap.

307. Many improvements to the buildings in the compound were carried out by the Public Works Department. These included complete re-wiring of the electrical installation, installation of security lighting, cementing of earth floors in stores and installation of proper drainage around buildings.

308. After the end of the Suez crisis goods arrived in large quantities and continued to arrive regularly throughout the year.

309. With a few exceptions the cost of drugs and goods remained reasonably stable. Handling charges at Mombasa increased by about 30 per cent and the insurance fees on parcel post increased 100 per cent.

310. The Medical Store Advisory Committee met six times during the year. Recommendations covering several subjects were made. These included additions and deletions to standard lists, amendments to medical forms, gradual replacement of enamel iron utensils by stainless steel, and reference books to be purchased for distribution to district hospitals.

311. The Pharmacy and Poisons Board met once during the year. The new Pharmacy and Poisons Ordinance passed through Legislative Council on 16th October, 1957. The draft Rules were almost complete at the end of the year. Two prosecutions against pharmacies were obtained. One was for carrying on the business of a pharmacist otherwise than under the personal management of a pharmacist. The other was for failing to record the supply of poisons.

312. Safaris included visits to all stations in the Western Province (except Fort Portal), Masaka, Jinja, Tororo and Mbale. The Senior Storekeeper visited Kitgum Hospital.

313. The training of stores assistants at the Medical Store and dispensaries at Mulago Hospital continued. Unfortunately, due to leaves and a resignation of a pharmacist, the teaching of dispenser-learners was interrupted. However, before the end of the year a pharmacist was recruited for full-time teaching and during the short time she was here a definite improvement in learners was noted.

314. It has not proved possible to institute a course in pharmacy at the Royal Technical College, Nairobi. It will therefore be necessary for prospective pharmacists to continue to train in the United Kingdom for some years to come.

315. The running of the Medical Stores carried on smoothly. Losses were kept at a reasonably low level, the total amount being less than Shillings 1,000. Periodic checks by responsible officers were carried out.

316. Work in the manufacturing section progressed satisfactorily in spite of one or two set-backs. The preparation of sterile fluids was interrupted for several weeks in the latter part of the year when the laboratory had to be re-wired. The following table shows the quantities of some of the more important preparations made during the last three years:—

Preparation	Unit	1955	1956	1957
Injection :				
Bismuth Oxide	Litres	260	63	71
Glucose	Litres	1,279	1,629	2,779
Hydnocarpus Oil	Litres	19	Nil	Nil
Quinine	Litres	168	244	165
Normal saline	Litres	1,382	1,459	3,164
Galenicals :				
Liniment	Litres	3,762	1,980	2,790
Ointment	Kilos	6,727	7,155	4,294
Insecticides :				
Benzyl benzoate emulsion.. ..	Litres	261	777	1,224
B.H.C. spray	Litres	1,386	2,178	1,980
D.D.T. spray	Litres	4,258	6,732	4,552
Pyrethrum spray	Litres	1,980	1,584	396

H. Ambulances and Transport

317. As in the previous two years, through careful servicing and maintenance, the approximate average number of days each vehicle was roadworthy was 340 per annum. Officers in charge of districts and units

co-operated to the full, ensuring that adequate maintenance and servicing was carried out in district stations, and this, together with regular attention being given to the vehicles by Medical Headquarters garage has, in some cases, improved the condition of vehicles, as well as their reliability. Other factors assisting materially in obtaining the high utilization factor has been the comparatively low turnover of drivers, and the addition of new vehicles to the fleet.

318. The total establishment of drivers at the end of the year was 70. Seventeen new drivers were recruited during the year, some of these to new posts on the establishment; thirteen drivers left the service for various reasons—of these only nine were dismissed, and included in these dismissals are those recruited purely on a temporary basis as leave reliefs. Many of the drivers have now been with the Department for a number of years and they are taking a pride in seeing that their particular vehicle is maintained satisfactorily, and as they do the work themselves repair bills are proportionately reduced.

319. To the low turnover of drivers may be attributed the very low accident rate obtained during the year. Although the number of vehicles in the service rose from 49 at the end of 1956 to 61 at the end of 1957, actual number of accidents involving Medical Department vehicles showed a decrease from 11 in 1956 to eight in 1957. Only two were attributed to the fault of departmental drivers, and all the accidents were of a minor nature and did not necessitate the vehicle being taken off the road immediately for repairs.

320. As will be noted from Table XI there was a considerable increase in the number of ambulances. The fact that the African local governments have continued to take over a large proportion of the district ambulance services, has enabled the Medical Department to concentrate on providing ambulance services between main hospitals. In the West Nile District the East African Tobacco Company presented the African local government with a second Volkswagon ambulance and funds for its maintenance.

321. The increasing demand for proper ambulances for the carriage of patients, rather than the general utility vehicle, has also been an influencing factor in the present trend. Bedford C.A. van ambulance-conversions were purchased and have proved to be reliable and generally satisfactory although, unfortunately, not dust-free. Various modifications have been tried, but the problem has not yet been finally solved. Certain districts—Karamoja, West Nile and Kigezi—still require utility vehicles rather than ambulances, as terrain more than other considerations dictates their need.

322. The stores supply service maintained its most satisfactory record, having an accident-free year. The fleet was supplemented by a new long-distance diesel lorry to which the departmental garage fitted additional tankage, so increasing its range of action, without the necessity of refuelling,

by about three times. A new long wheel-base Land-Rover and a Morris LC.5 utility vehicle were obtained for Arua and Kabale hospitals respectively. The Entomological Section transport was further strengthened by the addition of two Land-Rover trailers and two small motorised bicycles. A new Land-Rover station-wagon was received from U.N.I.C.E.F. for use on leprosy work in Toro District of the Western Province.

TABLE XI

	1953	1954	1955	1956	1957
New vehicles obtained	11	14	9	15	15
Old vehicles written off	14	9	3	6	3
Average age of vehicles in years ..	7	2	3	2	2
Number of ambulances at the end of the year	10	5	6	9	16
Number of cars, vans and trucks at the end of the year	22	32	37	36	37
Motor-cycles	—	—	—	2	4
Tractor	—	—	—	1	1
Trailers	—	—	—	1	3
Total number of vehicles at the end of the year	32	37	43	49	61

I. SPECIALIST AND CONSULTANT SERVICES

323. An appointment was made to the vacant post of Ear, Nose and Throat Specialist and one new post was included in the 1957/58 Estimates for a second Anaesthetist Specialist.

324. When time allowed specialists visited provincial and district hospitals. Such visits are welcomed by the medical staff as an opportunity for discussions of clinical problems and other matters associated with curative medicine. Following these tours a report and any necessary recommendations are made to the Director of Medical Services.

325. Masaka and Jinja are visited at regular intervals by specialists from Mulago. During the revision course of medical assistants at Masaka lectures were given by several specialists.

326. Dr. H. C. Trowell, O.B.E., M.D., F.R.C.P., who recently retired with the rank of Senior Medical Specialist, was appointed an Honorary Consultant to Mulago and Nakasero hospitals.

J. MISSION MEDICAL SERVICES

327. Grant in Aid Rules were published during the year detailing the methods whereby financial assistance would be given to missions.

328. The Rules covered grants in respect of both recurrent and capital expenditure on hospitals and training. The formula adopted for the payment of grants towards recurrent expenditure was based on the numbers of trained resident staff and the pupils under training.

329. The following are examples of the annual grants payable:—

Number of beds	*Maximum Grant*
20 — 49	£1,788
50 — 74	£2,472
75 — 99	£3,180
100 — 149	£4,572
150 — 199	£5,640
200 — 250	£7,032

330. In addition training schools receive grants for tutorial staff and an annual grant of £48 for each student nurse or midwife under training.

331. As the financial year adopted by the missions corresponds to the calendar year it is difficult to present a picture of Government's contribution during the year 1957. In the Government financial year 1957/58 £36,600 was made available to the mission medical services towards recurrent expenditure; of this £15,300 was specifically for training. In addition a sum of £1,950 was granted to the mission in Karasuk as part of the Karasuk Development Plan. Special *ad hoc* grants under the Grant-in-Aid Rules towards recurrent expenditure were £10,600 up to June 1957 and a further £17,600 which was made available in the 1957/58 Votes. Government's contribution towards capital expenditure during the 1957/58 period was £25,000.

332. The above figures do not take into account Government's contribution towards leprosy institutions run under the auspices of missions, nor of the contributions made to certain mission hospitals, maternity units and dispensaries by African local governments.

333. The number of mission hospitals, that is hospitals with a resident doctor, is shown in Appendix VII.

334. The accepted policy is that the Protectorate Government's negotiations with the missions are carried out through the respective Protestant and Roman Catholic Medical Bureaux. These bureaux are working to the mutual advantage of both Government and the missions.

335. The part played by the missions in training nurses and midwives is well known and Miss Houghton as Education Adviser to the General Nursing Council inspected and advised on the schools at Mengo (Church Missionary Society) and Nsambya (Roman Catholic) which are recognised by the Nurses and Midwives Council of Uganda as training schools for nurses and midwives. Both of these schools are situated in Kampala.

336. Two up-country hospitals, Kalongo (Roman Catholic) in the Northern Province and Ngora (Church Missionary Society) in the Eastern Province, are in communication with the Nurses and Midwives Council with a view to obtaining recognition as midwifery training schools.

337. Ngora Mission has an arrangement with the Teso African Local Government whereby it accepts full responsibility for the running of a maternity unit built and equipped by the African Local Government and is reimbursed for its services by the Local Government.

K. International Organisations

United Nations Children's Fund

338. The first phase of assistance from U.N.I.C.E.F. came to an end in 1956. This had covered the supply of equipment to the value of $20,000 for use in the Health Education Section and departmental training schools.

339. During 1957 an agreement was concluded with U.N.I.C.E.F. whereby that organisation agreed to give further assistance in connection with health education and medical training during 1958 and 1959. The scope has been enlarged to include aid to mission hospitals and training centres and to a number of Government and mission rural units carrying out maternity and child welfare work. It is expected that the value of this assistance will amount to approximately $80,000, and will cover additional motor vehicles, teaching and general equipment and drugs and diet supplements. In addition U.N.I.C.E.F. agreed to make available supplies of non-fat dried milk for issue to mothers and children attending Government and mission medical units. An amount of 15 tons has been promised for 1958 but this figure can be increased in subsequent years in accordance with demand.

340. By the end of the year negotiations had reached an advanced stage in connection with the foundation of a Chair of Paediatrics at the University College of East Africa, Makerere. It is expected that the value of U.N.I.C.E.F. assistance towards the cost of this project will amount to $40,000.

341. A plan of operations for U.N.I.C.E.F. assistance in connection with leprosy control programmes was completed during the previous year and supplies became available to units during 1957. These included specific leprosy drugs, training and laboratory equipment, motor transport, bicycles and soap. In view of the fact that the programme had gone ahead at a faster rate than was originally expected, U.N.I.C.E.F. agreed to revise their programme. It is now expected that supplies will continue until the end of 1960 and that by that time U.N.I.C.E.F. contributions will have amounted to approximately $82,000.

World Health Organization

342. As previously mentioned, the World Health Organization Nutrition Unit completed its two-year survey programme and a malariologist and an entomological assistant carried out a malaria survey in north Kigezi and made recommendations for a scheme for eradication of malaria in this area.

343. The Senior Entomologist (Medical) was awarded a World Health Organization Fellowship to enable him to attend an International Entomological Conference in Canada and subsequently to study similium control work in that country and the United States of America. Other World Health Organization fellowships were awarded to a medical assistant to study rural health work in the Philippines, to an African nurse to make similar studies in Calcutta, and to a health inspector to take a tropical sanitation course in Great Britain. The Senior Medical Officer (Labour) was awarded an International Labour Organization Fellowship to permit him to study health problems concerning labour in the United States of America.

V.—LABORATORY SERVICES

A. District Laboratories

344. Mainly due to the cessation of routine examinations of specimens of blood and stools from every in-patient there was a decrease in the number of specimens examined. The following are records of examinations made:—

	Total Specimens	Blood Slides	Stools	Serological	Genital Smears
Mbale	19,877	8,970	3,762	4,507	187
Gulu	12,866	3,223	4,280	2,337	556
Jinja	17,257	4,640	2,564	3,300	170
Fort Portal	20,823	6,987	8,281	1,428	640
Masaka	30,416	13,788	3,304	2,623	1,833
Buganda	6,523	2,738	2,097	—	100
Moroto	3,513	1,027	1,188	—	98
Soroti	7,875	2,722	994	616	1,377
Hoima	11,101	6,791	1,996	—	960
Masindi	10,534	4,792	1,073	3,647	313
Mbarara	11,115	2,667	1,625	190	402
Kabale	6,829	1,249	3,247	—	186
Arua	26,116	15,367	8,430	318	467
Moyo	6,633	1,294	4,233	—	20

345. The following are figures from certain laboratories which are suitably equipped for the particular type of work:—

	Jinja	Mbale	Gulu	Fort Portal	Masaka
Blood cultures	186	11	6	151	74
Pos. Enteric	24	3	1	12	12
Agglutinations	349	126	114	326	399
Significant	128	30	8	32	128
Doubtful	—	15	25	—	—
Sputa	1,014	659	414	911	3,374
Pos.M.tb.	199	150	42	100	926
C.S.F.	104	63	65	27	132
Meningococcus	5	4	6	—	5
Pneumococcus	15	11	3	3	—
Other organisms	2	1	1	—	2

	Jinja	Mbale	Moroto	Gulu	Arua	Fort Portal	Mbarara	Masindi Hoima	Masaka
Leprosy	3	144	13	7	1	—	—	11	6
M. leprae ..	1	14	1	—	—	—	—	—	2
For Trypanosomes	4,460	—	992	44	1,432	4	2,672	—	3
Tryps (blood) ..	20	—	—	—	15*	—	11	—	—
Schistosomes ..	2,880	3,675	1,504	4,712	8,402	9,382	—	3,199	3,251
Stool	25	29	35	407	652	—	—	59	—
Urine	4	1	1	4	—	—	—	—	—

*In addition, 15 out of 450 gland punctures revealed trypanosomes.

B. Kampala Laboratories

346. The assistant bacteriologist rejoined the staff in August. One laboratory technician resigned and the vacancy remained unfilled.

347. Teaching of medical students was undertaken on a basis of clinical clerkships, usually for a month in each section of the laboratory. In addition courses of lectures and demonstrations in forensic medicine were given.

Histopathology

348. There was little change in the number of biopsy specimens although a greater number of those originating in Mulago were examined in the Medical School Department of Pathology. There was a small increase in the numbers received from district and mission hospitals.

Total number of Biopsies done	1,246
Total number of blocks prepared	1,513
Total number of Autopsy specimens ...	183
Number of blocks prepared	979

Bacteriology

349. There appears to be a significant rise in the number of cases of typhoid fever diagnosed by isolation of infecting organism—117 from 714 blood cultures. The figure for 1956 was 91 from 852 cultures. The only unknown variable is the selection of cases for blood culture. Since few of these patients undergo any tests to exclude temporary carrier-state before discharge from hospital the clinical recovery following treatment with antibiotics should not imply that the excreta are innocuous.

350. A very large proportion (370 out of 1,218 tested) of African sera submitted contain agglutinins against typhoid or paratyphoid organisms in significantly high titre.

351. Of the 18 cultures of tubercle bacilli tested a high proportion were found to be resistant to one of the antibiotic drugs.

Blood cultures	714
Sputa cultures	605
Stool cultures	264
Urine cultures	596
Body fluids	117
Cerebro spinal fluid	76
Swabs and pus	1,158
Animal inoculations	39

Results: Blood cultures: S. typhi 117 positive (of these 6 were from Europeans, 3 from Asians and 108 from Africans).

Sputa tuberculosis culture 59 positive.

Sensitivity tested in cultures:

	Number resistant
Streptomycin	8
P.A.S.	12
I.N.A.H.	8

Stool cultures:

	Pathogens isolated
S. typhi	11
Sh. flexner	16
Sh. sonne	3
Sh. shiga	1
Sh. schmitz	1
B. alkaligenes	1

Urine Cultures for tuberculosis:

Number tested	19
Positive	1

Cerebro spinal fluid:

H. influenzæ	3
Pneumococci	16

Animal Inoculations:

Virulence test for K.L.B. ...	14
Number positive	8
Friendman tests	6
Inoculation for tuberculosis	19

Public Health Examinations:

Number of samples ... 350

Water

Entebbe	43	Soroti	8
Jinja	12	Masaka	4
Mbale	4	Kawanda	1
Kabale	8	Mengo	4

Kampala (on distribution) 104

Gaba Waterworks (for treatment) 140

Sample from Libya (B.O.A.C. intake) 6

Milk, beer and minerals

Milk samples 7

Beer samples 6

Soda samples 3

Pharmaceuticals

Number of sterility tests performed 408

Number found contaminated 43

SEROLOGY

	Europeans	*Asians*	*Africans*
Widal Tests			
Positive	27	4	370
Negative	64	69	848
Total	91	73	1,218
Weil Felix			
Positive	7	6	44
Negative	85	64	1,174
Total	92	70	1,218
Brucella Tests			
Positive	1	—	14
Negative	24	14	174
Total	25	14	188
Paul Bunnell Tests			
Positive	—	1	1
Negative	7	—	4
Total	7	1	5
Cold Agglutinin Test			
Positive	—		
Negative	1		
Total	1		

BIOCHEMISTRY

	Europeans	*Asians*	*Africans*	*Mulago*
Serum protein ...	2	6	31	598
Test meals ...	15	19	13	41
Thymol turbidity	3	5	22	264
Glucose tolerance	15	61	2	57
Blood sugar ...	38	89	27	121
Blood urea ...	31	78	45	537
Serum bilirubin	18	15	24	245
Icterus index ...	—	—	1	—
Blood cholesterol	—	1	8	153
Serum amylase ...	4	17	10	—
Blood phosphatase	3	7	19	239
Fibrinogen ...	—	—	—	134
Serum Sodium ...	—	—	—	87
Serum Potassium	—	—	—	71
Bicarbonate ...	—	—	—	51
Chlorides ...	—	—	—	86
Electrophoresis ...	—	—	—	106
Ascitic Fluids ...	—	—	—	101
Phosphorous ...	—	—	—	10
Urea clearance ...	—	—	—	8
Dilution tests ...	—	—	—	9
Urine concentration	—	—	—	15
Miscellaneous ...	33	33	43	86*
TOTALS ...	162	331	245	3,019
C.S.F. (Chemical)				
C.S.F. (Chemical)	10	4	190	311
C.S.F. (Lange) ...	6	31	39	679
TOTALS ...	16	35	229	990

*Miscellaneous includes: Uric acid, blood ammonia, calcium, urinary proteins, trypsin, amylase hæmoglobin pigments, creatinine and creatine, etc.

Summary of Blood Investigations

	Mulago	Medical Laboratory	Nakasero	C.W.C.
Haemoglobin ...	6,576	94	1,010	—
Leucocyte counts ...	3,080	88	817	—
Differential counts ...	2,977	219	156	—
Reticulocyte counts ...	204	—	24	—
Thrombocyte counts ...	49	—	3	—
Marrow counts ...	30	—	—	—
Coagulation tests ...	78	12	12	—
Fragility tests ...	2	7	—	—
Combs' tests ...	107	—	—	—
Sickling tests ...	172	33	—	1,029
E.S.R.	788	41	108	—
Miscellaneous ...	138	64	289	—

General Clinical Pathology

Summary of investigations

Specimens examined as follows:

	Mulago	Medical Laboratory	Nakasero
1. Cerebro spinal fluid			
Cell count	1,032	33	33
Smears	320	—	8
Cultures	203	—	—
2. Sputum			
Number examined ...	4,655	201	157
Acid fast bacilli	1,078	8	17
3. Urine	4,515	—	3,658
4. Semen	121	38	—
5. Skin			
Acid fast bacilli	4	—	—

Parasitology

352. Malaria. The number of positive malaria blood films rose from 4,600 of 20,200 examined in Mulago in 1956 to 5,824 of 19,622 in 1957.

353. The species identified were reported as follows:—

	Mulago	Child Welfare Centre	Nakasero	Medical Laboratory
P. falciparum	5,685	442	122	126
P. malariae	68	18	3	4
P. vivax	67	4	—	—
P. ovale	4	1	—	—
Slides examined ..	19,662	3,247	1,701	1,091

TRYPANOSOMIASIS

354. *T. rhodesiense* has been found in the blood of five patients at Mulago Hospital, Kampala.

RELAPSING FEVER

355. Spirochaetes have been seen in 13 blood films.

LEISHMANIASIS

356. Leishmania were found in splenic smears of five patients. The specimens were sent from Moroto Hospital in the Northern Province. No positive bone marrow film from that district has been confirmed.

AMOEBIASIS

357. *E. histolytica* has been recorded in 34 specimens out of 10,694 examined in Mulago Hospital: cysts were reported in 112.

358. HELMINTHIASIS

	Mulago	Medical Laboratory	Nakasero	Child Welfare Clinic
Hookworm	4,052	45	8	4
Ascaris	465	7	10	2
Taenia	406	10	16	—
Schistosoma	89	7	1	—
Stools examined ..	10,694	557	1,102	80

359. Five specimens of urine of 2,808 examined in Mulago showed ova of *S. haemotobium*.

360. Onchocerciasis was confirmed in four patients in Mulago.

VENEREAL DISEASES

361. (*a*) Syphilis. Dark ground examinations performed at Mulago numbered 656; of these 391 showed *T. pallidum*.

Kahn Tests

	Number	*Strong reaction*	*Weak reaction*
Blood ...	21,058	1,503	1,957
C.S.F. ...	585	20	186

(*b*) Gonorrhoea.

	Total smears examined	*Positive for gonococcii*
Male	2,673	1,783
Female	2,646	472
	5,319	2,255

362. During the year the volume of work increased considerably and in addition to an increase in the number of samples received, which does not give a true indication of time and labour expended, a very wide variety of work was undertaken.

363. The staff was augumented by the recruitment of a clerk/typist, a laboratory orderly and a laboratory assistant trainee. Lectures in elementary chemistry were given to all first year trainees in the Medical Laboratory and it is hoped to continue this scheme for future trainees.

364. The total number of samples examined during 1957 was 2,084 compared with 1,564 in the previous year, which is an increase of about 33 per cent.

365. The source and distribution of samples received are as follows:—

Source	Number	Distribution	Number
Police Department	1,162	Water	48
Public Health and Medical Department	241	Foodstuff	709
East African Customs and Excise Department	51	Forensic chemical examination ..	1,162
Other Government departments and parastatal bodies	401	Medical Department ..	44
Miscellaneous including private firms and individuals	229	Miscellaneous	121
TOTAL ..	2,084	TOTAL ..	2,084

366. Fees charged for examination undertaken on behalf of private firms and parastatal bodies amounted to Shs. 21,045 and this sum was credited to the Uganda Administration.

WATER

367. Forty-eight samples of water received included 30 from health authorities, five from the East African Railways and Harbours and 13 from private firms. Examinations were, in the main, required for suitability of the waters for domestic and industrial purposes.

368. Apart from the above samples examined, a considerable number of samples of water were tested in connection with the recommendations made regarding improvements in water treatment procedure for the Kampala and district water supply. This work involved chemical and bacteriological examinations and laboratory trials on methods of filtration and chemical sterilisation. The treatment recommended was filtration through a micro-stainer with the aid of allum floc followed by chemical sterilisation by chloramine process. The above recommendations will, it is hoped, be acted upon shortly and in the meanwhile as a result of determinations carried out on the chlorine demand of the raw water, the dose of chlorine has been increased and since this was started the quality of water entering the mains at the waterworks has been consistently satisfactory.

369. Advice on water treatment was also given in the case of a swimming pool near Kampala.

FOODSTUFF

370. The following foods were examined:—

Fresh milk	113
Edible oils and fat ...	118
Coffee	451
Other footstuffs ...	27
	709

FRESH MILK

371. Eighty-five samples of milk were received from health authorities and of these 36 (i.e. 43 per cent) were found to be impoverished either by the addition of water or by the abstraction of cream. The percentage of adulterated samples during the year is slightly less than that for the previous year which was 50 per cent. This might, to an extent, be accounted for by the large amount of milk sold in cartons. The majority of adulterated milks were found to be those received from African local authorities and these had obviously been taken from street vendors. The adulteration in these cases was gross.

372. Twenty-eight samples of milk were examined for compliance with phosphatase test and determination of acidity.

OILS AND FATS

373. Sixty-four samples of cottonseed oil and 44 samples of groundnut oil were received from commercial sources. The determinations required were moisture content, free fatty acidity and suspended impurities. The examinations were required for export purposes. Eight samples of butter, ghee, margarine and ghee substitutes were received from health authorities. All were found genuine except in one case where a sample sold as ghee was found to be hydrogenated vegetable oil.

374. One sample of red palm oil and one yaw oil were examined for private firms.

COFFEE

375. On behalf of the Uganda Coffee Industry Board 451 samples of coffee were examined for moisture content and presence of mould growth.

OTHER FOODS

376. Six samples of maize flour were examined for contamination with benzene hexachloride and three samples were examined for infestation.

377. Other samples examined were oil cakes, tinned foods for metallic contaminants, fruit gum, mineral waters and vinegar.

FORENSIC CHEMICAL EXAMINATION

378. The type of work undertaken in connection with exhibits submitted by the police was as follows:—

Exhibits for detection of human blood and seminal stains	669
Toxicological specimens and exhibits ...	409
Miscellaneous	64
	1,132

631 exhibits were examined for the presence of human blood and for determination of blood group. It is hoped to acquire antisera of other animals shortly and it should then be possible to identify positively bloods which give negative reactions with anti-human serum. The absorption technique for blood grouping is adopted as a routine procedure on all blood and seminal stains. Thirty-eight exhibits were examined for the presence of seminal stains, pubic hair, etc.

TOXICOLOGY

379. From 96 cases of suspected poisoning 353 exhibits were received. Toxic substances were identified in 41 cases comprising of 111 exhibits. The poisons found were ethyl alcohol (28 cases), caustic soda (three), euphorbium resin (four), quinine (two), chloroquine (one), poisonous mushroom (one) and phytolacca dodecandra (one).

380. Fifty-six drugs and plants were received for identification. The drugs were in connection with the illegal practice of medicine. These were found to be cannabis sativa, penicillin and its salts, streptomycin, phenindamine tartrate, phenobarbitone, arsphenamine and promethazine hydrochloride.

MISCELLANEOUS

381. These included 59 samples suspected to be *waragi,* nine samples of metal for estimation of gold in cases involving the illicit sale of gold. In the majority of cases these were found to be brass turnings and in two instances were alloys of silver and copper which had been coated with gold. Other exhibits examined included fragments of paints, bits of glass and fibre for identification in burglary and "hit and run" cases.

MEDICAL DEPARTMENT

382. Seventeen samples were received from the Chief Pharmacist for identification and compliance with British Pharmacopoeia and Codex specifications and these were:

zinc oxide, tincture of ipecac, infusion of gentian, paraldehyde, mist. chloral hydrate, distilled water and cotton-wool.

383. Twenty-one specimens were received from the hospitals for detection of poison and those identified were:

mercury, quinine, aspirin, codeine and phytolacca dodecandra.

A mixture containing morphine was assayed for alkaloidal content.

384. Three samples of native beers and four samples of beans were examined for the nutrition unit.

MISCELLANEOUS

385. Fifty-one samples were examined on behalf of the East African Customs and Excise Department and these included 11 beers for original gravity, 29 textiles for silk content, two perfumes, three oils, kaolin, lime, red palm oil, glycerine, invert sugar syrup and rice. Sixteen samples of insecticide powder were analysed for D.D.T. content for the Agricultural Department.

386. Nine samples from the Public Works Department included seven samples of soil for lime content and two samples of soap for free alkali content. One sample of vodka was received from the Treasury for the assessment of impurities. Five samples of cement and concrete mixes were examined for private builders.

387. Other samples examined included gramophone record raw materials for shellac content in an insurance claim case, samples of engine oil for contaminants, sewage sludge, wood preservative, tea, soils and a sample of biscuits for assessment of calorific value.

VI.—TRAINING SCHEMES

TRAINING

388. The outstanding event of 1957 was the visit to Uganda of Miss Houghton, M.B.E., Education Officer to the General Nursing Council for England and Wales.

389. Miss Houghton paid visits to all the nursing training schools in Kampala and to the nursing orderlies training schools at Jinja, Lira and Masaka. In addition, whilst in the Northern Province, she visited the training school for midwives at Gulu.

390. It is recorded with satisfaction that arising out of Miss Houghton's visit certificated nurses from Mulago Nurses Training School have been granted a concession of 18 months towards the period of training necessary in the United Kingdom prior to State Registration. This means that the time spent in the United Kingdom in training may be reduced by as much as 18 months.

391. A reduction of 12 months of study time has at the same time been granted to certificated nurses passing out from certain mission training schools. Both the concessions referred to above apply to all nurses beginning their training on or after 1st January, 1954.

392. Training has progressed steadily throughout the year, although difficulties still arise owing to the varying educational standards of the applicants. The policy has continued by which an examination is set at the end of the third month of training. Candidates failing to pass this elementary test are discharged. This results in a sharp reduction in the number of trainees in residence but, at the same time, spares the tutors wasted effort and removes those candidates who are unlikely to complete their training successfully before they have been a major drain on the Department's finances. After this initial period of wastage, losses are lower during the remainder of the training period.

393. There has been a definite improvement in the standard of education of schoolgirls coming forward for training. As a consequence an improved standard of nursing care given to patients should soon be felt.

394. The Department continues to lose a very high percentage of trained staff of all types on resignation. Annual losses in some instances almost approach annual replacements from the training schools, and the shortage of trained staff in existing and expanding units remained acute.

395. In past annual reports it has been customary to comment in detail on the training of individual types of nursing and public health ancillary staff. There has been no change in the activities of various training centres during the past year, and detailed comment is, therefore, omitted. At the end of this section Table XII shows the intake and the output of nurses, midwives and nursing ancillaries at each training centre, together with the wastage.

396. Particular mention of the School of Hygiene is, however, warranted. Although the present school at Mbale has continued as in the past, work has now commenced on the construction of a new unit scheduled for completion in 1959. The present school will accommodate a total of 88 trainees; the new school is designed to accommodate 120. On the transfer of the School of Hygiene to its new buildings the present school will be converted for use as a training establishment for medical assistants.

397. Training of local staff continues to be one of the major duties of the Department and must precede the further development of curative services.

398. A dismal report must be given on the attempt to train assistant health visitors, principally for posting to health centres. Eight commenced the course in August 1956. For one reason or another the class gradually diminished and four only sat the final examination. Of these one failed, one of the successful candidates resigned on marriage, and one refused to be posted outside Buganda. The remaining one was posted to the Health Centre at Budaka.

399. The new course which started in 1957 had an initial strength of five. At the end of the year five still remained.

400. As in past years, U.N.I.C.E.F. has continued to aid in training by the provision of welcome teaching equipment to both Government and mission schools.

401. At the beginning of the year, 12 students started the course for assistant radiographers. One student remained from the intake at the beginning of the previous year (1956). These 12 new students had educational standards varying from Secondary III to Secondary VI with School Certificate, but despite this it was found that their background education was deplorable. In most cases they had the most hazy notion of history, geography and general knowledge. Their English was poor and some were unable even to do simple calculations. A considerational amount of time has been taken up during the year in trying to make good these deficiencies. It is interesting to note the wide variation in the general education of boys of similar educational standards.

402. Of the students remaining at the end of the year, all but one passed the annual examination.

403. During 1957 the following completed their training and passed their qualifying examinations:—

Health Inspectors (East Africa)	5
Hygiene Orderlies	7
Laboratory Assistants ...	4
Dispensers	5

VII.—BUILDINGS

404. The following buildings were completed by December 1957:--

A. 1. Nakasero Hospital improvements.
2. Kampala, Nutrition Unit Buildings.
3. Lira, Medical Stores (first phase).
4. Lira, tuberculosis ward.
5. Jinja, X-ray building.
6. Mbarara, tuberculosis ward.
7. Mbarara, X-ray building.
8. Kabale, tuberculosis ward.
9. Mbale, X-ray building.
10. Fort Portal, tuberculosis ward.
11. Mulago Hospital, children's ward (alteration).
12. Mulago Hospital, paying patients' ward.

Complete scheme value of above—£98,800.

TABLE XII

Hospital	Course	Length of course	No. of places	In training on 1–1–57		Wastage	Passed final examinations	In training on 31–12–57
Mulago ..	General Nursing ..	3 years 3 months ..	196	3rd year	19	1	18	29
				2nd year	30	3	—	42
				1st year	46	3	—	34
				1957 intake	50*	15†	—	—
				TOTAL ..	145	22	18	105
Mulago ..	Midwifery ..	2 years 3 months ..	24	2nd year	8	—	7	11
				1st year	7	2	—	7
				1957 intake 10+6= ..	16*	4	—	—
				TOTAL ..	31	6	7	18
Gulu ..	Midwifery ..	2 years 3 months ..	10	2nd year	—	—	—	6
				1st year	6	—	—	2
				1957 intake	6	4	—	—
				TOTAL ..	12	4	—	8
Masaka ..	Medical Assistants ..	1 year or 2 years ..	30	One year	30	1	29	26
				Two years	8	2	—	3
				1957–1 year intake ..	20	—	—	—
				1957–2 year intake ..	3	—	—	—
				TOTAL ..	61	3	29	29
Masaka ..	Nursing Orderlies ..	2 years	60	2nd year	17	3	10 passed out at Nursing Orderly level. 7 passed Medical Assistants course	9
				1st year	15	4		19
				1957 intake	35	15		—
				TOTAL ..	67	22	17	28
Jinja ..	Nursing Orderlies ..	2 years	32	2nd year	14	6	7 passed out at Nursing Orderly level. 5 passed for Medical Assistants course	11
				1st year	16	3		15
				1957 intake	23	6		—
				TOTAL ..	53	15	12	26
Lira ..	Nursing Orderlies ..	2 years	45	2nd year	15	2	7 passed out at Nursing Orderly level. 7 passed for Medical Assistants course	23
				1st year	24	1		22
				1957 intake	30	7		—
				TOTAL ..	69	10	14	45

405. Under construction, December, 1957:—

B.
1. Entebbe, headquarters offices.
2. Arua, hospital O.P.D. and store.
3. Kabale, Medical Stores (first phase).
4. Jinja, hostel for hospital staff.
5. Jinja, labour ward.
6. Mbale, operating theatre, alterations.
7. Gulu, midwives' training centre, alterations.
8. Tororo, out-patients department.
9. Nakasero Hospital, operating theatre and administrative block, alterations.
10. Butabika Hospital for Nervous Diseases.
11. Institutional housing.

406. Planning stage for buildings for which funds have been made available to commence work during 1958:—

C.
1. Mulago staff hostel.
2. Mulago nursing sisters' quarters.
3. Nakasero Hospital, nursing sisters' quarters.
4. Entebbe, laundries and kitchens.
5. Masaka, laundries and kitchens.
6. Jinja, training school extension.
7. Jinja, paying ward.
8. Mbale, staff hostel.
9. Mbale, training schools.
10. Mbale, 20-bed ward.
11. Mbale, nursing sisters' quarters.
12. Arua, kitchens and laundries.
13. Arua, maternity unit.
14. Tororo, maternity unit.

Complete scheme value of B and C: £465,850.

New Mulago Hospital

407. An advisory committee, assisted by numerous specialist planning sub-committees, completed plans for a new six-storied hospital, to replace the existing Mulago, at a cost of £2,300,000.

408. The general and teaching hospital which is to occupy the first five storeys is designed to provide 758 beds. The top storey, that is the sixth, running the whole length of the ward blocks, will provide 132 beds in single and small wards for paying patients.

409. The building schedule, to be spread over six years, was approved by Legislative Council in November.

LEGISLATION

DISTRICT COUNCIL BYE-LAWS

Legal Notice 39 Bukedi District Council (Slaughtering Places and Meat Shops) Bye-laws, 1956.

Legal Notice 54 Busoga District Council—a bye-law to control eating-houses.

Legal Notice 91 Bukedi District Council—a bye-law to amend the Registration of Births, Marriages and Deaths, 1951.

Legal Notice 182 Bukedi District Council—a bye-law to amend the (Slaughtering Places and Meat Shops) Bye-law, 1956.

Legal Notice 229 Lango District Council—a bye-law to amend the Registration of Births, Marriages and Deaths, 1951.

FACTORIES ORDINANCE, 1952

General Notice 1207 lists equipment to be in first-aid boxes.

Markets Ordinance, Cap. 107.

MARKETS ORDINANCE, CAP. 107.

Legal Notice 122 rules to apply to Busoga District.

MEDICAL PRACTITIONERS AND DENTISTS ORDINANCE, CAP. 93.

General Notice 122 lists dentists permitted to practise under section 23 (ii) on 1st January, 1957.

General Notices 110 *and* 115 list medical practitioners on the list 1st January, 1957.

General Notices 111 *and* 116 list dentists on the register 1st January, 1957.

General Notice 117 lists medical practitioners provisionally registered under section 6B (2) 1st January, 1957.

MIDWIVES ORDINANCE, CAP. 95

General Notices 113 *and* 114 list midwives on the register 1st January, 1957.

General Notice 472 lists Local Supervisory Authorities.

General Notice 551—corrigendum to General Notice 472.

MENTAL TREATMENT ORDINANCE, CAP. 99

General Notice 920 appoints visitor of the mental hospitals.

PUBLIC HEALTH ORDINANCE, CAP. 98

Legal Notice 77 appointment of areas to be used as cemeteries for Gulu.

Legal Notice 237 appoints an area to be used as a Hindu crematorium for Kabale Township.

Legal Notice 240 appoints areas to be used as cemeteries for Arua Township.

Legal Notice 260 appoints areas to be used as cemeteries within the Municipality of Kampala.

General Notice 1017 appoints Medical Officer of Health to the Municipality of Kampala.

General Notice 1380 appoints Medical Officer of Health in the Municipality of Jinja.

THE PUBLIC HEALTH BUILDING RULES, 1951

Legal Notice 1 is Grade II Housing Areas Building (Amendment) Rules, 1956.

Legal Notice 68 exempts certain areas of Mbale Township from operations of provisions of the Rules Grade II.

Legal Notice 78 exempts certain areas of Jinja Municipality from operations of provisions of the Temporary Housing Areas Building Rules, 1957.

Legal Notice 79 exempts certain areas of Jinja Municipality from operations of provisions of Grade II Rules.

Legal Notice 80 exempts certain areas of Kamuli Township from operations of provisions of Grade II Rules.

Legal Notice 81 exempts certain areas of Kamuli Township from operations of provisions of Temporary Rules.

Legal Notice 82 The Temporary Housing Areas (Jinja Municipality) Building Rules, 1957.

Legal Notice 83 The Temporary Housing Areas (Kamuli Township) Building Rules, 1957.

Legal Notice 148 exempts certain areas of Lira Township from operations of provision of Rules Grade II.

THE PUBLIC HEALTH (EATING-HOUSE) RULES

Legal Notice 14 adds Kasese, Bundibugyo, Kabatoro, Butiti, Kyanjojo to First Schedule.

Legal Notice 38 adds Busia to First Schedule.

Legal Notice 73 adds Lwambu Township to First Schedule.

Legal Notice 236 bye-law to control eating-houses at Toro.

THE PUBLIC HEALTH (BAKEHOUSE) RULES

Legal Notice 15 adds Kasese, Bundibugyo, Kabatoro, Butiti, Kyanjojo to the First Schedule.

THE PUBLIC HEALTH (MEAT) RULES

Legal Notice 16 adds Kasese to the First Schedule.

General Notice 530 lists persons appointed officers in respect of Masindi Township.

THE PUBLIC HEALTH (NOTIFIABLE DISEASES) RULES

Legal Notice 159 form to replace form set out in Schedule A to the Rules.

Legal Notice 160 lists diseases notifiable for purposes of the Ordinance.

Legal Notice 166 hereby amends the principal Rules.

PRISON ORDINANCE, CAP. 59

Legal Notice 133 Dietary Scales.

PHARMACY AND POISONS ORDINANCE, CAP. 96

General Notice 248 lists persons authorised to give certificates under section 21 (2) (*c*) 1st February, 1957.

General Notice 249 lists registered premises removed from register under section 15 on 1st February, 1957.

General Notice 250 lists pharmacists registered under sections 9 and 11 on 1st February, 1957.

General Notice 251 exempts hospitals and dispensaries from certain provisions of the Ordinance.

General Notice 252 notes sale of patent medicines in the Protectorate.

General Notice 253 gives list of those licensed to sell poisons by way of wholesale dealing.

General Notice 254 lists pharmacists removed from register under section 11 on 1st February, 1957.

General Notice 255 lists premises registered under section 15 on 1st February, 1957.

General Notice 256 lists persons or firms licensed poisons Part 2 of Poisons List in 1957.

Legal Notice 112 Kuluva Leprosy and General Hospital exempted from Part II of the Ordinance.

Legal Notice 113 exempts Goli Dispensary and Maternity Unit from Part II of the Ordinance.

Legal Notice 231 lists hospitals exempted from Part II of the Ordinance.

General Notice 606 notifies that select committee has been set up to examine the Pharmacy and Poisons Bill, 1957.

REGISTRATION OF NURSES ORDINANCE, CAP. 94

General Notice 536 new member appointed to the Nurses and Midwives Council, 6th May, 1957.

General Notice 748 new member appointed to the Nurses and Midwives Council, 11th July, 1957.

SLEEPING SICKNESS ORDINANCE, CAP. 100

Legal Notices 108 *and* 136 proclaim the Lango District Sleeping Sickness Areas.

Legal Notice 137 proclaims the South Busoga Infected Areas.

Legal Notice 165 varies the fishing limits of defined places set out in paragraph O of the First Schedule to the Rules.

THE TOWNSHIPS ORDINANCE, CAP. 102

Legal Notice 354 appoints Medical Officer of Health, Mengo, as Member of Township Authorities.

General Notice 33 appoints Members of Township Authorities, Western Province.

General Notice 131 appoints Medical Officer of Health, Teso, as Member of Township Authority, Soroti.

MISCELLANEOUS

AFRICAN MEDICAL CHARGES

General Notice 172 announces committee set up to examine proposals for reintroduction of charging fees to Africans.

NAKASERO HOSPITAL

General Notice 170 announcing renaming of European and Asian Hospital to Nakasero Hospital.

NAKASERO HOSPITAL ADVISORY BOARD

General Notice 1096 lists members appointed with effect from 1st January, 1957.

General Notice 1252—corrigendum to General Notice 1096.

MEDICAL PRACTITIONERS

General Notice 404 requests notification of change of address of Medical Practitioners.

GOVERNMENT MEDICAL AND DENTAL SERVICES

General Notice 812 lists charges for Government Medical and Dental Services.

UGANDA MEDICAL INSTRUCTIONS

General Notice 672—Grants-in-Aid for Medical Units.

General Notice 753—corrigendum Grants-in-Aid for Medical Units.

General Notice 899—addendum to paragraph 2 of General Notice 672.

SCIENTIFIC PAPERS PUBLISHED OR SUBMITTED FOR PUBLICATION, 1957

COOK, J. AND BOSA, C. B. S.
A case of Choledochus Cyst.

DAVIES, A. G. M.
The Bone Changes of Madura Foot

HAMILTON, D. M.
Congenital Pyloric Sternosis. A Case Report.

HOPWOOD, B. E. C.
Feeding of Industrial Workers in Uganda. W.H.O./F.A.O. Course in Human Nutrition.

JACOB, G. F.
Further work on Haemoglobins in Monkeys.
Abnormal Haemoglobins in Monkeys.
A study of the Relationship between Sickling and Hookworms.

JACOB, G. F. AND RAPER, A. B.
Hereditary Persistence of Foetal Haemoglobin Production and its interaction with the Sickle-cell Trait.

KIBONEKA, G. H.
Cretinism

SINGH, S. A.
Treatment of Meningitis with Chloramphenical.
A Case of Pink Disease in an African Child.

TEWFIP, G. I.
Depression and E.C.T.
The Use of Short Acting Relaxants in Africa.

TROWELL, H. C.
The Second Albert Cook Memorial Lecture—The Medical Pioneers and Explorers of East Africa.
Intramuscular injections of iron in the treatment of the Anaemia associated with Kwashiorkor.

WELBOURNE, H. F.
Bottle feeding. A Problem of Modern Civilisation.
Differences between children attending Child Welfare Clinics in 1950 and in 1955.

WELCHMAN, J. M.
The Cardiac Toxicity of Emetine.

WOOLARD, A. R.
Housing Improvement—An aspect of Rural Sanitation in Acholi Uganda.

RAPER, A. B.
Unusual Haemoglobin Variant in a Gujerati Indian.

RAPER, A. B., TROWELL, H. C. AND WELBOURNE, H. F.
The Natural History of Homozygous Sickle-cell Anaemia.

SUMMARY OF REVENUE AND EXPENDITURE

	Revenue		Expenditure			Total
	Charges Raised	Capitation Fees	Personal Emoluments	Other Charges	Special Expenditure	
	£	£	£	£	£	£
1952	28,190	7,073	460,130	370,026	77,826	907,982
1953	32,308	7,912	499,472	411,769	50,236	961,477
Holding Budget 1954 ..	19,514	3,438	270,755	180,007	16,726	467,488
1954/55 ..	42,264	9,285	735,616	431,832	31,655	1,199,103
1955/56 ..	52,078	8,912	740,811	500,902	88,534	1,330,247
1956/57 ..	52,532	10,393	885,281	571,700	32,235	1,489,216

1955/56 Actual	Revenue	1956–1957 Estimated	1956–1957 Actual
£		£	£
	CHARGES FOR SERVICES RENDERED—		
24,858	Medical and dental charges and hospital and X-ray fees	32,000	29,020
3,440	Nursing Sisters' quarters	3,800	2,545
	SERVICES SUBJECT TO PART REPAYMENT TO OFFICERS—		
4,278	Medical fees: Workmen's Compensation Ordinance	5,500	2,957
19,502	Medical and dental private fees	16,500	18,010
52,078	TOTAL REVENUE ..	57,800	52,532
	CAPITATION FEES—		
5,225	Railways Administration: Medical attendance, Railway and Marine staff	5,384	6,509
3,687	Other bodies	3,422	3,884
7,500	Grants from other East African Governments to Mulago Teaching Hospital	7,500	7,500
68,490	TOTAL RECEIPTS ..	74,106	70,425
	Expenditure		
	STAFF—		
740,811	Personal emoluments	850,799	885,281
44,787	Casual labour	42,751	47,033
78,908	Transport of staff and patients	76,750	75,176
8,874	Part reimbursement of fees collected by officers from private patients	8,000	8,005
681	Workmen's Compensation : Payment to Government medical practitioners..	1,500	601
1,642	Medical and nursing attendance to private practitioners and nurses	950	1,757
1,519	Special courses of instruction for medical staff ..	400	848
9	Mulago Hospital African staff recreation fund ..	10	10
163	Financial assistance to departmental officers for research	250	186
5	Revenue refunds	10	2
442	Staff recreation : purchase of equipment ..	100	90
—	Honoraria and fees payable to consultants ..	250	250
—	Fees for sessional work by General Practitioners in out-patients clinics	—	—

1955/56	Expenditure—*continued*	1956–1957	
Actual		Estimated	Actual
£		£	£
	MATERIALS—		
206,287	Stores, drugs and equipment	250,000	233,277
625	Incidentals	800	858
445	Publications	450	881
	UPKEEP—		
—	Medico-Legal travelling	3,000	642
37,968	Post Office services, water and electricity ..	41,518	42,780
90,786	Food and fuel for hospitals, laboratory and training centres	93,493	92,038
703	Expenses in connection with non-African mental patients	500	471
	HYGIENE—		
9,471	Control of epidemic and endemic diseases ..	16,500	14,732
1,024	Public health propaganda	1,550	1,619
	CONTRIBUTIONS—		
7,256	Grants to missions for maintenance of training schools for nurses and midwives	10,631	7,931
7,742	Grants to missions for relief of leprosy ..	7,943	7,775
100	Lady Cook Memorial Scholarships for African nurses and midwives	100	50
750	Maintenance of Red Cross van for blood transfusion service	750	750
—	Grants to H.H. the Kabaka's Government and District Councils in respect of transferred services	1	31,638
	SPECIAL EXPENDITURE—		
754	Building grants to leper settlements	1,000	1,000
9,323	Equipment for hospitals and dispensaries ..	15,960	11,033
2,726	Purchase of motor vehicles	12,940	12,481
1,660	Teaching equipment for training schools ..	300	483
3,000	Pediatric research scheme	1,632	—
1,498	Office equipment	500	414
—	Equipment for new Nursing Sisters' quarters ..	2,000	1,813
—	Medical visitors	1,750	1,141
—	Agriculture and trade shows	100	—
—	Implementation of the Frazer Committee Report	200,000	852
—	Grants to H.H. the Kabaka's Government and District Councils in respect of transferred services	1	—
—	Equipment for Central Laboratory	—	2,918
1,259,959	TOTAL MEDICAL DEPARTMENT ..	1,645,189	1,489,216
	Capital Expenditure		
111,335	Public Works Extraordinary	31,975	39,305
—	New Mulago Hospital	20,000	23,572
61,539	Other capital expenditure	25,068	26,251
172,874	TOTAL ..	77,043	89,128

ESTABLISHMENT, 1957/58

Sanctioned Establishments and Vacancies

Administration

1 Director of Medical Services.
1 Deputy Director of Medical Services.
2 Assistant Directors.
9 Senior Medical Officers (1 *vacancy*).
1 Administrative Secretary.
2 Establishment Officer and Assistant Establishment Officer (1 *vacancy*).
1 Senior Accountant.
2 Accountants.
10 Personal Secretaries (3 *vacancies*).
6 Section Officers and Accounts Officer (1 *vacancy*).
7 Office Assistants.
7 Accounts Assistants.
1 Statistical Assistant (1 *vacancy*).

General

3 Senior Specialists.
12 Specialists. (1 *vacancy*).
9 Senior Medical Officers (1 *vacancy*).
121 Medical Officers, Medical Officers (E.A.), Medical Officers (U.), and Assistant Surgeons (17 *vacancies*).
1 Senior Hospital Superintendent.
3 Hospital Superintendents.
16 Assistant Hospital Superintendents (4 *vacancies*).
1 Nutritionist (1 *vacancy*).
2 Instrument Mechanics (1 *vacancy*).
1 Medico-Social Worker.
1 Commercial Artist (1 *vacancy*).
9 Clerks C6–5 (Shadow) and E2–1.
67 Clerks E4–3 and E6–5.
21 Clerks contract plus temporary.
64 Clerical Assistants (28 *vacancies*).
11 Hospital Cooks (9 *vacancies*).
23 Artisans (17 *vacancies*).
3 Foremen (2 *vacancies*).
36 Clinical writers.

Nursing

1 Matron-in-Chief.
4 Matrons Grade I.
4 Matrons Grade II.
1 Senior Sister Tutor.
7 Sister Tutors (4 *vacancies*).
4 Male Tutors (2 *vacancies*).
1 Health Visitor Tutor (1 *vacancy*).
95 Nursing Sisters and Health Visitors.
405 Asian Nurses and Midwives, Nurses and Midwives and Nurse/Midwives (102 *vacancies*).
315 Medical Assistants (54 *vacancies*).
242 Nursing Orderlies (56 *vacancies*).
1 Warden.
1 Welfare Worker.
9 Housekeepers (2 *vacancies*).
5 Domestic Assistants (4 *vacancies*).
2 Orthopaedic Assistants (1 *vacancy*).

Laboratory and Entomological

1 Senior Pathologist.
3 Pathologists.
2 Government Chemists (1 *vacancy*).
3 Senior Entomologist and Entomologists.
4 Laboratory Technicians (1 *vacancy*).
1 Assistant Bacteriologist (1 vacancy).
2 Field Officers (1 *vacancy*).
1 Physiological Laboratory Superintendent.
1 Biochemist.
3 Physiotherapists (1 *vacancy*).
1 Senior Laboratory Technician (1 *vacancy*).
66 Senior Laboratory Assistants and Laboratory Assistants (17 *vacancies*).
12 Field Assistants (6 *vacancies*).
3 Entomological Orderlies (1 *vacancy*).
23 Laboratory Orderlies (Subordinate).

Pharmaceutical

1 Chief Pharmacist.
6 Pharmacists (2 *vacancies*).
1 Senior Storekeeper.
2 Storekeepers (1 *vacancy*).
1 Inspector of Drugs (1 *vacancy*).
6 Assistant Storekeepers (3 *vacancies*).
51 Dispensers (3 *vacancies*).
36 Assistant Storekeepers (Stores Assistants) (25 *vacancies*).

Radiological

1 Senior Radiographer.
6 Radiographers (2 *vacancies*).
1 Receptionist Secretary.
7 Senior Assistant Radiographers (4 *vacancies*).

Hygiene and Sanitation

1 Chief Health Inspector.
26 Senior Health Inspectors and Health Inspectors (5 *vacancies*).
1 Instructor of Hygiene and Sanitation.
2 Assistant Instructors of Hygiene (1 *vacancy*).
135 Health Inspectors (E.A.) (25 *vacancies*)
120 Hygiene Orderlies (4 *vacancies*).
121 Health Orderlies.

Dental

7 Dental Surgeons (3 *vacancies*).
3 Dental Mechanics (1 *vacancy*).
5 Dental Orderlies (Subordinate).

Mental Hospital

1 Chief Male Nurse.
9 Charge Nurses (5 *vacancies*).
2 Sister-in-Charge Mental Hospital (1 *vacancy*).
4 Sisters Mental Hospital (4 vacancies).
12 Mental Nurses (9 *vacancies*).
55 Male Mental Attendants.
25 Female Mental Attendants.
148 Male Mental Orderlies.
74 Female Mental Orderlies.

Transport

13 Drivers (9 *vacancies*).
1 Vehicle Mechanic.
1 Mechanic.
64 Drivers (Subordinate service).

Training Schools

1 Instructor of Hygiene
1 Assistant Instructor of Hygiene.
4 Medical Officers
1 Senior Sister Tutor
3 Sister Tutors and Midwifery Tutor.
2 Male Tutors
} Included above.

480 Learners.

STAFF

Honours 1957

Miss M. O. C. Bonthron ..	*Matron-in-Chief* ..	..	O.B.E.
Dr. P. S. B. Muganwa	*Medical Officer (E.A.)*	..	M.B.E.
Dr. I. S. Kadama ..	*Medical Officer (E.A.)*	..	M.B.E.
Mr. M. Mukasa ..	*Dental Orderly* ..	..	Certificate of Honour.
Miss E. Nyinandegeya	*Midwife* ..	..	Certificate of Honour.

Post-Graduate Diplomas and Degrees

Dr. W. G. Timmis ..	*Medical Officer* ..	..	D.P.H.
Dr. J. L. Lanceley ..	*Medical Officer* ..	..	F.R.F.P.&S. (*Glasgow*).
Dr. A. Kagwa ..	*Medical Officer* ..	..	D.T.M.&H.
Dr. I. S. Kadama ..	*Medical Officer* ..	..	D.T.M.&H.

Senior Staff

Director	E. A. Trim, O.B.E., M.D., B.Ch., D.T.M.&H.
Deputy Director	J. K. Hunter, O.B.E., M.B., D.T.M.&H., D.P.H.
Assistant Directors	E. M. Clark, M.R.C.S., D.T.M.&H.
	D. G. Snell, M.B., M.R.C.S., D.P.H., D.T.M.&H.
Senior Specialists	A. A. Alderdice, M.B., M.R.C.P.
	P. W. Hutton, M.D., M.R.C.P., D.T.M.&H.
	I. W. McAdam, M.B., F.R.C.S.
Specialists Physician	J. M. Vaizey, B.A., M.D., M.R.C.P., D.T.M.&H.
Surgeon	D. P. Burkitt, M.D., F.R.C.S.
Ophthalmogist	D. W. Ellis Jones, M.B., D.T.M.&H. D.O.R.C.S., R.C.P.
Radiologist	A. G. M. Davies, M.D., D.M.R.D.
Alienist	G. I. Tewfik, M.D., D.P.M.
Anaesthetist	H. R. Hudd, B.Sc., M.B., M.R.C.S., D.A.
Leprologist	J. A. K. Brown, B.Sc., M.D., M.R.C.S., D.T.M.&H.
Gynaecologist	H. N. Mansfield, M.D., M.R.C.S., M.R.C.O.G.
Ear, Nose and Throat ..	P. E. Roland, M.B., B.Sc., D.L.O., F.R.C.S.
Senior Medical Officers ..	W. Barnetson, M.B., D.T.M.&H.
	A. F. Fowler, M.R.C.S., D.P.H., D.T.M.&H.
	A. R. Duff, M.B., D.T.M.&H., D.P.H.
	J. L. Lanceley, M.D., F.R.F.P.&S. D.T.M.&H.
	J. K. T. Cherry, M.D., D.P.H.
	J. N. Twohig, M.B., D.P.H.
	B. E. C. Hopwood, M.R.C.S., D.P.H., D.I.H.
Senior Pathologist	S. C. Buck, M.A., M.B., M.R.C.S.
Senior Entomologist	G. R. Barnley, M.B.E., M.Sc.
Matron-in-Chief	M. O. C. Bonthron, O.B.E., S.R.N., S.C.M., R.F.N. Diploma in Nursing to 19–7–57.
	R. Angus (Commenced duty 28–11–57).
Chief Pharmacist	J. C. Baird, M.P.S., Ph.C., D.B.A.
Chief Health Inspector ..	V. A. Bunge, F.R.S.H.
Administrative Secretary ..	E. J. Kennard.

Appendix VI (A)

DISEASES OF PATIENTS ATTENDING GOVERNMENT HOSPITALS

OUT-PATIENTS, 1957

List No.	Diseases	Africans		Asians	Europeans	Total
		No. of cases		No. of cases	No. of cases	
		M.	F.	M. & F.	M. & F.	
1.	Tuberculosis of the respiratory system	834	426	3	8	1,271
2.	Other tuberculous diseases	49	32	1	—	82
3.	Syphilis	9,249	7,024	1	1	16,275
4.	Gonorrhoea	19,784	8,890	5	6	28,685
5.	Other venereal diseases	4,797	2,871	1	2	7,671
6.	Fevers not otherwise specified	12,727	8,496	191	168	21,582
7.	Bacillary dysentery	3,317	1,815	111	37	5,280
8.	Amoebic dysentery	500	318	19	22	859
9.	Diphtheria	13	5	—	—	18
10.	Whooping-cough	2,592	2,346	66	38	5,042
11.	Meningitis (except tuberculous)	5	3	—	—	8
12.	Plague	—	—	—	—	—
13.	Leprosy	690	605	—	—	1,295
14.	Tetanus	9	7	—	—	16
15.	Anthrax	6	—	—	—	6
16.	Acute poliomyelitis	290	153	—	—	443
17.	Smallpox—					
	(*a*) Variola major	1	5	—	—	6
	(*b*) Variola minor	27	23	—	1	51
18.	Measles	1,589	1,250	16	7	2,862
19.	Mumps	1,161	602	32	53	1,848
20.	Malaria—					
	(*a*) Benign tertian (vivax)	1	—	—	—	1
	(*b*) Quartan (malariae)	99	44	3	5	151
	(*c*) Malignant tertian (falciparum)	19,608	14,293	389	79	34,369
	(*d*) Other unspecified malaria	61,764	42,961	1,408	154	106,287
21.	Blackwater fever	3	—	1	—	4
22.	Schistosomiasis—					
	(*a*) Vesical	210	76	—	—	286
	(*b*) Intestinal	1,159	810	1	1	1,971
23.	Onchocerciasis	440	194	9	6	649
24.	Ankylostomiasis	6,762	5,196	21	2	11,981
25.	Guinea-worm	170	53	—	1	224
26.	Other helminthic diseases	5,630	4,378	57	89	10,154
27.	Relapsing fever	2	—	—	—	2
28.	Yaws	6,148	4,215	1	—	10,364
29.	Chicken-pox	1,605	1,085	8	15	2,713
30.	Trachoma	3,725	4,186	245	—	8,156
31.	Other diseases of eye and annexa (except ophthalmia neonatorum)	21,955	14,645	478	1,739	38,817
32.	Trypanosomiasis—					
	(*a*) T. gambiense	65	29	—	—	94
	(*b*) T. rhodesiense	—	—	—	—	—
	(*c*) Unspecified	5	9	—	—	14
33.	Tinea	1,873	1,032	10	52	2,967
34.	Scabies	7,328	4,742	23	3	12,096
35.	Cancer and other tumours—					
	(*a*) Malignant including leukamia	106	55	2	1	164
	(*b*) Benign and unspecified	131	422	—	3	556
36.	Asthma	1,032	451	262	69	1,814
37.	Diabetes	30	5	49	30	114
38.	Vitamin deficiency states	871	562	12	9	1,454
39.	Diseases of blood and blood forming organs	1,771	1,475	108	62	3,416

List No.	Diseases	Africans		Asians	Europeans	Total
		No. of cases		No. of cases	No. of cases	
		M.	F.	M. & F.	M. & F.	
40.	Cerebral vascular lesions	2	1	1	4	8
41.	Mental disorders	269	138	20	97	524
42.	Epilepsy	82	30	6	25	143
43.	Other diseases of nervous system	3,268	1,731	196	299	5,494
44.	Disease inflammatory of ear and mastoid sinus	10,260	7,377	203	328	18,168
45.	Diseases of the circulatory system—					
	(*a*) Heart disease	881	557	53	64	1,555
	(*b*) Other circulatory diseases	541	320	68	68	997
46.	Pneumonia—					
	(*a*) Lobar pneumonia	3,507	2,401	35	2	5,945
	(*b*) Bronchopneumonia	1,742	1,254	77	4	3,077
47.	Other diseases of respiratory system	85,396	54,530	3,425	2,256	145,607
48.	Diseases of teeth and gums—					
	(*a*) Caries	9,642	6,357	881	3,587	20,467
	(*b*) Other conditions	8,193	5,185	449	2,070	15,897
49.	Appendicitis	—	2	10	19	31
50.	Intestinal obstruction and hernia	2,292	940	7	4	3,243
51.	Gastro-enteritis (over 4 weeks old)	4,236	2,703	110	257	7,306
52.	Cirrhosis of the liver	317	180	1	1	499
53.	Other diseases of liver and bile passages	109	132	24	35	300
54.	Other diseases of digestive system	45,466	33,259	490	657	79,872
55.	Nephritis	33	19	5	9	66
56.	Hydrocele	843	—	4	2	849
57.	Other diseases of genito-urinary system	3,469	5,531	196	494	9,690
58.	Diseases of pregnancy, child birth and the puerperal state	—	27	18	—	45
	(*a*) Abortion	—	482	15	28	525
	(*b*) Toxaemias of pregnancy	—	39	4	5	48
	(*c*) Other conditions	—	2,440	138	61	2,639
59.	Arthritis and rheumatism	12,374	7,547	232	170	20,323
60.	Chronic ulcer of leg	18,801	8,863	17	7	27,688
61.	(*a*) Other diseases of skin	25,334	17,101	625	971	44,031
	(*b*) Other diseases of musculo-skeletal system	7,203	3,759	251	260	11,473
62.	Congenital malformations and diseases of early infancy	1	—	—	1	2
	(*a*) Diarrhoea of new-born	1,169	1,570	3	3	2,745
	(*b*) Ophthalmia neonatorum	11	6	—	1	18
	(*c*) Immaturity	—	—	—	—	—
	(*d*) All other malformations and diseases of early infancy	235	190	5	23	453
63.	Fractures and dislocations, except where classifiable under item (64)	3,154	1,376	62	125	4,717
64.	Injuries by animals or insects	2,883	1,372	70	138	4,463
65.	Other wounds and superficial injuries (excluding burns)	50,815	21,397	394	674	73,280
66.	Effects of foreign bodies	2,415	1,437	35	53	3,940
67.	Burns and scalds	4,276	2,821	59	40	7,196
68.	Poisoning	347	202	—	11	560
69.	All other injuries from external causes	22,219	9,303	143	32	31,697
70.	(*a*) Ill-defined conditions	34,821	22,550	413	862	58,646
	(*b*) Examinations and prophylactic injections	58,810	61,460	6,266	3,144	129,680
	Grand Total	625,539	422,375	18,518	19,273	1,086,026

Total African Males and Females : 625,539+422,375=1,047,914.

DISEASES OF IN-PATIENTS AT GOVERNMENT HOSPITALS, 1957

			African				Asian		European		Total for the Year 1957	Deaths
			Male	Female	Deaths Male	Deaths Female	Male and Female	Deaths	Male and Female	Deaths		
A	1	Tuberculosis of respiratory system	623	305	76	15	13	3	3	—	944	94
A	2	Tuberculosis of meninges and central nervous system	9	8	4	3	1	—	—	—	18	7
A	3	Tuberculosis of intestines, peritoneum and mesenteric glands	16	10	1	1	3	—	—	—	29	2
A	4	Tuberculosis of bones and joints	139	46	9	—	—	—	—	—	185	9
A	5	Tuberculosis, all other forms	37	26	2	1	3	—	1	—	67	3
A	6	Congenital syphilis	21	19	1	6	—	—	—	—	40	7
A	7	Early syphilis (I and II)	53	28	1	—	—	—	—	—	81	1
A	8	Tables dorsalis	—	—	—	—	—	—	—	—	—	—
A	9	General paralysis of insane	7	3	—	—	—	—	—	—	10	—
A	10	All other syphilis	72	20	6	—	1	—	—	—	93	6
A	11	Gonococcal infections—										
		(*a*) Genito-urinary	564	349	22	1	—	—	—	—	913	23
		(*b*) Ophthalmic..	23	14	—	—	—	—	—	—	37	—
		(*c*) Other forms	196	104	5	—	—	—	—	—	300	5
A	12	Typhoid fever	490	235	36	15	6	—	5	—	736	51
A	13	Paratypho idfever and other salmonella infections	3	7	—	—	3	—	1	—	14	—
A	14	Cholera	—	—	—	—	—	—	—	—	—	—
A	15	Brucellosis (undulant fever)	5	1	—	—	—	—	1	—	7	—
A	16	(*a*) Bacillary dysentery	416	204	4	2	2	—	9	—	631	6
		(*b*) Amoebiasis (excluding symptomless cyst carriers)	215	134	3	2	—	—	13	—	362	5
		(*c*) Other unspecified forms of dysentery ..	75	65	3	1	—	—	14	—	154	4
A	17	Scarlet fever	1	1	—	—	—	—	—	—	2	—
A	18	Streptococcal sore throat	12	7	—	—	2	—	6	—	27	—
A	19	Erysipelas	1	—	—	—	—	—	—	—	1	—
A	20	Septicaemia and pyaemia	6	4	3	1	1	—	1	—	12	4

			African				Asian		European		Total for the Year 1957	Deaths
			Male	Female	Deaths Male	Deaths Female	Male and Female	Deaths	Male and Female	Deaths		
A	21	Diphtheria	3	2	—	1	3	—	—	—	8	1
A	22	Whooping-cough	170	263	6	12	1	—	1	—	435	18
A	23	Meningococcal infections	53	42	18	14	2	—	—	—	97	32
A	24	Plague	—	—	—	—	—	—	—	—	—	—
A	25	Leprosy	31	15	1	2	—	—	—	—	46	3
A	26	Tetanus	76	41	37	20	3	—	—	—	120	57
A	27	Anthrax	9	3	1	—	—	—	—	—	12	1
A	28	Acute poliomyelitis	27	22	3	2	6	—	4	—	59	5
A	29	Acute infectious encephalitis	7	5	—	—	—	—	—	—	12	—
A	30	Late effects of acute poliomyelitis and acute infectious encephalitis	16	7	—	—	1	—	—	—	24	—
A	31	Smallpox—										
		(*a*) Variola major	10	2	—	—	1	—	—	—	13	—
		(*b*) Variola minor	19	16	1	—	—	—	—	—	35	1
A	32	Measles	247	358	2	2	1	—	6	—	612	4
A	33	Yellow fever	—	—	—	—	—	—	—	—	—	—
A	34	Infectious hepatitis	84	41	15	3	5	—	6	—	136	18
A	35	Rabies	1	—	—	—	—	—	—	—	1	—
A	36	(*a*) Louse-borne (epidemic) typhus	2	—	—	—	—	—	—	—	2	—
		(*b*) Flea-borne (murine) typhus	8	1	—	—	1	—	—	—	10	—
		(*c*) Tick-borne typhus	2	22	—	—	1	—	8	—	33	—
		(*d*) Unspecified typhus	4	5	—	—	—	—	—	—	9	—
		(*e*) Other rickettsial diseases	—	—	—	—	—	—	—	—	—	—
A	37	(*a*) Vivax malaria (benign tertian)	36	11	—	2	4	1	4	—	55	3
		(*b*) Malariae malaria (quartan)	119	86	1	1	1	—	—	—	206	2
		(*c*) Falciparum malaria (malignant tertian)	2,125	2,047	93	85	23	2	58	1	4,253	181
		(*d*) Other unspecified malaria	2,172	1,860	62	53	57	—	17	—	4,106	115
		(*e*) Blackwater fever	7	8	—	1	—	—	—	—	15	1
A	38	Schistosomiasis—										
		(*a*) Vesical	12	5	—	—	—	—	—	—	17	—
		(*b*) Intestinal	89	69	1	—	—	—	2	—	160	1

Appendix VI (B)—continued

			African				Asian		European		Total for the Year 1957	Deaths
			Male	Female	Deaths Male	Deaths Female	Male and Female	Deaths	Male and Female	Deaths		
A	39	Hydatid disease	—	—	—	—	—	—	—	—	—	—
A	40	(*a*) Onchocerciasis	108	18	1	—	—	—	4	—	130	1
		(*b*) Loiasis	—	—	—	—	—	—	—	—	—	—
		(*c*) Filariasis (bancrofti)	1	1	—	—	—	—	—	—	2	—
		(*d*) Other filariasis	19	—	—	—	1	—	—	—	20	—
A	41	Ankylostomiasis	574	635	15	10	3	—	—	—	1,212	25
A	42	(*a*) Tapeworm	64	43	—	—	—	—	16	—	123	—
		(*b*) Ascaris	98	71	—	—	1	—	—	—	170	—
		(*c*) Guinea-worm	25	9	—	—	—	—	—	—	34	—
		(*d*) Other helminths	21	23	—	—	—	—	—	—	44	—
A	43	(*a*) Lymphogranuloma venereum	12	1	1	—	—	—	—	—	13	1
		(*b*) Granuloma inguinale, venereal	11	12	—	—	—	—	—	—	23	—
		(*c*) Other and unspecified venereal diseases	89	33	1	—	—	—	—	—	122	1
		(*d*) Food poisoning infection and intoxication (excluding Salmonella infections)	10	3	—	—	—	—	—	—	13	—
		(*e*) Relapsing fever	21	5	1	—	—	—	1	—	27	1
		(*f*) Leptospirosis (Weil's disease)	—	—	—	—	—	—	—	—	—	—
		(*g*) Yaws	105	60	—	—	—	—	—	—	165	—
		(*h*) Chicken-pox	199	112	—	—	1	—	1	—	313	—
		(*i*) Dengue	—	1	—	—	—	—	—	—	1	—
		(*j*) Trachoma	551	1,029	—	—	—	—	—	—	1,580	—
		(*k*) Sandfly fever	—	—	—	—	—	—	—	—	—	—
		(*l*) Leishmaniasis	14	1	1	1	—	—	—	—	15	2
		(*m*) Trypanosomiasis—										
		(i) T. gambiense	150	46	2	—	—	—	—	—	196	2
		(ii) T. rhodesiense	2	2	—	—	—	—	—	—	4	—
		(iii) Unspecified	18	10	1	2	—	—	—	—	28	3
		(*n*) Tinea	16	6	—	—	—	—	—	—	22	—
		(*o*) Scabies	43	32	—	—	—	—	—	—	75	—
		(*p*) All other parasitic diseases	89	61	2	4	—	—	2	—	152	6

			African				Asian		European		Total for the Year 1957	Deaths
			Male	Female	Deaths Male	Deaths Female	Male and Female	Deaths	Male and Female	Deaths		
		Malignant neoplasm of—										
A	44	buccal cavity and pharynx	18	10	1	—	—	—	—	—	28	1
A	45	oesophagus	8	3	1	1	—	—	—	—	11	2
A	46	stomach	13	13	5	2	—	—	2	—	28	7
A	47	intestine, except rectum	36	18	3	1	2	—	1	—	57	4
A	48	rectum	5	4	—	—	2	—	3	—	14	—
A	49	larynx	4	2	1	—	—	—	—	—	6	1
A	50	trachea, and of bronchus and lung not specified as secondary	4	1	3	—	1	—	—	—	6	3
A	51	breast	8	15	1	1	3	—	2	—	28	2
A	52	cervix uteri	—	78	—	2	—	—	1	—	79	2
A	53	other and unspecified parts of uterus	—	36	—	2	—	—	—	—	36	2
A	54	(*a*) prostate	29	—	3	—	—	—	—	—	29	3
		(*b*) penis	72	—	3	—	—	—	—	—	72	3
A	55	skin	27	31	2	—	—	—	3	—	61	2
A	56	bone and connective tissue	66	31	5	2	4	—	—	—	101	7
A	57	other unspecified sites	143	62	37	8	4	—	2	—	211	45
A	58	Leukaemia and aleukaemia	16	6	7	1	—	—	1	—	23	8
A	59	Neoplasm of lymphatic and haematopoietic system	46	5	8	1	1	—	2	—	54	9
A	60	Benign and unspecified neoplasms	141	883	2	5	2	—	8	—	1,034	7
A	61	Non-toxic goitre	8	23	—	1	—	—	2	—	33	1
A	62	Thyrotoxicosis with or without goitre	2	—	—	—	1	—	1	—	4	—
A	63	Diabetes mellitus	94	39	10	3	37	1	12	—	182	14
A	64	(*a*) Beriberi	9	1	2	—	—	—	—	—	10	2
		(*b*) Pellagra	2	3	—	1	—	—	—	—	5	1
		(*c*) Scurvy	8	12	—	1	—	—	—	—	20	1
		(*d*) Kwashiorkor	438	454	45	44	—	—	—	—	892	89
		(*e*) Other deficiency states	85	54	14	7	3	—	—	—	142	21
A	65	(*a*) Hyperchromic anaemias	24	23	4	5	2	—	1	—	50	9
		(*b*) Hypochromic anaemias	171	303	21	19	5	1	—	—	479	41
		(*c*) Other unspecified anaemias	186	190	44	20	8	—	2	1	386	65

Appendix VI (B)—continued

			African				Asian		European		Total for the Year 1957	Deaths
			Male	Female	Deaths Male	Deaths Female	Male and Female	Deaths	Male and Female	Deaths		
A	66	(*a*) Asthma	225	109	3	1	37	—	21	—	392	4
		(*b*) All other allergic disorders, endocrine, metabolic and blood diseases	161	92	5	6	6	—	2	—	261	11
A	67	Psychoses	600	323	1	—	35	1	3	—	961	2
A	68	Psychoneuroses and disorders of personality	65	55	—	—	9	—	17	—	146	—
A	69	Mental deficiency	40	30	1	—	2	—	—	—	72	1
A	70	Vascular lesions affecting central nervous system	58	13	17	3	10	2	9	3	90	25
A	71	Meningitis (except meningococcal and tuberculous)	203	149	92	64	5	—	—	—	357	156
A	72	Disseminated sclerosis	1	—	—	—	1	—	—	—	2	—
A	73	Epilepsy	71	14	5	—	2	—	3	—	90	5
A	74	Inflammatory diseases of eye	243	129	—	—	11	—	2	—	385	—
A	75	Cataract	72	18	—	—	12	—	—	—	102	—
A	76	Glaucoma	4	5	—	—	2	—	2	—	13	—
A	77	(*a*) Otitis externa	7	10	—	—	2	—	4	—	23	—
		(*b*) Otitis media and mastoiditis	84	72	1	3	2	—	5	—	163	4
		(*c*) Other inflammatory diseases of ear	16	8	—	—	—	—	2	—	26	—
A	78	(*a*) All other diseases and conditions of eye	572	320	1	1	13	—	10	—	915	2
		(*b*) All other diseases of the nervous system and sense organs	104	64	11	5	3	—	5	—	176	16
A	79	Rheumatic fever	18	15	—	1	3	—	2	—	38	1
A	80	Chronic rheumatic heart disease	33	30	10	7	2	—	3	—	68	17
A	81	Arteriosclerotic and degenerative heart disease	16	5	1	—	8	2	6	—	35	3
A	82	(*a*) Disease of heart or aorta	109	45	28	5	6	—	2	—	162	33
		(*b*) Other diseases of heart	165	104	42	21	15	1	—	—	284	64
A	83	Hypertension with heart disease	63	32	8	1	12	2	3	—	110	11
A	84	Hypertension without mention of heart	9	3	—	—	21	—	4	—	37	—
A	85	Diseases of arteries	33	56	4	1	2	—	3	1	94	6
A	86	Other diseases of circulatory system	113	83	6	3	20	—	25	—	241	9
A	87	Acute upper respiratory infections	1,202	992	16	19	27	—	54	—	2,275	35

			African				Asian		European		Total for the Year 1957	Deaths
			Male	Female	Deaths Male	Deaths Female	Male and Female	Deaths	Male and Female	Deaths		
A	88	Influenza	552	445	4	3	9	—	32	—	1,038	7
A	89	Lobar pneumonia	2,019	924	115	55	9	2	5	—	2,957	172
A	90	Bronchopneumonia	1,140	1,226	122	100	14	1	18	—	2,398	223
A	91	Primary atypical, other and unspecified pneumonia	314	212	20	20	6	—	16	—	548	40
A	92	Acute bronchitis	799	621	4	3	15	1	12	—	1,447	8
A	93	Bronchitis, chronic and unqualified	128	95	—	2	5	1	6	—	234	3
A	94	Hypertrophy of tonsils and adenoids	172	117	2	1	20	—	67	—	376	3
A	95	Empyema and abscess of lung	48	10	7	2	—	—	—	—	58	9
A	96	Pleurisy	43	20	1	1	2	—	2	—	67	2
A	97	(*a*) Pneumoconiosis	3	—	—	—	2	—	—	—	5	—
		(*b*) All other respiratory diseases	179	83	6	2	8	—	11	—	281	8
A	98	(*a*) Dental caries	42	29	—	—	7	—	11	—	89	—
		(*b*) All other diseases of teeth and gums	50	44	—	—	6	—	5	—	105	—
A	99	Ulcer of stomach	54	29	3	—	8	—	7	—	98	3
A	100	Ulcer of duodenum	35	18	4	—	5	—	14	—	72	4
A	101	Gastritis and duedenitis	81	56	2	3	9	—	9	—	155	5
A	102	Appendicitis	35	10	3	—	64	—	31	—	140	3
A	103	Intestinal obstruction and hernia	2,206	576	132	35	26	—	10	—	2,818	167
A	104	(*a*) Gastro-enteritis and colitis (4 weeks and over)	481	465	53	63	17	3	21	—	984	119
		(*b*) Chronic enteritis and ulcerative colitis	59	42	5	7	5	—	21	—	127	12
A	105	Cirrhosis of liver	173	70	41	8	1	—	—	—	244	49
A	106	Cholelithiasis and cholecystitis	15	5	2	—	13	1	15	—	48	3
A	107	Other diseases of digestive system	611	515	47	31	37	—	37	—	1,200	78
A	108	Acute nephritis	76	42	10	5	9	—	—	—	127	15
A	109	Chronic, other and unspecified nephritis	134	58	15	6	7	—	11	—	210	21
A	110	Infections of kidney	58	76	6	2	8	1	14	—	156	9
A	111	Calculi of urinary system	4	1	—	—	13	—	8	—	26	—
A	112	Hyperplasia of prostate	58	—	5	—	5	—	—	—	63	5
A	113	Diseases of breast	2	89	—	—	4	—	7	—	102	—

			African				Asian		European		Total for the Year 1957	Deaths
			Male	Female	Deaths Mal	Deaths Female	Male and Female	Deaths	Male and Female	Deaths		
A	114	(*a*) Hydrocele	367	—	2	—	6	—	—	—	373	2
		(*b*) Disorders of menstruation	—	417	—	2	126	—	85	—	628	2
		(*c*) All other diseases of the genito-urinary system	866	1,617	41	21	132	—	75	1	2,690	63
A	115	Sepsis of pregnancy, childbirth and the puerperium	—	292	—	9	6	—	—	—	298	9
A	116	Toxaemias of pregnancy and the puerperium	—	61	—	8	7	—	3	—	71	8
A	117	Haemorrhage of pregnancy and childbirth	—	352	—	21	7	—	4	—	363	21
A	118	Abortion without mention of sepsis or toxaemia	—	1,941	—	4	73	—	34	—	2,048	4
A	119	Abortion with sepsis	—	194	—	4	5	—	—	—	199	4
A	120	(*a*) Other complications of pregnancy, childbirth and the puerperium	—	3,732	—	177	67	—	21	—	3,820	177
		(*b*) Delivery without complications	—	9,603	—	5	852	—	226	—	10,681	5
A	121	Infections of skin and subcutaneous tissue	1,159	752	20	19	27	—	32	—	1,970	39
A	122	Arthritis and spondylitis	333	145	3	—	12	—	7	—	497	3
A	123	Muscular rheumatism unspecified	139	71	—	—	—	—	5	—	215	—
A	124	Osteomyelitis and periostitis	182	54	4	—	9	—	1	—	246	4
A	125	Ankylosis and acquired musculo-skeletal deformities	24	13	—	—	—	—	2	—	39	—
A	126	(*a*) Chronic ulcer of leg	456	198	4	—	2	—	1	—	657	4
		(*b*) All other diseases of skin	318	227	4	4	7	—	9	—	561	8
		(*c*) All other diseases of musculo-skeletal system	649	287	8	4	12	—	12	—	960	12
A	127	Congenital malformations— Spina bifida and meningocele	7	8	1	1	1	—	1	—	17	2
A	128	Circulatory system	3	9	—	—	—	—	1	—	13	—
A	129	all others	43	39	4	1	18	1	3	—	103	6
A	130	Birth injuries	10	13	4	9	—	—	—	—	23	13
A	131	Diseases of new-born (under 4 weeks)— asphyxia and atelectasis	10	13	5	6	1	—	—	—	24	11

		African				Asian		European		Total for the Year 1957	Deaths
		Male	Female	Deaths Male	Deaths Female	Male and Female	Deaths	Male and Female	Deaths		
A 132	(*a*) Diarrhoea	54	59	4	5	4	—	1	—	118	9
	(*b*) Ophthalmia	13	14	—	—	—	—	—	—	27	—
	(*c*) Other infections	30	24	2	4	3	1	—	—	57	7
A 133	Haemolytic disease	4	1	1	—	—	—	—	—	5	1
A 134	Other defined diseases	41	47	3	6	20	—	19	—	127	9
A 135	Ill-defined diseases and immaturity	139	124	52	44	—	—	—	—	263	96
A 136	Senility without mention of psychosis	13	22	4	3	2	2	—	—	37	9
A 137	(*a*) Pyrexia of unknown origin	806	639	46	38	32	1	69	—	1,546	85
	(*b*) Observation, without need for further medical care	566	1,763	3	2	95	—	31	—	2,455	5
	(*c*) All other ill-defined causes of morbidity	1,318	994	48	26	120	1	50	—	2,482	75
AN 138	Fracture of skull	203	31	44	7	14	3	5	1	253	55
AN 139	Fracture of spine and trunk	131	22	7	1	6	1	1	—	160	9
AN 140	Fracture of limbs	1,198	400	15	6	80	—	35	—	1,713	21
AN 141	Dislocation without fracture	139	44	—	—	8	—	2	—	193	—
AN 142	Sprains and strains of joints and adjacent muscles	143	30	—	—	9	1	15	—	197	1
AN 143	Head injury (excluding fracture)	300	60	41	4	38	2	10	—	408	47
AN 144	Internal injury of chest, abdomen and pelvis	124	14	12	4	1	1	1	—	140	17
AN 145	Laceration and open wounds	2,356	620	37	3	71	1	24	—	3,071	41
AN 146	Superficial injury, contusion and crushing with intact skin surface	787	268	2	—	37	—	9	—	1,101	2
AN 147	Effects of foreign body entering through orifice	72	59	1	2	5	—	1	—	137	3
AN 148	Burns and scalds	461	313	45	39	14	2	9	—	797	86
AN 149	Effects of poisons	216	155	12	1	10	1	2	—	383	14
AN 150	All other and unspecified effects of external causes	158	70	1	1	16	—	8	—	252	2
	Grand Total	39,876	45,464	2,005	1,371	2,783	44	1,617	8	89,813	3,428

CAUSES OF DEATH OF NON-AFRICANS, 1957

International List No.	Disease	Deaths Registered During 1957													Total	Deaths in Hospital
		Race					Age						Sex			
		European	Indian	Goan	Arab	Other	0–	1–	5–	15–	45–	65–	*M*	*F*		
A 1	Tuberculosis of respiratory system	—	5	—	—	—	—	—	—	3	2	—	2	3	5	3
A 2	Tuberculosis of meninges and central nervous system	—	1	—	—	—	—	1	—	1	—	—	1	—	1	—
A 3	Tuberculosis of intestines, peritoneum and mesenteric glands ..	—	1	—	—	—	—	—	—	1	—	—	—	1	1	—
A 12	Typhoid	—	1	—	—	1	—	—	1	—	1	—	2	—	2	1
A 19	Erysipelas	—	1	—	—	—	—	—	—	—	—	1	1	—	1	1
A 21	Diphtheria	—	1	—	—	—	—	—	1	—	—	—	1	—	1	1
A 26	Tetanus	—	1	—	—	—	—	—	1	—	—	—	—	1	1	—
A 29	Acute infections encephalitis ..	—	2	—	—	—	—	1	—	1	—	—	1	1	2	—
A 36	Typhus	—	1	—	—	—	—	—	—	1	—	—	—	1	1	—
A 37 (*c*)	Falciparum malaria (malignant tertian)	—	16	1	—	—	10	3	3	1	—	—	7	10	17	4
A 37 (*d*)	Other unspecified malaria ..	—	2	—	—	—	1	1	—	—	—	—	1	1	2	—
A 43	Influenza	—	1	—	—	—	1	—	—	—	—	—	1	—	1	—
A 44	Malignant neoplasm of— buccal cavity and pharynx ..	—	2	—	—	—	—	—	—	2	—	—	—	2	2	1
A 46	stomach	1	1	—	—	—	—	—	—	—	1	1	1	1	2	1
A 48	rectum	—	1	—	—	—	—	—	—	—	1	—	—	1	1	—
A 50	trachea and of bronchus and lung not specified as secondary ..	1	—	—	—	—	—	—	—	—	1	—	1	—	1	1
A 52	cervix uteri	—	1	—	—	—	—	—	—	—	—	1	—	1	1	—
A 57	other unspecified sites.. ..	—	4	1	—	—	—	—	—	—	3	2	1	4	5	—
A 58	Leukaemia and aleukaemia ..	—	2	—	—	—	—	1	—	—	1	—	2	—	2	1
A 59	Neoplams of lymphatic and haematopoietic system	—	1	—	—	1	—	—	—	2	—	—	2	—	2	2
A 63	Diabetes mellitus	—	1	—	—	—	—	—	—	—	1	—	1	—	1	—
A 65	Anaemias	1	5	—	—	—	—	—	1	2	1	—	4	2	6	2
A 66	Asthma	—	3	—	—	—	—	—	—	—	2	1	2	1	3	—

International List No.	Disease	Deaths Registered During 1957													Total	Deaths in Hospital
		Race					Age						Sex			
		European	Indian	Goan	Arab	Other	0–	1–	5–	15–	45–	65–	*M*	*F*		
A 70	Vascular lesions affecting central nervous system	2	14	—	—	2	—	—	1	1	8	7	14	4	18	7
A 78 (*a*)	All other diseases & conditions of eye	—	1	—	—	—	1	—	—	—	—	—	—	1	1	1
A 78 (*b*)	All other diseases of the nervous system and sense organs	—	1	—	—	—	—	1	—	—	—	—	1	—	1	—
A 80	Chronic rheumatic heart disease	1	—	—	—	—	—	—	1	—	—	—	—	1	1	—
A 81	Arteriosclerotic and degenerative heart disease	3	26	—	—	—	—	—	—	4	13	13	22	7	29	3
A 82	Other diseases of heart	4	20	—	1	1	1	3	1	2	10	9	17	9	26	9
A 83	Hypertension with heart disease	1	6	1	—	—	—	—	—	1	5	2	7	1	8	3
A 84	Hypertension without mention of heart	—	3	—	—	—	—	—	—	—	3	—	3	—	3	1
A 89	Lobar pneumonia	—	1	1	—	—	—	2	—	—	—	—	—	2	2	2
A 90	Bronchopneumonia	—	13	1	—	—	5	3	1	—	3	3	4	10	14	5
A 91	Primary atypical, other and unspecified pneumonia	1	6	—	1	—	3	1	—	1	2	1	5	3	8	2
A 97	Other respiratory diseases	—	1	—	—	—	—	—	—	1	—	—	—	1	1	—
A 103	Intestinal obstruction and hernia	—	4	—	—	—	1	1	—	—	2	—	3	1	4	4
A 104 (*a*)	Gastro-enteritis and colitis (4 weeks and over)	—	6	—	—	—	5	1	—	—	—	—	2	4	6	2
A 104 (*b*)	Chronic enteritis and ulcerative colitis	—	1	—	—	—	—	—	—	—	1	—	1	—	1	1
A 105	Cirrhosis of liver	—	2	—	1	—	—	—	—	1	2	—	3	—	3	—
A 107	Other diseases of digestive system	—	2	—	—	—	1	—	—	1	—	—	1	1	2	2
A 109	Chronic, other and unspecified nephritis	—	1	—	—	—	—	—	—	1	—	—	—	1	1	—
A 110	Infections of kidney	1	—	—	—	—	—	—	—	—	—	1	—	1	1	—
A 112	Hyperplasia of prostate	1	—	—	—	—	—	—	—	—	—	1	1	—	1	1
A 116	Toxaemias of pregnancy and the puerperium	—	2	—	—	—	—	—	—	2	—	—	—	2	2	2

International List No.	Disease	Deaths Registered During 1957													Total	Deaths in Hospital
		Race					Age						Sex			
		European	Indian	Goan	Arab	Other	0–	1–	5–	15–	45–	65–	*M*	*F*		
A 117	Haemorrhage of pregnancy and childbirth	—	1	—	—	—	—	—	—	1	—	—	—	1	1	1
A 120 (*a*)	Other complications of pregnancy, childbirth and the puerperium ..	—	1	—	—	—	—	—	—	1	—	—	—	1	1	—
A 124	Osteomyelitis and periostitis ..	—	1	—	—	—	—	—	—	1	—	—	1	—	1	1
A 128	Congenital malformations—circulatory system	—	1	—	—	—	—	—	1	—	—	—	1	—	1	1
A 129	all others	—	1	—	—	—	1	—	—	—	—	—	1	—	1	1
A 130	Birth injuries	—	1	—	—	—	1	—	—	—	—	—	—	1	1	—
A 131	Diseases of newborn (under 4 weeks)—asphyxia and atelectasis ..	—	2	—	—	—	2	—	—	—	—	—	1	1	2	2
A 132 (*a*)	Diarrhoea	—	2	—	—	—	1	1	—	—	—	—	1	1	2	—
A 132 (*c*)	Other infections	—	1	—	—	—	1	—	—	—	—	—	1	—	1	—
A 135	Ill-defined diseases and immaturity	5	5	1	—	—	11	—	—	—	—	—	5	6	11	9
A 136	Senility without mention of psychosis	2	1	—	—	—	—	—	—	—	—	—	1	2	3	1
A 137	Ill-defined and unknown causes of mortality	1	12	—	—	—	1	4	—	2	3	3	6	7	13	6
AN 138	Fracture of skull	2	10	—	—	—	—	—	3	5	3	1	8	4	12	3
AN 140	Fracture of limbs	—	1	—	—	—	—	—	—	1	—	—	—	1	1	1
AN 144	Internal injury of chest, abdomen and pelvis	—	7	—	—	—	—	2	—	5	—	—	4	3	7	4
AN 146	Superficial injury, contusion and crushing skin surface	—	2	—	—	—	—	—	—	1	1	—	2	—	2	—
AN 147	Effects of foreign body entering through orifice	2	9	—	—	—	1	1	1	5	2	1	10	1	11	—
AN 148	Burns and scalds	1	2	—	—	—	—	—	—	3	—	—	2	1	3	—
AN 149	Effects of poisons	—	1	—	—	—	—	—	—	—	1	—	1	—	1	1
	TOTAL DEATHS FROM INJURIES ..	5	32	—	—	—	1	3	4	20	7	2	27	10	37	9
	TOTAL DEATHS FROM DISEASES ..	25	195	6	3	5	49	24	13	34	65	49	133	101	234	86
	TOTAL DEATHS FROM ALL CAUSES	30	227	6	3	5	50	27	17	54	72	51	160	111	271	95

Appendix VI (D)

INFECTIONS AND NUTRITIONAL DISORDERS AMONG CHILDREN ATTENDING CHILD WELFARE CLINICS, MENGO, FOR THE FIRST TIME

Age	0–6m.		7–12m.		1–6 yrs.		Total
Ganda or Non-Ganda	Ganda	Non-Ganda	Ganda	Non-Ganda	Ganda	Non-Ganda	
Acute respiratory infection	19	27	6	12	15	17	96
Chronic respiratory infection ..	3	1	—	2	8	8	22
Otitis media ..	3	—	3	2	2	6	16
Malaria pyrexia ..	6	6	10	8	14	16	60
Undetermined fevers	—	4	2	4	5	5	20
Enlarged spleen ..	22	16	21	25	31	47	162
Sickle-cell anaemia ..	2	—	—	—	3	1	6
Other anaemias ..	3	1	6	5	8	5	28
Acute diarrhoea and vomiting ..	5	7	—	9	3	10	34
Chronic diarrhoea ..	—	—	—	—	—	—	—
Measles	—	1	—	—	—	—	1
Whooping-cough ..	—	—	3	1	—	2	6
Chicken-pox ..	—	—	—	—	—	1	1
Tuberculosis ..	—	—	—	—	—	—	—
Poliomyelitis ..	—	—	—	—	—	—	—
Congenital syphilis ..	2	—	—	—	—	—	2
Thrush	3	13	2	—	—	—	18
Conjunctivitis ..	7	27	7	12	10	19	82
Scabies	2	1	2	2	3	—	10
Ringworm ..	2	3	2	2	3	6	18
Skin sepsis ..	4	14	10	21	17	16	82
Umbilical sepsis ..	1	7	—	—	—	—	8
Dental caries ..	—	—	1	—	3	2	6
Severe kwashiorkor ..	—	1	—	—	—	5	6
Mild kwashiorkor ..	1	—	1	1	10	9	22
Hair changes but no oedema ..	—	3	16	13	32	33	97
Under-feeding ..	17	13	14	10	10	19	83
Malasmus ..	3	5	2	2	—	—	12
Totals ..	105	150	108	131	177	227	898

BEDS IN GOVERNMENT HOSPITALS

Name of Hospital	Number and Category of beds						Grading of beds		
	General	Maternity	Tuberculosis	Infectious	Mental	Total	A	B	C and D
Nakasero hospital ..	91	29	—	—	—	120	51	69	—
Mulago hospital ..	483	69	94	2	—	648	6	—	642
Mulago mental hospital	—	—	—	—	342	342	1	1	340
Butabika mental hospital	—	—	—	—	104	104	—	—	104
Luzira	26	—	—	—	—	26	—	—	26
KAMPALA AREA ..	600	98	94	2	446	1,240	58	70	1,112
Entebbe hospital ..	58	24	16	—	—	98	3	4	91
Bombo (Buganda Government) ..	47	5	—	—	—	52	—	—	52
Mityana (Buganda Government) ..	61	16	—	1	—	78	—	—	78
Masaka	166	61	40	18	—	285	—	8	277
Mubende (Buganda Government) ..	34	14	8	8	—	64	—	—	64
BUGANDA (excluding Kampala) ..	366	120	64	27	—	577	3	12	562
Jinja hospital ..	245	33	16	14	—	308	8	23	277
Namasagali ..	30	6	—	—	—	36	—	—	36
Mbale	143	22	12	6	—	183	4	2	177
Tororo	138	26	—	8	—	172	—	4	168
Soroti	67	14	—	6	—	87	—	6	81
EASTERN PROVINCE	623	101	28	34	—	786	12	35	739
Moroto	45	—	—	—	—	45	—	—	45
Lira	99	23	28	—	—	150	—	—	150
Gulu	74	24	6	—	—	104	—	—	104
Kitgum	48	9	2	—	—	59	—	—	59
Arua	64	6	16	—	—	86	—	—	86
Moyo	47	4	4	—	—	55	—	—	55
NORTHERN PROVINCE	377	66	56	—	—	499	—	—	499
Masindi	33	19	—	5	—	57	—	6	51
Hoima	34	14	—	4	—	52	—	—	52
Fort Portal ..	68	10	28	—	—	106	—	—	106
Mbarara	80	21	28	—	—	129	—	4	125
Kabale	82	12	28	11	—	133	—	4	130
WESTERN PROVINCE	297	76	84	20	—	477	—	13	464
PROTECTORATE TOTALS ..	2,263	461	326	83	446	3,519	73	130	3,376

HOSPITAL BEDS IN OTHER INSTITUTIONS

	Units 13		Units 4		Units 3	
	Mission hospitals	Mission dispensaries and maternity centres	Employers of labour hospitals	Military hospitals	Nursing homes	Prisons
Kampala area ..	499	—	—	—	—	—
Buganda (excluding Kampala area) ..	527	204	110	—	18	30
Eastern Province ..	417	281	125	28	20	—
Northern Province	90	101	—	—	—	—
Western Province..	195	18	115	—	—	—
TOTAL ..	1,708	604	350	28	38	30

GRAND TOTAL .. 2,758

NOTE.—Mengo, Nsambya and Rubaga are included in the Kampala area.

LOCAL GOVERNMENT DISPENSARY BEDS

BUGANDA

		General	Maternity	Total
	Mubende			
5	Kyannasoke	10	12	22
	Kibale	14	11	25
	Kakindu	4	—	4
	Madudu	2	—	2
	Kakumiro	12	11	23
	Mengo			
21	Kasangati	10	—	10
	Namulonge (Protectorate) ..	4	—	4
	Mengo Jail	12	—	12
	Kigo Prison	—	—	—
	Buikwe	10	12	22
	Mukono	12	—	12
	Kome Island	1	—	1
	Semuto	12	—	12
	Luwero	16	15	31
	Bowa	—	—	—
	Kalagala	—	—	—
	Nakasongola	5	—	5
	Kiboga	8	12	20
	Tondola	7	—	7
	Mpigi	20	18	38
	Buwama	12	—	12
	Mwera	—	—	—
	Kitalya Prison Farm (Protectorate) ..	8	—	8
	Wakiso	3	—	3
	Buvuma Island	6	—	6
	Ntenjeru	8	14	22
	Masaka			
11	Bukasa (Sese)	1	—	1
	Kalisizo	25	14	39
	Kakuto	20	10	30
	Kalungu	20	10	30
	Kalangala (Sese) ..	7	2	9
	Kyebbe	20	—	20
	Lyantonde	17	—	17
	Rakai	9	—	9
	Sembabule	6	—	6
	Busungwe	1	—	1
	Mutukula	2	—	2
Total of Dispensaries 37	Total of Beds ..	324	141	465

WESTERN PROVINCE

		General	Maternity	Total
	Bunyoro			
12	Bujenje	—	—	—
	Kimengo	—	—	—
	Masindi Port	—	—	—
	Mutunda	—	—	—
	Bulisa	4	—	4
	Butiaba	8	—	8
	Kiryandongo	8	—	8
	Kabwoya	2	—	2
	Kikube	2	—	2
	Kyabigambire	—	—	—
	Kigorobya	—	—	—
	Kigumba	—	—	—
	Toro			
12	Butiti	—	11	11
	Bundibugyo	6	—	6
	Bwera	5	—	5
	Katwe	5	—	5
	Kisomaro	6	11	17
	Kyegegwa	6	—	6
	Kyenjojo	24	—	24
	Nyabirongo	5	—	5
	Kijura	5	—	5
	Kasule	13	—	13
	Kahunge	4	—	4
	Bugoye	—	—	—
	Ankole			
11	Buhwenzu	—	—	—
	Bushenyi	16	12	28
	Kabwohe	15	9	24
	Kinoni	16	8	24
	Chitwe	18	—	18
	Rubale	18	10	28
	Buhoko	17	10	27
	Rwashamaire	16	9	25
	Kiruhura	12	—	12
	Rugazi	18	—	18
	Mabona	—	—	—
	Kigezi			
11	Muku (Nyarurambi) ..	20	—	20
	Rukungiri	37	8	45
	Kisizi	24	—	24
	Mpalo	18	3	21
	Bukinda	24	—	24
	Bufundi	7	—	7
	Kanungu	19	5	24
	Kisoro	12	5	17
	Katete	10	—	10
	Rubaya	19	—	19
	Bugangali	21	—	21
Total of Dispensaries 46	Total of Beds ..	460	101	561

EASTERN PROVINCE

(Including Sub-Dispensaries)

		General	Maternity	Total
	Busoga			
9	Bugiri	28	—	28
	Buyende	24	—	24
	Kaliro	30	—	30
	Kamuli	24	—	24
	Kiyunga	24	—	24
	Namwenda	22	10	32
	Namugalwe	23	10	33
	Nsinze	22	12	34
	Bugembe	—	20	20
	Tororo (Bukedi)			
4	Butaleja	30	12	42
	Nagongera	28	—	28
	Masafu	15	17	32
	Lumino	32	—	32
	Teso			
15	Serere	50	12	62
	Kaberamaido	34	4	38
	Katakwi	14	13	27
	Amuria	22	5	27
	Bukedea	30	—	30
	Apapai..	1	—	1
	Mukura	1	—	1
	Kyere	1	—	1
	Magoro	1	—	1
	Orungo	1	—	1
	Tiriri	1	—	1
	Wera	1	—	1
	Akumu (Nariam) ..	1	—	1
	Ajeluk	1	—	1
	Kumi	20	—	20
	Mbale (Bugisu)			
13	Budadiri	44	20	64
	Bubulo	48	11	59
	Bukigai	16	9	25
	Muyembe	4	—	4
	Bukwa	4	—	4
	*Kamuge	46	12	58
	*Budaka	34	12	46
	Atar	1	—	1
	Buwalasi	—	—	—
	Busiu	1	—	1
	Bupoto	2	—	2
	Nakupa	1	—	1
	Buluganya	—	—	—
Total of Dispensaries 41	Total of Beds ..	682	179	861

*In Bukedi District but supervised from Mbale.

NORTHERN PROVINCE

(Including Sub-Dispensaries)

		General	Maternity	Total
	Acholi			
10	Bobi	6	—	6
	Anaka	20	—	20
	Atanga	7	—	7
	Attiak	8	—	8
	Awach	4	—	4
	Awere	6	—	6
	Madi Opei	6	—	6
	Naam Okora	8	—	8
	Patongo	5	—	5
	Pajule	—	—	—
	Lango			
11	Aboki	12	—	12
	Aduku	14	—	14
	Agwata	8	—	8
	Alebtong	12	—	12
	Amolitar	8	—	8
	Anyeke	12	—	12
	Bata	8	—	8
	Ibuje	8	—	8
	Orum	8	—	8
	Dokolo	20	—	20
	Teboke	20	—	20
	West Nile			
18	Loiriri	—	—	—
	Aringa	17	—	17
	Koboko	12	—	12
	Omugo	12	—	12
	Pakwach	12	—	12
	Rhino Camp	8	—	8
	Ajumani (Moyo) ..	6	—	6
	Laropi (Moyo) ..	2	—	2
	Payida	5	—	5
	Warr	12	—	12
	Angal	1	—	1
	Okollo	6	—	6
	Bondo	9	—	9
	Matuma	—	—	—
	Maracha	4	—	4
	Wandi	14	—	14
	Zaipi (Moyo) ..	4	—	4
	Obongi (Moyo)	4	—	4
	Karamoja			
7	Abim	1	—	1
	Amudat	1	—	1
	Kaangole	1	—	1
	Kaabong	1	—	1
	Karita	1	—	1
	Kotido	1	—	1
	Nabilatuku	1	—	1
Total of Dispensaries 37	Total of Beds ..	335	—	335

NON-GOVERNMENT MEDICAL UNITS

BUGANDA

(*Approved under Section* 121 *of Public Health Ordinance*)

	Authority	Category	General	Maternity	Total
KAMPALA AREA					
Mengo	C.M.S.	Hospital ..	143	53	196
Nsambya ..	R.C.M.	Hospital ..	143	70	213
Rubaga	R.C.M.	Hospital ..	70	20	90
MENGO					
Nkokonjeru ..	R.C.M.	Hospital ..	38	22	60
Kisubi	R.C.M.	Hospital ..	85	33	118
Naggalama ..	R.C.M.	Hospital ..	56	20	76
Nkozi	R.C.M.	Hospital ..	28	65	93
Bukalagi ..	R.C.M.	Dispensary ..	—	—	—
Mitala Maria ..	R.C.M.	Dispensary ..	—	32	32
Namagunga ..	R.C.M.	Dispensary ..	3	18	21
Gayaza	R.C.M.	Dispensary ..	—	13	13
Katende	R.C.M.	Dispensary ..	—	14	14
Nyenga	R.C.M.	Dispensary ..	—	16	16
Nandere ..	R.C.M.	Dispensary ..	—	—	—
Namilyango ..	R.C.M.	Dispensary ..	5	14	19
Bugema	S.D.A.	Dispensary ..	—	—	—
Kireka	S.D.A.	Dispensary ..	—	—	—
Nakifuma ..	C.M.S.	Dispensary ..	—	16	16
Ngogwe	C.M.S.	Dispensary ..	—	10	10
Mukono	C.M.S.	Dispensary ..	—	24	24
Lutete	C.M.S.	Dispensary ..	—	10	10
Kapeka	C.M.S.	Dispensary ..	—	10	10
Kunonya ..	Private	Nursing Home	12	—	12
MASAKA					
Villa Maria ..	R.C.M.	Hospital ..	78	60	138
Kitovu	R.C.M.	Hospital ..	21	—	21
Bikira	R.C.M.	Hospital ..	—	21	21
Kabuwoko ..	C.M.S.	Dispensary ..	—	19	19
Kako	Private	Nursing Home	6	—	6
		TOTAL ..	688	560	1,248

R.C.M.—Roman Catholic Mission.
C.M.S.—Church Missionary Society, or Native Anglican Church.
S.D.A.—Seventh Day Adventists.

EASTERN PROVINCE

(*Approved under Section* 121 *of Public Health Ordinance*)

	Authority	Category	General	Maternity	Total
Busoga					
Kamuli	R.C.M.	Hospital ..	69	36	105
Iganga	R.C.M.	Hospital ..	35	31	66
Budini	R.C.M.	Hospital ..	15	41	56
Iganga	C.M.S.	Dispensary ..	—	20	20
The Nile Poly Clinic, Jinja	Private	Nursing Home	16	4	20
Bugisu					
Sipi	R.C.M.	Hospital ..	18	1	19
Nyondo	R.C.M.	Hospital ..	28	2	30
Magale	R.C.M.	Hospital ..	44	10	54
Budadiri ..	R.C.M.	Dispensary ..	—	—	—
Teso					
Pallissa	R.C.M.	Dispensary ..	—	18	18
Budaka	R.C.M.	Dispensary ..	—	10	10
Lwala	R.C.M.	Dispensary ..	31	56	87
Toroma	R.C.M.	Dispensary ..	—	—	—
Ngora	R.C.M.	Dispensary ..	—	22	22
Bukedea	R.C.M.	Dispensary ..	—	—	—
Madera	C.M.S.	Dispensary ..	—	16	16
Ngora, Freda Carr	C.M.S.	Dispensary ..	88	20	108
Bukedi					
Nagongera ..	R.C.M.	Hospital ..	25	12	37
Dabani	R.C.M.	Hospital ..	28	22	50
		Total ..	397	321	718

R.C.M.—Roman Catholic Mission.
C.M.S.—Church Missionary Society, or Native Anglican Church.
A.I.M.—Africa Inland Mission.

WESTERN PROVINCE

(*Approved under Section* 121 *of Public Health Ordinance*)

	Authority	Category	General	Maternity	Total
Toro					
Kabarole.. ..	C.M.S.	Hospital ..	—	29	29
Virika	R.C.M.	Hospital ..	86	20	106
Ruwenzori ..	S.D.A.	Dispensary ..	4	—	4
Butiti	R.C.M.	Dispensary ..	—	—	—
Kigorogoro ..	S.D.A.	Dispensary ..	—	—	—
Kigezi					
Mutolere	R.C.M.	Dispensary ..	—	—	—
Nyakibale ..	R.C.M.	Dispensary ..	—	—	—
Ankole					
Ankole	S.D.A.	Hospital ..	34	6	40
Butale	R.C.M.	Dispensary ..	—	—	—
Mushanga ..	R.C.M.	Dispensary ..	—	—	—
Bunyoro					
Bujumbura ..	R.C.M.	Dispensary ..	—	14	14
		Total ..	124	69	193

R.C.M.—Roman Catholic Mission.
C.M.S.—Church Missionary Society, or Native Anglican Church.
A.I.M.—Africa Inland Mission.
S.D.A.—Seventh Day Adventists.

NORTHERN PROVINCE

(*Approved under Section* 121 *of Public Health Ordinance*)

	Authority	Category	General	Maternity	Total
Acholi					
Padibe	R.C.M.	Hospital ..	—	—	—
Kalongo	R.C.M.	Hospital ..	10	40	50
Gulu	R.C.M.	Dispensary ..	—	—	—
Kitgum	R.C.M.	Dispensary ..	—	40	40
West Nile					
Kuluva	A.I.M.	Hospital ..	36	4	40
Angal	R.C.M.	Dispensary ..	—	42	42
Lodonga ..	R.C.M.	Dispensary ..	7	—	7
Nyapea	R.C.M.	Dispensary ..	—	—	—
Goli	A.I.M.	Dispensary ..	12	—	12
Lango					
Aber	R.C.M.	Dispensary ..	—	—	—
Ngetha	R.C.M.	Dispensary ..	—	—	—
Karamoja					
Morulem ..	R.C.M.	Dispensary ..	—	—	—
		Total ..	65	126	191

R.C.M.—Roman Catholic Mission.
C.M.S.—Church Missionary Society, or Native Anglican Church.
A.I.M.—Africa Inland Mission.

FIGURES OF ATTENDANCES AT GOVERNMENT DISPENSARIES 1957

	New Out-patients	Reattend-ances	In-patients	Deaths
WESTERN PROVINCE				
Toro	136,841	111,497	2,825	51
Ankole	100,631	99,390	5,132	58
Bunyoro	69,399	85,595	800	3
Kigezi	112,956	131,643	6,302	73
TOTAL ..	419,827	428,125	15,059	185
EASTERN PROVINCE				
Teso	297,604	241,044	8,506	144
Mbale	191,082	114,776	9,520	179
Tororo	75,868	50,066	2,663	56
Busoga	139,119	47,993	9,522	298
TOTAL ..	703,673	453,879	30,211	677
NORTHERN PROVINCE				
Lango	189,823	125,386	5,194	40
Acholi	88,427	170,383	1,824	57
West Nile	199,397	256,140	3,228	157
Karamoja	37,469	21,921	—	—
Madi	44,438	61,229	789	35
TOTAL ..	559,554	635,059	11,035	289
BUGANDA				
Mubende	62,159	68,765	2,107	43
Masaka	82,614	61,398	4,624	126
Mengo	280,684	224,585	6,166	193
TOTAL ..	425,457	354,748	12,897	362
GRAND TOTAL ..	2,108,511	1,871,811	69,202	1,513

NOTE.—The figures for Kampala Dispensary are included with those of Mulago Hospital as this dispensary forms an integral part of Mulago and comes directly under the Medical Superintendent.

SUMMARY OF PATIENTS TREATED AT GOVERNMENT INSTITUTONS

	Buganda	Eastern Province	Northern Province	Western Province	Total
In-patients :					
Hospitals					
Europeans	1,260	351	—	6	1,617
Asians	2,128	564	19	72	2,783
Africans	34,973	21,584	15,371	13,412	85,340
All races	38,361	22,499	15,390	13,490	—
Dispensaries	12,897	30,211	11,035	15,059	69,202
Total Admissions ..	51,258	52,710	26,425	28,549	158,942
Out-patients :					
Hospitals					
Europeans	13,568	3,724	999	982	19,273
Asians	9,971	7,333	514	700	18,518
Africans	433,814	223,827	220,262	170,011	1,047,914
All races	457,353	234,884	221,775	171,693	1,085,705
Dispensaries	425,457	703,673	559,554	419,827	2,108,511
Total Out-patients ..	882,810	938,557	781,329	591,520	3,194,216
Reattendances :					
Hospitals	612,543	178,283	267,835	168,741	1,227,402
Dispensaries	354,748	453,879	635,059	428,125	1,871,811
Total Attendances ..	1,850,101	1,570,719	1,684,223	1,188,386	6,293,429
Deaths :					
Hospital					
Europeans	6	1	—	1	8
Asians	28	14	1	1	44
Africans	1,559	994	472	351	3,376
All races	1,593	1,009	473	353	3,428
Dispensaries	362	677	289	185	1,513
Total Deaths ..	1,955	1,686	762	538	4,941

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