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Report on the Medical Services for the Year 1944

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Report on the Medical Services for the Year 1944

I. — ADMINISTRATION

A. — Staff

In spite of shortage of staff the volume of work done continues to expand. The out-patient attendances at African Hospitals increased from 773,980 in 1943 to 947,341 in 1944. War-time difficulty in obtaining sufficient drugs and equipment and the almost complete suspension of the normal hospital programme for building and improving hospitals make this continual expansion more noteworthy.

2. One specialist and four medical officers were still serving with the Forces at the end of the year. Shortage of Nursing Sisters at time caused acute difficulty. Essential hospital services could only be maintained through the employment of numbers of married women in a temporary capacity, and through the loan of Army Sisters by the Military Authorities.

3. The department suffered losses by the death of Dr I. M. Hill, while serving with the Forces, and of Dr A. D. Hodges at Minna.

4. The cordial relationship between the Medical Department and the three services has been maintained and much mutual aid given and received. Considerable numbers of both European and African personnel have been treated at civil hospitals. The military have assisted by the loan of staff and by carrying out x-ray and other investigations, at stations where such facilities would not otherwise be available.

B. — Legislation

List of Ordinances, Regulations, etc., affecting Public Health enacted during the Year 1944

Serial No.	*Date*	*Short Title*	*Provisions*	*Gazette*
		Ordinances		
3	20.4.44	The Dogs (Amendment) Ordinance, 1944.	Amends section 15 of Ordinance No. 15 of 1942.	20 of 1944.
18	20.4.44	The Midwives (Amendment) Ordinance, 1944.	Composition of the Midwives Board . .	20 of 1944.
19	20.4.44	The Venereal Diseases (Application—Amendment) Ordinance, 1944.	Application of the Whole and Part of Ordinance No. 19 of 1943.	20 of 1944
34	27.4.44	The Births, Deaths and Burials (Amendment) Ordinance, 1944.	Amends sections 22, 31, 32, 33, 44, 45, 47 and 48 of Chapter 47.	21 of 27.4.44
		Regulations		
26	2.5.44	The Hospital Fees (Amendment) Regulations, 1944.	Amend Regulations 24 of 1925	23 of 11.5.44
65	17.10.44	The Quarantine (Fees) (Amendment) Regulations, 1944.	Amend Regulations 20 of 1931	52 of 26.10.44
76	1.12.44	Diseases of Animals (Aerodrome Areas) Regulations, 1944.	Disease of Animals	59 of 7.12.44

Serial No.	*Date*	*Short Title*	*Provision*	*Gazette*
		Orders-in-Council		
1	11.1.44	The Births, Deaths and Burials (Oshogbo and Kaduna Public and Jos Military Cemeteries) Order in Council, 1944.	Provision for Public Cemeteries at Oshogbo and Jos, etc.	4 of 1944
2	11.1.44	The Public Health (Application to Sapele Urban Districts) Order, 1944.	Application of Public Health Rules to Sapele Township.	do.
5	1.2.44	The Public Health (West Calabar Province) Order in Council, 1944.	Application of Public Health Rules 1-25 inclusive of No. 2 of 1917 to areas west of the Cross River.	8 of 1944
6	22.2.44	The Births, Deaths and Burials (Kafanchan African Cemetery) Order in Council, 1944.	Provision of an African Cemetery, Kafanchan.	12 of 1944.
7	23.3.44	The Births, Deaths and Burials (Ibadan Public Cemetery) Order in Council, 1944.	Discontinuance of Public Cemetery at Ibadan.	17 of 30.3.44
11	25.4.44	The Public Health (Application to Burutu Urban Districts) Order in Council, 1944.	Application of Public Health Rules 1-25 and of Rules No. 2 of 1917 to Urban District of Burutu.	22 of 1944.
15	2.5.44	The Sleeping Sickness (Declaration of Areas) (Amendment) Order in Council, 1944.	Inclusion of Rukuba Tribal Area, Jos Division in the Sleeping Sickness infested Area.	22 of 1944.
19	23.5.44	The Births and Deaths (Jos Township) Registration (Amendment) Order in Council, 1944.	Registration of Births and Deaths of Natives in Jos Township.	26 of 1944.
20	14.6.44	The Births, Deaths and Burials (Lafenwa Military Cemetery) Order in Council, 1944.	Provision of a Military Cemetery, Lafenwa.	30 of 22.6.44
21	14.6.44	The Births, Deaths and Burials (Zaria African Hospital Cemetery) Order in Council, 1944.	Provision of an African Infectious Diseases Hospital Cemetery, Zaria.	do.
25	25.7.44	The Births, Deaths and Burials (Oshogbo Public Cemetery Extension) Order in Council, 1944.	Public Cemetery Extension Oshogbo. . .	37 of 3.8.44
27	25.7.44	The Public Health (Application to Warri Urban Districts) Order in Council, 1944	Application of Public Health Rules Chapter 56, Rules 1-25 and 82 to Warri Urban District.	do.
28	8.8.44	The Vaccination (Plateau Province) Order in Council, 1944.	Compulsory vaccination of all adults and children in the Shendam Division.	39 of 17.8.44
29	22.8.44	The Public Health (Application of Rules to certain areas) (Amendment) Order in Council, 1944.	Defining the boundaries of Badagry.	41 of 31.8.44
34	5.9.44	The Public Health (Application) Order in Council, 1944.	Application of Public Health Ordinance and Rules throughout Nigeria.	43 of 14.9.44
36	26.9.44	The Vaccination (Makurdi, Nguru, Minna, Gusau and Yola) (Revocation) Order in Council, 1944.	Revocation of Orders-in-Council No. 3 of 1935 and 28 of 1936.	47 of 5.10.44
37	3.10.44	The Public Health (Cameroons under British Mandates Application) Order in Council, 1944.	Application of Public Health Ordinance and Rules to Cameroons under British Mandates.	do.

LIST OF ORDINANCES, REGULATIONS, ETC., AFFECTING PUBLIC HEALTH ENACTED DURING THE YEAR 1944—*continued*

Serial No.	*Date*	*Short Title*	*Provision*	*Gazette*
		Orders-in-Council		
39	17.10.44	The Births, Deaths and Burials (Kaduna, Military Cemetery) Order in Council, 1944.	Provisions of a Military Cemetery—Kaduna.	52 of 26.10.44
		Rules		
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21	3.4.44	The Katsina Native Authority (Sugar Manufacture) Rules, 1944.	Sanitation of premises, tools, etc. used in the manufacture of sugar.	do.
40	21.11.44	The Native Authority (Zaria Province) Vaccination (Revocation) Order, 1944.	Revoke Schedule to N.A. Public Notice No. 56 of 1942.	60 of 14.12.44

C. — FINANCE

5. Below are financial statements for the financial year 1943-44:—

A. — MEDICAL, HEALTH AND LABORATORY SERVICES

	£	s	d
Total Revenue, 1942-43	60,134	16	2
Total Revenue, 1943-44	99,695	19	5
Total Expenditure, 1942-43	491,689	19	6
Total Expenditure, 1943-44	605,451	15	0

B. — SLEEPING SICKNESS SERVICE

	£	s	d
Total Expenditure, 1942-43	30,497	14	5
Total Expenditure, 1943-44	36,679	0	8

D. — MEDICAL STORES

6. Despite the war, the work of the Central Store continues to increase due to the supplying of all essential medical supplies to Government, Native Administrations, Missions, Doctors and Commercial Firms in the country. The value of stores handled during the year exceeded £200,000. This has involved a great amount of clerical work.

7. During the year 9,046 store issue vouchers were prepared with an average of twenty-five items on each voucher; 8,828 cases of supplies were packed and despatched up country; 5,453 parcels, etc., were also despatched. Although difficult at times to avoid a hold up no serious delay took place and this is attributed to the loyal co-operation and untiring efforts of the staff concerned.

8. Regular supplies of penicillin are being obtained from the United Kingdom. At present the use of this drug is mostly confined to research, though small quantities are available if required for urgent cases. Later when supplies become more plentiful the drug will be distributed for general use under Government control.

II. — PUBLIC HEALTH

General Remarks

9. Civilian health has been affected adversely by the need for working longer hours, doing abnormally long tours and the curtailment of recuperative leave. This has shown itself by increased amounts of minor illnesses including neurasthenia. The effect is likely to be cumulative so that the effect of the recent general improvement of conditions may not be apparent for some time.

10. The malaria rate dropped to 27.5 per cent of all European in-patients. There has been a regular decrease in this rate each year since 1941 when the figure was 44 per cent. This improvement has probably been associated with the more effective prophylactic use of mepacrine. Still further improvement is to be expected. There has been also a significant decrease in the incidence of black-water fever.

11. Figures for the last four years were: —

	1941	*1942*	*1943*	*1944*
In-patients ...	75,665	83,741	99,227	97,048
Out-patients ...	676,957	752,349	773,980	947,341

12. As usual " Diseases of the Skin, Cellular Tissues, Bones and Organs of Locomotion " were the most numerous comprising 14 per cent of all admissions.

13. Pregnancy and the diseases associated with it account for 10 per cent respiratory diseases (excluding Tuberculosis) 8.5 per cent.

14. Admissions for infectious intestinal diseases and helminthic infections remained as high as ever.

15. There has been a significant increase in the number of hospital cases of cerebro-spinal meningitis. There were 574 in 1942, 1,273 in 1943 and 2,060 in 1944. There was a decrease in admissions for smallpox.

16. There has been a very slight increase in hospital cases of pulmonary tuberculosis. Invaliding figures of African Staff for this disease remain high, 23.6 per cent of the total.

17. Rice pneumokoniosis is still a danger in the Cameroons plantations. All men working in the rice mills are now provided with masks.

Venereal Disease

18. This problem remains as serious as ever, particularly in the Northern Provinces. Hospital statistics show an increase in the number of syphilitics treated. Cases of gonorrhoea remained about the same. In the more northerly parts of the country particularly those adjacent to the great trade and pilgrim routes to the Sudan, the incidence of venereal disease is very high among all sections of the population. At Maiduguri hospital, Bornu, 43 per cent of all African patients were infected. In Hadeija and Kano Province, nearly 50 per cent of all hospital cases had venereal disease. The Senior Medical Officer, Kano, reported that this was an hospital general index of the high incidence of venereal diseases all over the Province. The problem is complicated by the fact that patients in the North only attend for treatment when their lesions are severe. Troop movements during the war years have aggravated the risk of spread of infection.

19. Inadequate treatment and resistance to sulphapyridine through illicit sale of this drug especially in the South is leading to dissemination of resistant strains of gonorrhoea. Mass treatment, particularly in rural areas, would be the only satisfactory solution of the problem.

Guinea-Worm

20. There has been an improvement in the incidence of this disease in Katsina Province. Mobile teams designed primarily to combat cerebro-spinal meningitis and smallpox and guinea-worm are assisting. The reporting of cases by village and district authorities is now more efficient. The sinking of new wells and the improvement of existing ones have resulted in a general decrease in the infection. Similar results have been obtained in the Anchau Sleeping Sickness Settlements.

Hospital Buildings

21. Work on the new African Hospital at Victoria is well under way. Except for this and the building programme required for rehabilitation and care of disabled soldiers, work has had to be confined to minor improvements to existing hospitals.

22. A big expansion and modernising of hospital facilities is overdue, as little could be attempted during the war years. Future progress will depend upon the availability of trained medical staff and the amount of building the Public Works Department will be able to undertake for the department.

Maternity and Child Welfare

23. The demand for these services in the South is very great. At present expansion is limited by shortage of both European and African Staff. At Aba maternity centre there was a 24 per cent increase in deliveries and 26 per cent increase in infant welfare attendance. Similar progress was made at other centres in the Eastern Provinces. Ibadan division reported general progress throughout the whole area.

24. The position is very difficult in the North. Maternity and child welfare are active in Kano. Some 9,231 babies were treated for minor ailments and 38,000 home visits made. In most of the rest of the northern areas these services are very backward. Moslem prejudice and tradition will have to be overcome gradually. This will depend upon the general increase in the standards of education throughout the mass of the people and particularly among women.

Minesfields

25. The scheme for improved medical facilities for the tin mining areas worked satisfactorily. The new 66-bed hospital at Barakin Ladi was opened in April. Additional accommodation for ambulant cases has been provided by building numbers of rest huts. This hospital has proved very popular with both mining labour and the local pagans.

26. The mining population is also catered for by Jos and Kafanchan hospitals and eight special field posts in addition to the ordinary native authorities dispensaries. The mining employers pay their part of this service by a capitation fee of 4s 6d for each of the 60,000 labourers they employ.

Rehabilitation

27. Plans were made during the year for the rehabilitation of disabled ex-soldiers, as follows:—

(*a*) by establishing a 300-bed rehabilitation centre at Igbobi, including occupational therapy massage, and artificial limb-making departments,

(*b*) by building additional 30-bed wards at seven of the existing African Hospitals at out-stations.

Building has begun on both these projects and occupation will be possible in a few months.

28. The Igbobi Centre is designed for the active treatment of improving cases, and the extra wards for the care of the permanently disabled. In Post-war years the rehabilitation centre will become the orthopaedic unit for the whole country.

Leprosy Service

29. A five-year plan for a Nigerian Leprosy Service to be financed from Colonial Development and Welfare funds has been drawn up and approved. The plan covers the greater part of the Eastern and Western Provinces. It provides for the incorporation and development of existing works being carried on by Native Authorities and voluntary bodies and for the establishment of new work.

30. An agreement with the voluntary bodies covering the main principles on which they will co-operate with Government has been reached. Leprosy control had previously been carried on under financial conditions of great stringency. In drafting the financial side of the scheme the problem was to introduce the measure of standardisation which must obtain in a unified Government service without dislocating the work already being done.

31. Arrangements have been made for the new service to start functioning next year in three areas, namely, Onitsha Province, Owerri Province and Benin and Warri Provinces operated together. The process of bringing these areas into a unified service will be a continuous one which must take some time.

School of Medicine

32. A total of seven students qualified for the Diploma during the academic year bring the total now in actual practice to thirty-nine.

33. The numbers of students attending classes in 1944 were as follows:—

Five students in the first year.
Seven students in the second year.

Six students in the third year.

Three students in the fourth year.

Five students in the fifth year.

Further particulars about this and the pharmacy schools will be found in Appendix B.

Lunacy

34. Plans are being drawn up for a large modern mental hospital at Ibadan. To start with accommodation for 250 patients will be built. Provision will be made for an invaluable future expansion.

Native Administration Dispensaries

35. Comparative figures for the Northern and Southern Provinces are given below:—

	Northern Provinces		*Southern Provinces*	
	1943	*1944*	*1943*	*1944*
Cases treated ...	462,862	509,559	907,390	851,103
Total attendances ...	2,237,668	2,320,998	2,871,584	2,821,811

Future Developments of Medical and Health Services

36. Preliminary plans have been drawn up for a large scale expansion of medical services to be financed partly from Imperial and partly from local funds.

37. The essential preliminaries would be an adequate medical school and sufficient training schools for nurses, dispensers, midwives, health visitors, sanitary inspectors and dispensary attendants.

38. For the expansion of the hospital services one or more first class hospitals, with full facilities for the scientific investigation and treatment of disease, would be required for each province. These would serve as bases for rural hospitals and outlying centres.

39. Provincial epidemic teams would be required for the mass treatment of epidemic and endemic diseases. The rural dispensary system would have to be developed and expanded. Provincial rural health centres would then be required to provide demonstration centres of ante-natal and maternity work, as child welfare, school medical work, village sanitation and hygiene, health education and domiciliary midwifery.

40. A corresponding expansion of maternity hospitals, mental services, tuberculosis service, dental ophthalmic and laboratory services would be an essential part of the general scheme.

III.—VITAL STATISTICS

41. The births and deaths of non-natives are compulsorily registrable throughout Nigeria.

42. Compulsory registration of the local population under the Births, Deaths and Burials Ordinance, is in force in the townships of Lagos, Jos, Calabar, Port Harcourt, Enugu and Aba; in the township and adjoining foreign native settlements

of Kano, in a limited part of Minna, in Abuja, Bida, Kontagora and Makurdi. Some Native Administrations have made rules and adopted them in various towns.

43. For Lagos Township, compulsory registration has been in force for many years; in fact, since 1889 when the Births, Deaths and Burials Ordinance No. 5 of 1889 was applied. Prior to this, however, voluntary registration was carried out and the first record of a birth registered is dated July 27, 1867 and that for a death August 1, 1867. Comparative data for Lagos in the years 1943-44 are given below:—

	1943	*1944*
Estimated Population	169,800	172,000
Births (live)	6,653	7,240
Crude birth-rate (per 1,000)	39.2	42
Corrected birth-rate (per 1,000)	34.8	37.3
Deaths	3,734	3,674
Crude death-rate (per 1,000)	21.9	21.3
Corrected death-rate (per 1,000)	*30	29.1
Deaths within first year of life	934	837
Infant Mortality rate (per 1,000 live births)	140.3	116
Still births	236	252
Still birth-rate (per 100 live births) ...	3.5	3.4
Deaths in pregnancy or child birth ...	65	76
Maternal mortality rate (per 1,000 births)	9.8	10.5

* Correct 1943 report where figure of 23.2 was shown in error.

44. The above figures do not include non-native births and deaths. There is no doubt that the estimated population figures given for Lagos, based on a table prepared from the 1931 census, is now an underestimate and the rates *per mille* calculated on this figure in consequence are higher than the actuals. War time movement of population into urban areas, and the trend for people to drift into large towns, has caused a considerable increase in the Lagos population, but actual figures are impossible to obtain. A new census of Lagos is now long overdue.

IV. — HYGIENE AND SANITATION

1. — PREVENTIVE MEASURES

(*i*) *Mosquito and other Insect-borne Diseases*

45. During the year the Mosquito Control Officer carried out investigations at Lagos (Ikoyi and Apapa), Abeokuta, Ibadan, Oshogbo, Ijebu-Ode, Agbor, Sapele, Warri, Onitsha, Port Harcourt and Calabar. In all but one of these places, the survey included examination of children's blood for malaria parasites (parasite index or malaria endemicity), catching and examination of anopheline mosquitoes for malaria infection (sporozoite rate) and for room density (infestation rate) and the search for breeding places of anopheles species. The report form a useful record for reference when planning mosquito control schemes.

(*a*) *Malaria*

46. In co-operation with the Army Authorities who provided the Supervisory Staff, the civil Government paying for labour, the schemes for bunding and canalising the swamps abutting on the west side of Lagos harbour were completed

by the end of 1944. The method has been worked out by Lieutenant-Colonel A. B. Gilroy, I.M.S., O.C. No. 7 Malaria Field Laboratory; it is aimed at lowering the level of the swamp water by keeping out the high tide and utilising each low tide to drain water due to seepage or to rainfall. Control is by hand operated tide-gates. The work was commenced on the Apapa Mainland in November, 1942. All villages within one mile of harbour and airport on the west side of Lagos port were removed in June 1943. The programme then progressed as follows:—

1943 July — Mainland Swamp drainage completed.
Oct. — Tin Can Island Swamp drainage commenced.
Dec. — Tin Can Island Swamp drainage completed.
1944 Jan. — Magazine Island Swamp drainage commenced.
Apr. — Magazine Swamp drainage completed.
May — Middle Point Swamp drainage commenced.
Aug. — Middle Point Swamp drainage completed.
Aug. — Meridian Point Swamp drainage commenced.
Nov. — Meridian Point Swamp drainage completed.

These swamps now drained aggregate an area of 1,677 acres. A comparison of the Malaria Rates at Apapa during the past three years give some idea of the effectiveness of the measures that have been adopted. These rates were:—

1942	888	per 1,000
1943	535	,, ,,
1944	261	,, ,,

(*b*) *Yellow Fever*

47. One case was confirmed in an African during the year from the Plateau Province. The campaign against the domestic breeding of mosquitoes has continued.

(*c*) *Typhus Fever*

48. Thirty-two cases of typhus with no death occurred. These cases occurred sporadically without the suggestion of any epidemic.

(*d*) *Trypanosomiasis*

49. This subject is dealt with in a separate section of the report.

(*e*) *Plague*

50. No cases occurred during the year. In view of epidemics of plague in Senegal and other ports on the coast of Africa, special precautions were taken on arrival in Lagos of ships from any of these ports. Fourteen ships were fumigated with Cyanide by the Port Health Staff, Lagos. More would have been done if stocks of cyanide had not been very low for part of the year. In the Lagos area, 20,235 rodents were destroyed, of which 10,030 were dissected, but found negative for plague. At Port Harcourt 12,292 rats were destroyed and 2,868 were examined for plague with negative results: a flea-count was made on 653 rats and the resulting flea-index was 2.77, with a cheopis index of 1.34.

(ii) Epidemic Diseases

(*a*) *Smallpox*

51. 5,164 cases were notified, with 816 deaths compared to 6,360 cases and 1,234 deaths in 1943. The death rates were 11.9 per cent and 19.4 per cent respectively. In some areas the use of the Sulpha drugs appeared to have a beneficial effect

in controlling secondary sepsis in smallpox. The Vaccination Campaign in Sokoto was continued and a total of 217,619 persons were inspected for evidence of protection and 174,529 were vaccinated during the year. Throughout the whole country 1,137,212 vaccinations were carried out. The incidence of smallpox in Nigeria is still much too high and it is hoped that the plans made for epidemic teams will result in better control of this disease.

(b) Cerebro-spinal Meningitis

52. The outbreak of cerebro-spinal meningitis was more severe during 1944 than in the previous year, most provinces being affected. 7,800 cases reported with 1,079 deaths as compared with 2,389 cases with 558 deaths in 1943, but the efficacy of the sulphonamide drugs against the disease is reflected in the drop in mortality rates—23.48 per cent in 1943 and 13.8 per cent in 1944. Epidemic control by the establishment of treatment centres has proved popular and communities are now willing and eager to bring cases for treatment in earlier stages of the disease. The increased movement of people due to war conditions has contributed to the spread of the disease. A disquieting development is the extension of the epidemic season into the rains particularly in the Southern Provinces. Benue, Owerri and Plateau Provinces were the most heavily affected.

(c) Enteric Fever

53. Fifty-eight cases with fourteen deaths occurred. All cases were sporadic but a gradual upward trend in the notifications of enteric is apparent.

(d) Dysentery

54. A total of 4,718 cases with 93 deaths were reported as compared with 5,085 with 258 deaths in 1943; the respective death rates were 1.97 per cent and 5 per cent Plateau and Owerri Provinces showed the highest incidence.

(iii) Other Infectious Diseases

(a) Tuberculosis

55. 1,209 cases of tuberculosis of which 393 terminated fatally, were notified; figures which show little difference from last year. The tuberculosis ward at Yaba, Lagos, with accommodation of 16 beds, has never had any more in-patients than ten at the same time: this in spite of the large numbers of cases notified. 373 cases were notified in Lagos Township, of which 304 died, 584 cases with 113 deaths were notified from the Northern Provinces. The disease is believed to be on the increase in Port Harcourt. Poor housing and overcrowding amongst the population with a low degree of resistance to this disease, are no doubt leading factors in spread. War conditions have brought in large additional numbers of people into the urban areas at the same time interfered with the necessary additional provision and improvement of housing.

(b) Pneumonia

56. 3,602 cases were notified with 795 deaths, but these figures give no real idea of the prevalence of the disease as there is no doubt that many cases are never notified.

(c) Undulant Fever

57. No cases were reported.

(d) Rabies

58. Two human cases of rabies were confirmed by post-mortem examination. Canine rabies was demonstrated in specimens from 32 dogs and 2 cats.

(e) Yaws

59. This is one of the commonest diseases treated at some hospitals and Native Administration Dispensaries.

(f) Infective Hepatitis

60. A widespread outbreak of infective jaundice occurred in the Eastern Provinces of Nigeria. Probably originating on the banks of the Cross River during the early part of the year, the epidemic reached its peak in August. The staff of the Yellow Fever Research Institute proceeded immediately to the affected districts to exclude the possibility of the disease being yellow fever. Their investigations and those of our medical officers revealed that the disease had been occurring for some months, with fatalities or, in not a few cases, disabling consequences such as cirrhosis and ascites. Some 960 cases were seen by Sanitary Inspectors and Dispensers; there was however no opportunity for more than a very few cases to be confirmed by medical men. There was a great increase in the admission of jaundice cases to the Hospitals at Calabar, Ikot Ekpene, Aba, Okigwi and Obubra.

61. Death rates were low; for instance, in Ikot Ekpene from January to November, 256 cases were seen at the hospital, with one death. The epidemic subsided during the months of November and December. There is no doubt that the diet of the people in the area is unsatisfactory particularly in the months April to August, and nutrition defects were almost certainly an important factor in this widespread epidemic.

(iv) Helminthic Infections

62. 30,613 specimens of stools were examined by the laboratory service and these indicated the following helminth infestations:—

633 or 2.1 per cent showed Taenia eggs.
7,698 or 25.1 per cent showed Ascaris eggs.
11,055 or 36.1 per cent showed Ankylostome eggs.
280 or 0.91 per cent showed Schistosoma mansoni eggs.

Of 27,330 specimens of urine examined, ova of Schistosoma haematobium were demonstrated in 2,732 or 10 per cent.

II. — GENERAL MEASURES

(a) Sewage Disposal

63. The use of the composting method for disposing of refuse and nightsoil is gradually being introduced with success throughout the country. New installations have been begun at Buea, Warri and Sapele. In the smaller towns, however, pit latrines still remain the best practicable method of disposal, in the absence of more qualified staff to introduce and supervise composting. Generally speaking, the composting of nightsoil has not been free from nuisance, and other difficulties arose when it was tried in such towns as Lagos and Ibadan where the humidity is high.

(b) Refuse Disposal

64. There is little to report during the year with regard to refuse disposal. Apart from its use along with nightsoil for composting, the general method of disposal is by incineration. Controlled tipping to fill up swampy areas and depressions has been carried out in Lagos, Apapa, Port Harcourt and other places.

(c) *Water Supplies*

65. No new major schemes have been put into operation during the year, but existing supplies have operated satisfactorily on the whole and the quality of the water has been controlled by bacteriological analysis at the bigger centres of population. In the Northern Provinces, 94 new wells were sunk by the Geological Survey Department—nearly 4 times as many as in the previous year.

III. — SCHOOL HYGIENE

66. The usual routine inspections of schools and school children have been carried out as far as possible, and talks and lectures have been given by Sanitary Superintendents and Sanitary Inspectors. Weekly lectures on health topics have been given to the trainees at the C.M.S. Training School at Port Harcourt.

67. In Lagos, a new School Clinic and Infant Welfare Centre building was opened at Oroyinyin Street with much better facilities for the examination of children than were previously available. A full-time School Medical Officer was appointed and treatment of many eye and skin cases, which was previously done at the African Hospital, has been undertaken at the Clinic. Attendances have increased. 6,362 pupils attended a total of 18,584 times. 348 new cases were treated for eye conditions.

IV — LABOUR CONDITIONS — AFRICAN HOUSING

68. Conscripted labour ceased to be imported into the Tin Minesfields during the year. Despite the fact that this rendered more housing available for the other employees, it was found that a state of unnecessary and artificial overcrowding remained, due to the fact that the labourers had a tendency to crowd together in a few houses even when many other vacant huts were available. Housing conditions are gradually improving throughout the area and in some camps, the older employees are getting an opportunity to enjoy a greater degree of privacy by grouping together a number of huts into family compounds.

69. On the Cameroons Plantations, although many camps still remain unsatisfactory, a number of very satisfactory new camps have been constructed. Progress has also being made with the rehousing of the plantation labour on the U.A.C. Plantations at Calabar, where semi-detached cottages are being constructed, instead of lines of rooms, for housing labour.

70. Improvements have also been made at Sapele. The discovery of gold in the Ife-Ilesha area led to a minor gold rush and the accommodation in the villages in the neighbourhood was severely overtaxed by the sudden influx of Hausas who came there to live. Extra Government and Native Administration Staff were posted to the area and a considerable number of sanitary structures were erected to deal with the sanitary problems which had been created. Later in the year, many of the miners left the area and conditions returned more or less to normal.

71. Timber camps at Okitipupa and Ondo also required the posting of extra staff. These camps were mostly of a temporary nature.

72. Population movements into the major centres, and particularly into Lagos, present a very serious problem. Rents are exorbitant, and the overcrowding is consequently aggravated as many people tend to share a room in order to keep down the expense.

73. Town Planning is going ahead and in the Northern Provinces a number of chiefs have visited the Sleeping Sickness Settlements at Anchau, in order to get ideas for the improvement of the layout of their villages.

74. The vicious circle of overcrowding — insufficient housing — exorbitant rents — continues to defeat any attempt at enforcing the standards laid down by public health legislation. It is believed that if the local authorities and the big employers of labour were to build houses for their employees and lease them at an economic rent this would have the effect of lowering rents charged by private landlords and lead to a general improvement of living conditions in towns. Overcrowding would be reduced and private builders would have practical demonstrations of improved types of housing to follow.

V — FOOD IN RELATION TO HEALTH AND DISEASE

75. Iodised salt continued to be imported into Benue Province to control goitre. Apparently, however, it is not popular with the people as it is in a finer state and less bulky than ordinary salt; they like its taste but do not feel that they are getting the full value for their money. It is not possible yet to say what effect the iodisation of salt is having on the incidence of the disease.

76. Goitre is very prevalent in many provinces of Nigeria and we may find that the best results from salt control will only be achieved by prohibiting the importation of all salt that is not iodised. Some sections of the public are becoming educated to the importance of nutrition in relation to health and to the importance of certain protective foodstuffs in the diet if disease is to be prevented.

77. In Lagos, the knowledge of nutrition has been advanced by clinical research into cases of ariboflavinosis and other avitaminosis. In Ibadan, valuable information about foodstuffs is being collected through the kindness and voluntary efforts of the wife of a Senior Agricultural Officer. Enthusiasm and keenness to investigate and learn about problems of nutrition is evident in many quarters, but lack of reliable subordinate staff and excessive routine work militate against progress.

VI — PORT HEALTH WORK AND ADMINISTRATION

78. No seaport or airport was declared infected during the year. Owing to an outbreak of plague in Senegal, special precautions were taken with regard to ships which had called there to ensure that no human cases of plague or infected rats were imported into Nigeria. The deck passenger traffic remained very light compared to pre-war years.

VII — TRAINING OF HEALTH PERSONNEL

79. An improved standard of education was noted in the candidates admitted to the Kano Sanitary Training School. Eleven students completed the course of instruction, and at the end of the year there were eighteen still undergoing training.

80. At the Ibadan Sanitary Training School twenty-nine completed the course and thirty are in training.

81. Twenty-three candidates sat for, and ten passed the examination held by the Royal Sanitary Institute (British West Africa) for the Sanitary Inspector's Certificate

82. The Lagos Town Council Infant Welfare Centre held 200 clinics during the year, at Lagos and Ebute Metta, where the total attendances of 15,709 compared with 7,650 attendances in 1943. New cases were 3,831 as against 3,206 in 1943. A total of 52,731 home visits were made by health visitors on infant welfare duty as against 51,573 in 1943.

83. 5,408 new cases with a total of 18,584 attendances were recorded at the School Clinics for 1944 as against figures of 4,848 and 17,903 during 1943.

84. The number of confinements in Government or Native Administration Institutions or attended by midwives sent out from such institutions amounted to 13,223, exclusive of confinements in European Hospitals; this represents approximately 22 per cent increase on the 1943 figure of 10,878.

85. Work in the Northern Provinces is hampered by the lack of suitable local staff and some of the Native Administrations are employing southern midwives until such time as suitable local women are available for training.

86. New ante-natal clinics were initiated at Umuahia and Kumba and have been well attended. A new Maternity Ward at Umuahia has also proved very popular. At Oshogbo, Warri and Degema, the attendances at clinics were very encouraging.

87. The ante-natal clinic at Ibadan had 1,001 cases, with a total of 5,443 attendances and the Child Welfare Clinic was even more popular with 1,374 new cases and 11,399 attendances.

RETURN OF DISEASES AND DEATHS FOR THE YEAR 1944

EUROPEANS AND AFRICANS

Disease	*Total In-patients treated*	*Total Deaths in In-patients*	*Total Out-patients*	*Total Deaths in Out-patients*
1. (*a*) Typhoid fever	62	12	2	—
(*b*) Paratyphoid fever	10	3	2	—
2. Typhus	32	—	—	—
3. Relapsing fever	—	—	—	—
4. Undulant fever	—	—	—	—
5. Smallpox	939	186	89	3
6. Measles	149	3	653	—
7. Scarlet fever	6	—	—	—
8. Whooping cough	91	2	707	—
9. Diphtheria	6	2	—	—
10. Influenza :—				
(*a*) with respiratory complications	97	1	469	—
(*b*) without respiratory complications	—	—	—	—
11. Cholera	—	—	—	—
12. Dysentery :—				
(*a*) Amoebic	1,010	80	3,857	9
(*b*) Bacillary	563	55	330	—
(*c*) Unclassified	706	67	2,664	4
13. Plague :—				
(*a*) Bubonic	—	—	—	—
(*b*) Pneumonic	—	—	—	—
(*c*) Septicaemic	—	—	—	—
14. Acute Poliomyelitis	10	1	8	—
15. Encephalitis lethargica	4	1	—	—
16. Cerebro-spinal fever	2,060	335	394	63
17. Rabies	2	2	—	—
18. Tetanus	348	115	58	—
19. Tuberculosis of the respiratory system	870	294	480	—
20. Other tuberculosis diseases	292	53	282	—
21. Leprosy	289	12	547	—
22. Venereal diseases :—				
(*a*) Syphilis	4,544	50	11,214	—
(*b*) Gonorrhoea	3,744	11	20,429	1
(*c*) Other venereal diseases	823	5	2,707	—
23. Yellow fever	1	1	—	—
24. Malaria :—				
(*a*) Benign	25	1	293	—
(*b*) Subtertian	2,973	46	21,208	—
(*c*) Quartan	12	—	18	—
(*d*) Unclassified	3,725	88	58,213	—
25. Blackwater fever	22	6	4	2
26. Kala-azar	6	—	4	—
27. Trypanosomiasis	801	48	1,171	1
Carried forward	24,222	1,480	125,803	83

RETURN OF DISEASES AND DEATHS FOR THE YEAR 1944—*contd.*

EUROPEANS AND AFRICANS

Disease	*Total In-patients treated*	*Total Deaths in In-patients*	*Total Out-patients*	*Total Deaths in Out-patients*
Brought forward	24,229	1,480	125,803	83
28. Yaws	508	1	31,966	—
29. Other protozoal diseases	18	—	4	—
30. Ankylostomiasis	2,068	19	2,871	—
31. Schistosomiasis	641	9	1,071	—
32. Other helminthic diseases	1,945	5	50,868	—
33. Other infectious or parasitic diseases ..	1,714	51	8,997	1
34. Cancer and other tumours :—				
(*a*) Malignant	151	24	62	—
(*b*) Non-malignant	689	7	1,186	—
(*c*) Undetermined	126	9	309	—
35. Rheumatic conditions	1,118	5	159,100	1
36. Diabetes	81	4	92	—
37. Scurvy	1	—	258	—
38. Beriberi	90	8	346	—
39. Pellagra	26	4	583	—
40. Other diseases :—				
(*a*) Nutritional	101	15	2,573	—
(*b*) Endocrine glands and general ..	114	7	396	—
41. Diseases of the blood and blood-forming organs	1,725	122	16,854	2
42. Acute and chronic poisoning	52	2	51	—
43. Cerebral haemorrhage	311	59	407	1
44. Other diseases of the nervous system ..	1,311	191	7,445	—
45. Trachoma	37	—	256	—
46. Other diseases of the eye and annexa ..	1,212	1	26,181	—
47. Diseases of the ear and mastoid sinus ..	263	1	17,977	—
48. Diseases of the circulatory system :—				
(*a*) Heart	899	215	1,301	5
(*b*) Other circulatory diseases	1,441	35	7,313	—
49. Bronchitis	2,533	47	64,904	15
50. Pneumonia :—				
(*a*) Broncho-pneumonia ..	1,547	253	899	25
(*b*) Lobar-pneumonia .. 4723	3,176	251	746	12
(*c*) Otherwise defined	—	—	—	—
51. Other diseases of the respiratory system	970	49	9,941	—
52. Diarrhoea and enteritis :—				
(*a*) Under 2 years of age	149	28	4,083	—
(*b*) Over 2 „ „	2,059	166	29,166	4
53. Appendicitis	130	15	122	—
54. Hernia, intestinal obstruction	3,887	139	3,291	1
Carried forward	55,315	3,222	577,422	150

RETURN OF DISEASES AND DEATHS FOR THE YEAR 1944—*contd.*

EUROPEANS AND AFRICANS

Disease	*Total In-patients treated*	*Total Deaths in In-patients*	*Total Out-patients*	*Total Deaths in Out-patients*
Brought forward	55,315	3,222	577,422	150
55. Cirrhosis of the liver	141	33	47	—
56. Other diseases of the liver and bacillary passages	942	91	2,049	6
57. Other diseases of the digestive system	2,767	115	103,727	—
58. Nephritis :—				
(*a*) Acute	235	51	388	—
(*b*) Chronic	264	73	230	—
59. Other non-venereal diseases of the genito-urinary system	5,889	128	22,615	—
60. Diseases of pregnancy, childbirth and the puerperal state :—				
(*a*) Abortion	1,016	9	755	1
(*b*) Ectopic gestation	46	2	20	—
(*c*) Toxaemias of pregnancy	504	41	1,208	—
(*d*) Other conditions of the puerperal state	9,158	123	458	—
61. Diseases of the skin, cellular tissue, bones and organs of locomotion	13,846	164	166,661	6
62. Congenital malformation and diseases of early infancy :—				
(*a*) Congenital debility	618	148	1,699	—
(*b*) Premature birth	156	56	28	—
(*c*) Injury at birth	32	13	2	—
63. Senility	45	15	38	—
64. External causes :—				
(*a*) Suicide	18	3	4	—
(*b*) Other forms of violence	7,518	255	73,596	3
65. Ill-defined	1,001	63	8,437	—
Total	99,511	4,605	959,384	166

LABORATORY SERVICE

Staff

Dr B. G. T. Elmes succeeded the late Dr E. C. Smith as Assistant Director of Laboratory Service. The continued shortage of Staff necessitated the posting of two Medical Officers as Acting Pathologists at different period of the year.

2. Mr J. E. Knight, Laboratory Superintendent, was posted to the Yellow Fever Research Institute in September. Mr R. A. Nethercot, Laboratory Superintendent, arrived in Nigeria on first appointment in January.

Expansion

3. Proposals were submitted to enable Kano and Port Harcourt to be opened as Area Pathologists' Stations. A Technical Assistant was posted to Enugu for the first time.

General Work

4. It is not proposed to give in detail the work performed during the year but a brief summary is appended.

Headquarters, Medical Laboratory Service

(Medical Research Institute, Yaba and Pathology Department, African Hospital, Lagos.)

Clinical pathology (including bacteriology, biochemistry and histology)	38,052 examinations
Autopsies	719

Rabies

5. Ninety-seven brains were received for examination.

Dog	81 (32 positive)
Human	6 (2 ,,)
Cat	9 (2 ,,)
Leopard	1

Five of the positive brains (4 dog and 1 cat) were histologically negative and were subsequently proved positive by animal inoculation.

Yellow Fever

6. Seven specimens of liver from suspected cases of yellow fever were all negative histologically.

Out-station Laboratories

7. (Eight. Seven staffed by Technical Assistants and one by a Laboratory Superintendent and Technical Assistants).

Clinical pathology	79,853 examinations.
Autopsies	366

Vaccines

Smallpox Vaccine (Lanolated sheep lymph)

8. The total yield of pulp was 24,824 grammes from 822 sheep: an average of 30 gramme per sheep compared with 24.5 grammes in 1943. The increase is

mainly due to an improved method of scarification.

9. The mortality rate among the sheep was considerably higher than 1943 and the Veterinary Department has been consulted.

10. The bacteriological and potency tests on the finished vaccine were satisfactory. Approximately 86,000 tubes were issued during the year, equivalent to 1,720,000 single doses.

11. Owing to the war the refrigerator plant has not yet been installed and the Yellow Fever Research Institute has kindly provided cold storage space.

12. The increased production necessitates additions to the present building and plans have been submitted.

13. Mutton was supplied to the African, European and Infectious Diseases Hospitals and to the Infant Welfare Clinic.

Rabies Vaccine (Phenolized sheep brain)

14. 43,400 cc. were prepared and issued.

T.A.B. Vaccine

15. 5,000 cc. were prepared and issued.

Yellow Fever Inoculations in Lagos Area

16. 2,371 inoculations were given with Rockefeller vaccine.

Preparations of Antigens and Media

17. 1,730 cc. of Kahn and 1,605 cc. of Ide antigen were prepared. 545,900 cc. of various media were prepared.

Teaching

18. The teaching of Pathology (including Bacteriology and Parasitology) in the Medical School was carried out by the staff of the Laboratory Service in Lagos.

Training of Technical Assistants

19. There were seventeen Technical Assistants-in-Training or still on probation resulting in much congestion at the Pathology Department of the African Hospital, Lagos, and added strain on the small staff. Increased staff and the opening of subsidiary training centres are indicated.

SUMMARY OF WORK CARRIED OUT FOR THE ARMED FORCES DURING 1944

Clinical pathology	7,742 examinations.
Yellow Fever Inoculations	406
VACCINES:	
Smallpox	9,092 tubes
Rabies	1,060 cc.
ANTIGENS:	
Kahn antigen	1,050 cc.
Ide ,, ...	300 cc.
MEDIA (various)	228,020 cc.

THE MEDICAL AND PHARMACY SCHOOLS

This report covers the Academic year October 1943 to September 1944.

Staff

2. The permanent staff of the School during the year consisted of the Assistant Principal, the Superintendent of the School of Pharmacy and a Laboratory Superintendent, the latter being a new appointment.

3. One new Technical Assistant has been appointed, but the second provided for remains vacant pending the development of the Biochemistry Department.

4. All other teaching has been in the hands of part-time teachers. Members of the Medical Staff of His Majesty's Forces resident in Lagos have greatly assisted both in teaching and examining.

5. *Buildings.*—All building projects have been suspended until the recommendations of the Elliot Commission on Higher Education in West Africa are known.

6. *Equipment.*—Unavoidable shortage of equipment has necessitated the curtailing and re-casting of some of the practical work.

7. *Visitors.*—In February and March the school was visited and inspected by the members of the Commission on Higher Education under the Chairmanship of Colonel Walter Elliot. Much evidence, both oral and documentary was laid before them.

8. *Students.*—A total of twenty-six students attended classes during the year and seven qualified for the diploma, bringing the total now in practice to thirty-nine.

9. *Examinations.*—Statutory examinations were held in December 1943, April, July and September 1944. There were sixty-nine admissions to examination of which twenty-one were re-admissions. Of these there were fifty-five passes and fourteen failures.

10. *General.*—Little progress can be reported, mainly owing to the uncertainty as to the future development of the School.

School of Pharmacy

11. *Staff.*—The staff consisted of the Superintendent and five African teachers, one of whom was invalided.

Students.—Three classes ran simultaneously during the year:—

Part I	14	students.
Part II	15	,,
Chemist and Druggist Class (old regulations) ...	8	,,

12. *Examinations.*—Statutory examinations were held in December 1943, March, June and September 1944. There were fifty-three admissions to examination including re-admissions. Of these there were thirty-three passes and twenty failures.

13. *Hydnocarpus oil Preparation.*—From January to September, 1,281 imperial pints of sterile Hydnocarpus oil with 4 per cent creosote were prepared for the Medical Stores. Investigations into unsuitable samples of oil were undertaken on behalf of the Uzuakoli and Oji River Leper Settlements.

14. An electric granulator and tablet-making machine has been installed with a view to the local production of standard tablets.

15. Other work carried out includes the preparation of sterile saline and glucose-saline injections for use in the African Hospital, Lagos, and Dusting Powder and brilliant green solution for the Lagos Town Council.

16. There is urgent need for the expansion of the Pharmacy School to meet the growing demand for dispensers.

Appendix C

SLEEPING SICKNESS SERVICE

The sleeping sickness service is on a maintenance basis. Including a wells foreman there are usually from eight to ten officers in the field. They are equally divided between the treatment and control services.

2. Mass examination and treatment were confined to re-surveys by one full team and several temporarily constituted sub-teams. In Zaria Province, village re-surveys are also made by dispensary staff. Various forces of mines labour totalling over 6,000 men are examined and re-examined at six-weekly intervals. Apart from routine inspection of all patients attending dispensaries 183,000 examinations were made. Infection rates averaged 2 per cent.

3. Seven new dispensaries have been opened. Treatment facilities are available at 50 Sleeping Sickness and 37 Native Administration dispensaries, 26 hospitals and a variable number of temporary posts in the restricted minesfield areas. 15,629 cases of trypanosomiasis were treated by the teams and at these centres during the year. Over 4,000 cases of meningitis were treated in these provinces alone.

4. Control of mines labour is satisfactory in Niger Province and in the Southern Division of Plateau Province, less satisfactory in Jemaa. There is now only a very small labour force in the Kabba-Ilorin restricted area.

5. Developments in the tsetse-free corridor included the opening of village schools to reduce illiteracy, the reservation of the evacuated lands in Anchau district, the establishing of communal herds of cattle in three villages and the building of a cattle dip. In the 1943-44 dry season, 34 wells were completed and a 40-well programme in the northern part of the corridor begun in the 1944-45 season. Re-settlement of some of the remaining groups to be moved in Anchau and Ikara districts has been planned and is in hand. Corridor clearings were extended by 35 miles. All villages are visited by one of the propaganda teams and the local Native Administration officials advised regarding desired improvements. At a mid-year inspection of the 23 new villages only the one which had suffered most severely in the meningitis epidemic was found to be poorly maintained.

6. In Zaria and Kano Provinces, village areas with a population of 45,000 were protected by communal clearings which totalled 180 miles in length. Inspection of old clearings in these and other provinces showed that reslashing is done with reasonable efficiency.

7. Field research, entomological and clinical, is being resumed. The Entomologist has built a field laboratory in Zaria Province, instituted fly rounds on a new system, and made trials on various insect repellents. The action of Pentamidine as a prophylactic is being observed in groups of mines labourers. An American trivalent arsenical is being tested on a large scale and results compared with both standard and synergic treatment by Antrypol and Tryparsamide.

MINESFIELD MEDICAL FACILITIES

The new minesfield hospital at Barakin Ladi was opened during the year. Owing to circumstances it was necessary to take individual wards and other departments into use as construction was completed. For example in January one sixteen-bed ward was in use, from May two sixteen-and one thirty-bed wards together with theatre, stores, kitchens, etc., and later an Infectious Disease Section. Staff quarters in the area must be provided for all the nursing and labour staff as there is no alternative housing accommodation in the vicinity. Meanwhile round huts constructed for emergency purposes have been allocated to staff. There were many administrative difficulties arising out of these circumstances which were overcome by the keenness and willingness of the staff to meet them. The absence of a pipe-borne water supply for a considerable period necessitated transport of all water. The basic equipment provided for the hospital has been very good bearing in mind the difficulties of supply in war time.

2. *Clinical Work.*—The actual type of work done can be divided broadly into two periods with April as the dividing time. From January to April the vast majority of patients were Selected Labourers. The illnesses of which they complained were varied, but cerebro-spinal meningitis and the pneumonias accounted for a considerable number: bronchitis followed closely as a cause of death, whilst the invaliding rate was very high. (In those days 2,000 attendances a week were not unusual—in fact, during 1943 before the hospital was functioning and therefore before an annual report was submitted and in the early weeks of this year, a week with less than 1,800 attendances was considered a slack period). This state of affairs gradually eased off as the Selected Labourers were repatriated from February onwards. But our in-patients including those in emergency accommodation averaged about 100. After April, all the Selected Labourers had gone, the full complement of nursing staff had arrived and all the three general wards were open. In consequence it was possible to get down to routine hospital work more readily than had hitherto been possible, and at same time try to organise the work efficiently. Mines employees have always had a prior place by reason of numbers and the fact that the hospital is essentially part of the Minesfield Medical Facilities. All sections of the Mining Community have used the hospital and it is interesting in view of the high incidence of absconding from hospitals in this country to note that out of 1,119 in-patients up to 31st December, 1944, there have been only 30 absconders. It is not suggested that the administration is responsible, but it would appear that the system is.

3. Mining Patients know that if they are ill they are looked after without fear of losing their job or having no salary to draw with which to keep their families going. Meanwhile, local population patients know that treatment is free and therefore the risk of unauthorised charges is decreased enormously. The Medical Officer enquired into the causes of the absconding and found that it generally is due either to domestic trouble or in isolated cases to fear and misunderstanding of the treatment contemplated. The problem of employees with venereal diseases was discussed with managers of two of the largest mines. Patients suffering from venereal diseases had been losing their pay whilst under treatment. In consequence such persons were very chary of revealing their condition. The Mines Owners readily co-operated on this matter. It is worth noting that the sympathy shown towards the Medical Services by the Mines Owners and their readiness to help and co-operate generally has been a very pleasant feature of the work. With-

out co-operation between hospital and the mining community the work would be very hard and extremely difficult. Fortunately the reverse is true.

4. The Pagans have been using the hospital in increasing numbers since its inauguration. This is a very gratifying fact. A tremendous amount of curative and preventive medical work waits to be done among the Pagans who are very backward, very shy and reserved, but very loyal and friendly once they have learned to trust. The local Pagan chiefs bring their people readily or send for the Ambulance if it is a bad case. Especially does this apply to the women and children. The large numbers of Pagan children led inevitably to a Pagan Infant Welfare Clinic. This exceeded expectations both at its inception and in the way the people have continued to bring along their children for everything from a cold to the most severe illness. They are not afraid to stay in hospital if necessary. A Pagan Baby Show held on October 10, 1944, and attended by the Resident, Plateau Province, was a success. Two hundred and nine Pagan Babies (all regular attendants at hospital) were entered. The Hausa folk are also coming along steadily. It is a useful and encouraging thing that the local Hausa Headmen of the various villages have all been very co-operative and willing to help. The Fulanis, numerically smaller, are very friendly to the hospital and one or two are to be seen every day in the O.P. queue. The Southerners, of course, are more hospital minded. They formed the nucleus for the starting of an Ante-Natal Clinic which has steadily grown and is now attended by all types of people—(Southerners, Hausa and Pagan). We have had 214 Ante-Natal Clinic Attendances during the year. Not a few of these women have asked to be allowed to have their babies in the hospital.

5. Attendances during the year have been as follows:—New Out-patients 12,002, with a total attendance of 37,790. Of this number 8,279 have been selected labourers, 7,217 regular employees of the mines, 1,164 Pagan Labourers who are casual workers at the mines and 14,750 Local Population (this latter figure includes everyone not included in the previous groups). No less than 1,653 new patients have been under 16 years of age, whilst 4,192 of the attendances have been children and women—a good sign.

6. The first year's work of this hospital has been hard, with all the opening of the hospital together with the numbers of patients in the early days, but two things have been demonstrated:—

(*a*) The need of a hospital

(*b*) The willingness of the local folk to co-operate.

It is true to say that new work such as this could languish as easily as it could flourish. It will, undoubtedly progress steadily and surely so long as the local population retain their present attitude of gratitude that the hospital is for their own good and so long as the Mines Owners are conscious of the fact that they are "getting value for money" which they are. As far as the local people are concerned, it will be an advantage if the present system laid down when the Minesfield scheme was first inaugurated whereby all local population are treated free is continued. Very few can afford to pay for treatment and the loss of revenue from the few is more than compensated for by the general advantages to the public. The Medical Officer was of the opinion that a small tax of say 2d or 3d per head added to the annual taxation with a definite indication as to what it stands for would link the local population to the capitation scheme for mines labour in a very adequate manner. So long as the Mines are paying the annual capitation fee, there is little likelihood of their not ensuring that their employees obtain treatment when it is necessary.