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NIGERIA

Report on the Medical Services for the Year 1945

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Report on the Medical Services for the Year 1945

I. - ADMINISTRATION

A. — STAFF

Staff shortage has continued and, despite the return of several Medical Officers from the Army, prospects at the end of the year were still dismal in respect of this cadre, so much so that unless there is an early improvement in the recruitment of Clinical Staff it will be impossible to implement the reorganisation of the department envisaged under the new Constitution for some considerable time to come. The proposed decentralization involves the creation of three new posts for Regional Deputy Directors who will be stationed as advisers to Chief Commissioners at Kaduna, Enugu and Ibadan. Each regional head-quarters will also have an Assistant Director and Senior Medical Officer, while the staff at departmental headquarters will consist of the Director of Medical Services, the Deputy Director of Medical Services and two Assistant Directors of Medical Services, the post of Deputy Director and Assistant Director of Health Services having been abolished as from 1st April, 1945.

2. While the cessation of hostilities has led to a reduction in the period spent in travel to and from leave, shortage of shipping has continued to be acute and, in consequence, lengthy tours of service are still the rule.

B.—LEGISLATION

LIST OF ORDINANCES, REGUEATIONS, ETC., AFFECTING PUBLIC HEALTH ENACTED DURING THE YEAR 1945

(1) ORDINANCES

Serial No.	Date	Short Title	Provisions	Gazette No.
230130	(a) 161 (b)	ding Crism silvest to noine will	or ast clunct bas clinit only 24 th	PIPE
11	1.4.45	The Births, Deaths and Burials (Amendment) Ordinance, 1945.	Amendment of section 48 (a) of Chapter 47 of the Laws of Nigeria.	24 of 1945
16	19.4.45	The Vaccination (Amend- ment) Ordinance, 1945.	Amendments of Vaccination Ordinance	24 of 1945
21	7 Se ger	The Destruction of Mosquitoes Ordinance, 1945.	Measures for the destructions of Mosquitoes.	24 of 1945
32	19.4.45	The Yellow Fever and Infectious Diseases (Immu- nisation) Ordinance, 1945.	Provision for inoculation against Yellow Fever.	24 of 1945
34	26.4.45	The Public Health (Amendment) Ordinance, 1945.	Amendments of sections paragraph (6B) of 45 and 19, etc.	25 of 1945
52	-	The Private Hospitals Ordinance, 1945.	Provides for the registration, etc. of Private Hospitals.	68 of 1945
56	1.3.45	The Pharmacy Ordinance, 1945.	New Pharmacy Ordinance	72 of 1945
60		The Pharmacy (Amend- ment) Ordinance, 1945.	Amendment of sections 2, 33, 56, 48, etc. of Ordinance No. 56 of 1945.	76 of 1945
69 2401 lo	22.12.45	The Destruction of Mosquitoes (Amendment) Ordinance, 1945.	Amendment of Ordinance No. 31 of 1945.	76 of 1945

LIST OF ORDINANCES, REGULATIONS, ETC., AFFECTING PUBLIC HEALTH ENACTED DURING THE YEAR 1945—continued

(2) REGULATIONS

Serial No.	Date	Short Title	Provisions Provisions	Gazette No.
20	6.7.45	The Hospital Fees (British Overseas Airways Corpora- tion—Amendment) Regu- lations, 1945.	Amendment of Regulations No. 24 of 1945 by adding sub-regulation (13) to regulation 2.	46 of 1945

(3) Orders-in-Council

Serial No.	Date	Short Title	Provisions Provisions	Gazette No.
3	2.2.45	The Native Courts (Jurisdiction in Public Health Offence) Order-in-Council, 1945.	Grant of jurisdiction to Native Courts to enforce Public Health Rules.	9 of 1945
9	29.6.45	The Public Health (Applica- tion to Victoria—Amend- ment) Order-in-Council, 1945.	Amendment of Order-in-Council No. 21 of 1926.	46 of 1945
10	29.6.45	The Births, Deaths and Burials (Enugu Cemeteries —Amendment) Order-in- Council, 1945.	Amendment of Order-in-Council No. 25 of 1940.	46 of 1945
12	5.10.45	The Births, Deaths and Burials (United States Military Cemetery—Ikoyi) Order-in-Council, 1945.	Provision for United States Military Cemetery at Ikoyi, Lagos.	65 of 1945
13	1.11.45	The Births and Deaths (Jos Town and Bukuru) Regis- trution, Order-in-Council, 1945.	Registration of Births and Deaths in Jos Town and Bukuru.	69 of 1945
240130	19.12.45	The Births, Deaths and Burials (Warri European Cemetery Extension) Order-in-Council, 1945.	Extension of the European Cemetery at Warri.	77 of 1945

(4) RULES

Serial No.	Date	Short Title	Provisions	Gazette No.
2	9.2.45	The Townships (Eastern Provinces) Building (Amendment) Rules, 1945.	Amendment of Rules No. 4 of 1943	10 of 1945

3. Below are statements for the financial year 1944-45:-

A. - MEDICAL, HEALTH AND LABORATORY SERVICES

				£	S	d
Total Revenue, 1943-44	***	***		99,695	19	5
Total Revenue, 1944-45		(Chillipse)	HORE	105,182	0	0
Total Expenditure, 1943-44	mi.J	e torrepo		605,451	15	0
Total Expenditure, 1944-45		Maroito	oluni.	638,698	0	0
Increase	300	Henry Inti	1200	30,247	0	0

B. — Sleeping Sickness Service

			.001£ 200	S	d
Total Expenditure, 1943-44	area tubero	ontho :	36,679	0	8
FIR 1 2 FR 21 21 20 20 20 20 20 20 20 20 20 20 20 20 20	vi. alsoluvre		37,938	0	0
Increase	ducing the	bag, ,al	1,259	0	0

D .- MEDICAL STORES

- 4. The supply position has improved somewhat during the year and the work of the Central Stores has increased. The staff position is acute, and delays in the regular despatch of medical supplies throughout the country are only to be expected, unless the position improves.
- 5. During the year, the value of stores handled again exceeded £200,000. 10,256 Store Issue Vouchers were prepared; 10,053 cases of supplies were packed and despatched up-country; 5,252 parcels were also despatched, all of which involved a great amount of clerical work.

II. — PUBLIC HEALTH — GENERAL REMARKS

European Health

6. The malaria rate again showed a slight drop among Europeans, being 25.8 per cent of all in-patients. Comparative figures over the last four years are:—

1941	1942	1943	1944
44%	35.4%	30%	27.5%

7. The general health of Europeans was, on the whole, good. Malaria was the commonest condition necessitating admission. Apart from malaria; diseases of the skin, enteritis and diseases of the digestive system were most frequently encountered.

African Health

8. Figures for the last three years were:-

			1943	1944	1945
In-patients	H6F1131. 10	will be t	99,227	97,048	106,083
Out-patients			773,980	947.341	866,449

- Diseases of the Skin, Cellular Tissues, Bones and Organs of Locomotion were responsible for the most numerous admissions comprising 12.5 per cent of the total.
- 10. Diseases of pregnancy, child-birth and the puerperal state accounted for 12.1 per cent.
 - 11. Respiratory diseases (excluding tuberculosis) accounted for 8 per cent.
- 12. There is little change to report in the incidence of infectious, intestinal diseases, and helminthic infections.
- 13. The number of hospital cases of cerebro-spinal fever was less than in 1944, 1,500 cases being recorded as compared with 2,060.
 - 14. Smallpox, too, showed a decrease in admissions.
- 15. The figures for pulmonary tuberculosis remain almost the same as they were in 1944. Pulmonary tuberculosis is still the commonest cause of invaliding amongst African officials, and during the year was responsible for 18.9 per cent of all invalidings.

Venereal Disease

- 16. The annual returns show that there has been an increase in the number of cases of syphilis treated and a slight fall in the cases of gonorrhoea.
- 17. In the South, all reports show a falling off in the number of cases of gonorrhoea treated and it is thought this may be due in the main to the increasing activity of private practitioners and self medication with sulphonamide.
- 18. Comparative figures for the Cameroons and Port Harcourt for 1944 and 1945 show:—

		1944	1945
Cameroons		 4,433	2,488
Port Harcourt	Angel (4,026	945

- 19. In the North, venereal disease remains as serious a problem as before.
- 20. It is hoped that with the introduction during the year of legislation to control and check the sale of sulphonamides and other dangerous drugs, more patients will be persuaded to attend for hospital treatment and that the production of a sulphanilamide-resistant gonoccoccus may be impeded.

Leprosy Service

- 21. The new Leprosy Service came into being during the year and consists of a Central Leprosy Unit in charge of a Senior Leprosy Officer and three Area Organisations, each under an Area Superintendent. The three areas are Benin and Warri Provinces together, Onitsha Province and Owerri Province. The Central Unit is intended as a base for administration, training and investigation.
- 22. The Area Organisations consist of (a) a central settlement as a base, training school and segregation unit, (b) clinics—as local centres for diagnosis and treatment, (c) segregation villages where infectious cases may be isolated in their own neighbourhood.

23. In addition, there is a touring staff for tracing active leprosy in the general population, and there are welfare activities to meet the needs of the individual patient, which cannot be covered by the medical branch. The welfare work is under the control of the Co-operating Missions, which is in each area that Mission which was originally associated with the work. The Service came into operation only on April 1st and so far is still going through a transition period. It is hoped that by the end of 1946, definite progress will be reported.

School of Medicine

24. The number of students attending classes in 1945 was as follows: -

Seven students in their first year. Five students in their second year. Six students in their third year. Six students in their fourth year. Three students in their fifth year. One student in his sixth year.

The last mentioned student obtained his Diploma and was the only graduate of the year. Further particulars may be found in Appendix B.

Lunacy

25. A small mental hospital is at present in operation at Abeokuta and in the very near future it is planned to build a large modern mental hospital there. All asylums, of which there is a great inadequacy, remain as crowded as ever.

Native Authority Dispensaries

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

		Northern Provinces		Southern	Provinces	
		1944	1945	1944	1945	
Cases treated	1	509,559	580,604	851,103	1,007,490	
Total Attendance	es	2,320,998	3,200,298	2,821,811	3,118,972	

Hospital Buildings

- 27. The new African Hospital at Victoria was almost completed by the end of the year and it is hoped to have it in operation early in 1946.
- 28. Additional 30-bed wards, intended primarily for ex-servicemen, have been built at the Hospitals at Bida, Sokoto, Benin, Bauchi, Makurdi, Kano and Yola.
- 29. Apart from this, alterations and extensions have been carried out at existing Hospitals, principally at Minna, Kumba, Agbor, Jos and Makurdi, while construction at the new Igbobi Rehabilitation Centre near Lagos has proceeded satisfactorily. The Administration of this Centre was taken over from the Military Authorities towards the end of the year and there are already signs that its modification to an Orthopaedic Hospital and Rehabilitation Centre for civilian cases will be required at an early date.

III. — VITAL STATISTICS

- 30. The births and deaths of non-natives are compulsorily registrable throughout Nigeria.
- 31. Compulsory registration of the local population under the Births and Deaths 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 area in Minna, Abuja, Bida, Kontagora and Makurdi. In addition, rules have been made and adopted in various towns by many of the Native Administrations.
- 32. Comparative figures are given below for Lagos Township, where compulsory registration has been in force since 1889:—

	1944	1945
Estimated population	172,000	174,200
Births (live)	7,240	7,804
Crude birth-rate (per 1,000)	42	nahuta ani 45
Corrected birth-rate (per 1,000)	37.3	40.05
Deaths	3,674	4,051
Crude death-rate (per 1,000)	21.3	23.3
Corrected death-rate (per 1,000)	29.3	31.9
Deaths within first year of life	837	996
Infant Mortality (per 1,000)	bed16q	128
Still births 177010 an manner avanapabent har	252	deidw 1259mul
Rate of still-births (per 100 live births)	3.4	3.3
Deaths from disease of pregnancy and Child birth	76	26 97 ompusativ
Maternal Mortality (per 1,000 live		
births) words and and and and	10.5	9.8

33. The above figures represent only births and deaths of the indigenous population. The Birth and Death rates are not accurate as the total population is only an estimate based on the 1931 Census.

IV. — HYGIENE AND SANITATION

I. - PREVENTIVE MEASURES

(i) Mosquito and other Insect-borne Diseases

(a) Malaria

- 34. The anti-malarial work in Lagos area continued throughout the year. Progress made was as follows:—
- 35. Ikoyi Area.—All drainage was completed at N.E. Ikoyi swamp and a tide gate was installed. Additional drainage was carried out in Bambose swamp. All outstanding excavation was completed on the Lagos Town Council N.E. Ikoyi Scheme and there is now an area of approximately 50 acres of pleasant surroundings in the form of two large tidal lakes. Since the work has been completed, no instance of mosquito breeding has been found. It is planned to form a bund between the Eleshin and Bambose bunds.

- 36. Apapa Mainland. Permanent concrete tide gate was constructed to replace two defective temporary sluices. The wood gates at most sluices were replaced.
 - 37. Iddo Island. Swamps drained and concrete sluice gate constructed.
- 38. South Cowrie Creek. Area was surveyed and drains were pegged and traced. Bund facade and canal were completed and one sluice gate constructed.
- 39. Ijora Village. Preliminary survey was carried out and the greater part of bush clearing completed in readiness for drain digging.

(b) Yellow Fever

40. No case of yellow fever was reported during the year. Investigations carried out by personnel of the Rockefeller Yellow Fever Research Institute at Yaba indicate that the comparative freedom from yellow fever in the past few years is illusory. This was demonstrated by the mouse-protection test in young children and wild monkeys. In view of this, no relaxation in anti-aedes measures can be permitted.

(c) Plague

41. No cases were reported during the year. Nineteen ships were fumigated with cyanide by the Port Health Staff, Lagos. In the port area, 4,577 rodents were caught and a flea count was made on 629 rats, which gave a flea index of 4.3 and a cheopis index of 2.4. At Port Harcourt, 11,581 rats were destroyed and 2,980 were examined for plague with negative results. At Calabar, 17,159 rats were destroyed and 6,253 examined with negative results.

(d) Trypanosomiasis

42. See Special Report.

(ii) Epidemic Diseases

(a) Smallpox

43. 6,720 cases were reported with 1,117 deaths compared with 5,164 cases and 816 deaths in 1944, showing death rates 16.6 per cent and 15.8 per cent respectively. The routine use of sulphathiazole was practised in certain areas and it is reported that in such cases the length of the pustular stage was appreciably reduced. Mass vaccination campaigns were carried out in Kano, Sokoto, Katsina and Plateau Provinces, and a similar campaign has been organised in Zaria Province. During the year, 1,660,699 vaccinations were performed throughout the whole country. The Port Health Officer at Port Harcourt reports that on several occasions European members of crews were poorly protected against small-pox and he comments that there appears to be no system of vaccination, or of checking previous vaccination, at home ports prior to the signing-on of the men.

(b) Cerebro-spinal Meningitis

44. 9,628 cases were reported during the year with 1,443 deaths — a mortality rate of 14.99 per cent. The majority of cases came from the Northern Provinces, where the disease was widespread.

(c) Enteric

45. Seventy-two cases occurred with eight deaths. In Lagos, nineteen cases were notified, as compared with seven in 1944. Of these four died.

(d) Dysentery.

46. There were no unusual features compared with other years. The majority occurred in the Northern Provinces, where 2,854 cases with sixty-nine deaths were reported.

(e) Typhus

- 47. For the first time on record in Nigeria, an epidemic of louse-borne typhus occurred in Jos Native Town between June and September. 126 cases of known clinical typhus occurred with a mortality rate of 25 per cent. In almost all cases, the clinical picture was dominated by nervous symptoms and signs, most of them believed to be due to an encephalitis. Other clinical features which differed from the classical description of typhus were the absence of a rash and absence of diarrhoea and vomiting. Prompt measures and the use of D.D.T. brought the epidemic under control. These measures included mass delousing of the population by treating and re-treating bedding, clothing and spare clothing, and by systematic spraying and re-spraying of the bodies of the people.
- 48. During the last quarter of the year the disease appeared in Kano City. The first case was admitted to the African Hospital in October and a second one in December. Those affected were suffering from malnutrition and were living in over-crowded hovels where ventilation was practically non-existent. The disease has since assumed the form of a minor epidemic for the control of which prompt action is being taken.
- 49. Apart from these outbreaks, sixteen cases of murine typhus were reported by the Port Health Officer, Lagos.

(iii) Other Infectious Diseases

(a) Tuberculosis

50. This disease is suspected to be on the increase in many urban areas due partly to housing conditions and general overcrowding, but concrete proof of this is not available. Many patients suffering from tuberculosis do not attend at the Hospital until the disease is so far advanced that treatment is of little avail. In Yola, active pulmonary tuberculosis has been found in quite a few ex-servicemen returning from overseas. In Lagos, 319 cases of tuberculosis were notified and of these 263 died.

(b) Pneumonia

51. The incidence of this disease depends largely on the factors mentioned above in connection with tuberculosis viz. overcrowding and housing conditions generally. In addition, during the cold season, the African tends to herd together in his compound with his family to keep warm, thereby providing ideal conditions for the development and spread of the disease.

(c) Undulant Fever

52. No cases were reported.

(d) Rabies

53. One human case of rabies was confirmed by post-mortem examination. Forty-one cases of canine rabies and one case of rabies in a cat were demonstrated by histological examination.

(e) Yaws

54. This condition is common throughout Nigeria. Experiments with penicillin have shown that rapid and effective treatment can be given for yaws, and it is possible that when penicillin becomes more easily obtainable and less costly an effective agent will be at hand to render whole populations non-infective in an extremely short time. One case of yaws was reported in a European.

(iv) Helminthic Infections

55. The Laboratory Service reported on 33,345 specimens of stool, which indicated the following helminth infestations:—

445 or 1.3 per cent showed Taenia eggs.

9,655 or 28.9 per cent showed Ascaris eggs.

9,127 or 27.3 per cent showed Ankylostome eggs.

178 or 0.53 per cent showed Schistosoma mansoni eggs.

Of 28,181 specimens of urine examined, ova of Schistosome haematobium were demonstrated in 1,066 or 3.7 per cent.

II. — GENERAL MEASURES

(a) Sewage Disposal

56. There is little to report in regard to the method of composting of refuse and nightsoil which continues to be introduced throughout the country. Composting towers have been installed during the year at Kumba and Buea. In Apapa, the nightsoil is removed by the Lagos Town Council and is still being dumped into the Lagoon after disintegration, giving rise to numerous complaints. It is to be noted that the Council hope soon to provide a better method of disposal.

(b) Refuse Disposal

57. Incinerators continue to dispose of refuse, except in the larger towns where composting stations have been installed. There is nothing to report in this connection.

(c) Water Supply

58. A water purification plant has been installed at Kafanchan. The Geological Survey Department is making considerable progress with its programme of sinking wells in the Northern Provinces, where there is a dominant need for adequate and safe water supplies. Bacteriological findings of the routine examination of samples of water from the larger towns continue to be consistently satisfactory.

- 59. Medical Officers have carried out school inspection throughout the country. Among the commonest conditions met with are tinea, scabies and pediculosis. Schistosomiasis is prevalent among school children in certain areas. It is noticeable that skin diseases show a tendency to disappear in children who have been resident at school for one or two years.
- 60. Sanitary Superintendents and Sanitary Inspectors have given lectures and calks and have carried on propaganda in hygiene and sanitation.
- 61. In Lagos, routine medical examination of school children was carried out in seven secondary and five elementary schools and a total of 1.543 children were examined. A Lady Medical Officer was appointed during the year to be responsible for work in the girls' schools. It was observed, possibly through better living condition and less overcrowding, that children on the mainland in the Ebute Metta and Yaba areas of the Township are, on the whole, of better general physique than those in Lagos.

IV. - LABOUR CONDITIONS

- 62. In the Cameroons Plantations, permanent camps of a very satisfactory nature were started at Likomba and Tiko. The labourers' lines consisted of single-roomed brick houses in blocks of four or six with tiled roofs. Higher grade employees were provided with larger houses of well-designed types. In the temporary camps, conditions have, on the whole, shown a marked improvement, which will increase as staff and materials permit.
- 63. At Enugu Colliery, investigations were carried out into the incidence of hook-worm disease among the workmen. The conclusion reached is that the majority of the men, who came from Owerri Province, are infected before they start work in the Colliery.
- 64. In the Ife-Ilesha Area sanitary conditions are more satisfactory, as there has been a decline in the number of strangers who came to live in the local villages following the discovery of gold there.
- 65. In the timber camps at Ondo and Okitipupa, the improved conditions have been maintained.
- 66. On the Cowan Estate in Warri Province a compost factory has been started and improvements in housing have been made. It is planned to instal a pipe-borne water supply in the near future for both factory and labour lines. In the Jamieson River Rubber Estate in Benin Province a compost factory has been constructed, and on both this Estate and the Cowan Estate a maternity block has been built with the services of a resident midwife available at each.

V. - FOOD IN RELATION TO HEALTH AND DISEASE

67. The cost of living is probably still on the increase and this, added to the fact that harvests have been indifferent during the year, has caused a general searcity of foodstuffs. Coco-yams and plantains were particularly in short supply in the Cameroons.

68. In the North, as a result of good rains, food was not so short and cereals were plentiful, but there is too little variation in the diet. In the rural areas of the North, the peasant does not appear to obtain enough protein food and, during the dry season, not enough green vegetables. In spite of this, deficiency diseases do not seem to be very common.

VI. - PORT HEALTH WORK AND ADMINISTRATION

69. No seaport or airport was declared infected during the year. The Apapa airport was closed down during the year and was taken over as Military Head-quarters. The airport for Lagos is now at Ikeja. No cases of major infectious disease have occurred on ships.

VII. - TRAINING OF HEALTH PERSONNEL

70. At the Kano Sanitary Training School, in addition to Native Administration students who received a short course training, three Government students completed their course during the year. At the Ibadan Sanitary Training School thirty students completed the nine-months course and twenty-four are in training. As a result of careful selection, the standard of intelligence of present pupils is well above average and a high pass-rate is anticipated at the forthcoming examination. Thirteen candidates sat for, and nine passed the annual examination held by the Royal Sanitary Institute (British West Africa) for the Sanitary Inspector's Certificate.

VIII. - MATERNITY AND CHILD WELFARE

- 71. In the Northern Provinces, progress continues to be unsatisfactory, but it is hoped that when it is possible to send out women of Northern extraction, who have been trained in elementary domiciliary midwifery, to contact the people in the villages, prejudices will be gradually overcome and the northern women persuaded to attend ante-natal and child welfare clinics.
- 72. Maternity and Child Welfare work was carried out in most of the medical areas in the Southern Provinces. In addition to the facilities available at the hospitals, clinics are attached to many of the Native Administration dispensaries in the out-stations. These are staffed by Midwives holding the Grade II Certificate under supervision of the Medical Officer in charge of the area. Expectant mothers are thus provided with regular advice and treatment at centres which are not too distant from their homes. In consequence, abnormal cases can be detected at an early stage and sent in to the hospitals.
- 73. In addition, a great deal of Maternity and Infant Welfare work is undertaken by the various Missions hospitals. In all, there are eight approved Grade I Midwives' schools and twenty-six approved Grade II Midwives' schools.
- 74. Attendances during 1945 at both the Lagos and Ebute Metta Infant Welfare Clinics compared very favourably with the 1944 figures. 8,000 new cases of births reported were visited by the Health Visitors. A total of 61.726 home visits were paid by the Health Visitors during the year.
- 75. Figures recorded at the School Clinics continue to show big increases. 8,197 new cases were dealt with and a total attendance of 27,529 recorded, as compared with 5,408 and 18,584 respectively in 1944.

RETURN OF DISEASES AND DEATHS FOR THE YEAR 1945

EUROPEANS AND AFRICANS

Diseases	In- patients	Deaths	Out- patients	Deaths
1. (a) Typhoid fever	58	7	2.	1
(b) Paratyphoid fever	8		2	_
2. Typhus	55	5	THE SUID OF SW	- Transferre
3. Relapsing fever	3	L TRILL THE	111 90 1	
4. Undulant fever	and the state	Street Par Die	DE CANDED DANS	SERVICE DE
5. Smallpox	554	100	51	O ATO
6. Measles	327	4	464	000
7. Scarlet fever	1	arbit all com	OF the later	11-4
8. Whooping cough	95	4	674	Alteria
9. Diphtheria	1	nivertuesin	on stream in	(bullette)
10. Influenza:—	nestragin		one streaten	a systemial
(a) with respiratory complications	54	India lat	258	-
(b) without respiratory complications	-	-	_	-
11. Cholera		-		_
12. Dysentery:—			2 (10	BREINGER
(a) Amoebic	1,215	78	3,619	MIN 2200
(b) Bacillary	373	46	435	1110-1
(c) Unclassified	1,117	94	9,705	(III)
13. Plague :—	2102		13759	quent.
(a) Bubonic	or amount	ed Modes	No other No.	
(b) Pneumonic	of old part	in at E to	w tiells her	nod en
(c) Septicaemic	10	THE WALL	139Tex	ALFEE TO
14. Acute Poliomyelitis	19	- 2	4	Maria Bala
15. Encephalitis lethargica	The second second second	311	420	1
16. Cerebro-spinal fever	1,502	1	420	1
19 Totonus	274	126	70	TO THE REAL PROPERTY.
19. Tuberculosis of the respiratory system	879	216	533	THE PERSON
20. Other tuberculosis diseases	326	40	321	allineus
21. Leprosy	258	12	496	
22. Venereal Diseases :—	250	12	150	1
(a) Syphilis	6,077	74	12,674	
(b) Gonorrhoea	5,452	19	18,265	THE REAL PROPERTY.
(c) Other Venereal Diseases	843	3	3,051	10 mag
23. Yellow Fever	THE REAL PROPERTY.	1984 <u>91</u> 947	TO STATE OF THE PARTY.	AN THE
24. Malaria:—	arin Han		descrimately.	PRIDA
(a) Benign	18	2	30	-
(b) Subtertian	4,367	63	21,992	
(c) Quartan	12		72	_
(d) Unclassified	4,172	60	55,392	1
25. Blackwater fever	24	6	2	1
26. Kala-azar	14	STATE OF THE PARTY	9	-
27. Trypanosomiasis	821	47	1,447	
28. Yaws	434	2	31,285	100000
Carried forward	29,358	1,323	161,273	3

RETURN OF DISEASES AND DEATHS FOR THE YEAR 1945-contd.

EUROPEANS AND AFRICANS

Diseases 1	patients	In- patients	Deaths	Out- patients	Deaths
Brought forward	58,263	29,358	1,323	161,273	3
Pathologier's Laberatory hav		11			
29. Other protozoal diseases	860.5	1 779	CONTINUE TO	2,691	0 -00
30. Ankylostomiasis	100	1,778	12	1,494	
31. Schistosomiasis 32. Other helminthic diseases	000	1,931	7	50,884	
33. Other infectious or parasition		1,622	75	7.749	18
34. Cancer and other tumours		1,022	13	7,777	
(a) Malignant	ture. Value	160	42	53	ci me
(1) NT 1'		719	12	1,220	-
/ TT T	1.064	106	2	184	- (0
or Di	Has hard to	1,181	9	60,601	100 -
36. Diabetes	819	95	8	79	
37. Scurvy	11,293	7	lo -south	36	161
38. Beriberi		109	20	723	_
39. Pellagra	13.557	37	6	847	0 30
40. Other diseases :—		anizon	cont do zame	on bear some	
(a) Nutritional	AND THE SAME	102	2	3,508	(C)
(b) Endocrine glands and		137	12	703	1
41. Diseases of the blood and b	lood-forming	2,198	129	20,039	(10)
organs.	111		Iffrid	Percentatural	(6)
42. Acute and chronic poison	ing	32	7	26	(3)
43. Cerebral haemorrhage		314	74	292	18 A
44. Other diseases of the nerve		1,242	156	7,788	- A-B
45. Trachoma	9	43	-	256	(4)
46. Other diseases of the eye a	and annexa	1,285	parology 1	27,252	(6)
47. Diseases of the ear and mas		264	7	20,266	Mark Service
48. Diseases of the circulatory	system :-	100			
(a) Heart		950	252	1,425	
(b) Other circulatory disea	ses	1,519	36	8,320	-
49. Bronchitis		2,936	42	62,143	
50. Pneumonia:—			225	505	
(a) Broncho-pneumonia		1,537	325	705	1
(b) Lobar-pneumonia	Contract of the	3,375	236	716	1
(c) Otherwise defined		-	- 50	11.707	
51. Other diseases of the resp		943	52	11,727	
52. Diarrhoea and enteritis:		017	26	1.064	1
(a) Under two years of ag		217	26	4,964 28,808	
(b) Over two years of age		2,076	163	140	
53. Appendicitis		148	115	18,164	1
54. Hernia, Intestinal obstruc		4,898 140	48	73	1
	and basillars		96	2,429	
56. Other diseases of the liver passages.	and bacillary	1,187	90	2,127	
Carried forward.	1,819,80L	63,263	3,309	507,582	7

RETURN OF DISEASES AND DEATHS FOR THE YEAR 1945—contd. EUROPEANS AND AFRICANS

57. Other diseases of the digest 58. Nephritis:— (a) Acute (b) Chronic 59. Other non-venereal disease genito-urinary system. 60. Diseases of pregnancy, characteristics of pregnancy, characteristics of pregnancy (a) Abortion (b) Ectopic gestation (c) Toxaemias of pregnancy (d) Other conditions of the state. 61. Diseases of the skin, cell bones and organs of locor 62. Congenital malformation are early infancy:— (a) Congenital debility (b) Premature birth (c) Injury at birth 63. Senility (c) External causes:— (a) Suicide (b) Other forms of violence 65. Ill-defined	żn- patients	In- patients	Deaths	Out- patients	Deaths
58. Nephritis:— (a) Acute (b) Chronic 59. Other non-venereal diseated genito-urinary system. 60. Diseases of pregnancy, charter the puerperal state:— (a) Abortion (b) Ectopic gestation (c) Toxaemias of pregnancy (d) Other conditions of the state. 61. Diseases of the skin, cell bones and organs of locory 62. Congenital malformation are early infancy:— (a) Congenital debility (b) Premature birth (c) Injury at birth 63. Senility 64. External causes:— (a) Suicide (b) Other forms of violence 65. Ill-defined	28.05	63,263	3,309	507,582	7
58. Nephritis:— (a) Acute (b) Chronic 59. Other non-venereal diseated genito-urinary system. 60. Diseases of pregnancy, charter the puerperal state:— (a) Abortion (b) Ectopic gestation (c) Toxaemias of pregnancy (d) Other conditions of the state. 61. Diseases of the skin, cell bones and organs of locory 62. Congenital malformation are early infancy:— (a) Congenital debility (b) Premature birth (c) Injury at birth 63. Senility 64. External causes:— (a) Suicide (b) Other forms of violence 65. Ill-defined	ive system	2,658	114	99,673	0 45
(b) Chronic 59. Other non-venereal diseat genito-urinary system. 60. Diseases of pregnancy, characteristics the puerperal state:— (a) Abortion (b) Ectopic gestation (c) Toxaemias of pregnancy (d) Other conditions of the state. 61. Diseases of the skin, cell bones and organs of locored state. 62. Congenital malformation are early infancy:— (a) Congenital debility (b) Premature birth (c) Injury at birth 63. Senility 64. External causes:— (a) Suicide (b) Other forms of violence 65. Ill-defined	1,778			asimomolyal	
59. Other non-venereal diseate genito-urinary system. 60. Diseases of pregnancy, characteristics the puerperal state:— (a) Abortion	300	291	54	418	3tt Sc
genito-urinary system. 60. Diseases of pregnancy, chethe puerperal state:— (a) Abortion (b) Ectopic gestation (c) Toxaemias of pregnancy (d) Other conditions of the state. 61. Diseases of the skin, celebones and organs of locored. 62. Congenital malformation are early infancy:— (a) Congenital debility (b) Premature birth (c) Injury at birth 63. Senility 64. External causes:— (a) Suicide (b) Other forms of violence 65. Ill-defined	of the	306		265	10 ====
60. Diseases of pregnancy, che the puerperal state:— (a) Abortion (b) Ectopic gestation (c) Toxaemias of pregnancy (d) Other conditions of the state. 61. Diseases of the skin, cell bones and organs of locor 62. Congenital malformation are early infancy:— (a) Congenital debility (b) Premature birth (c) Injury at birth 63. Senility 64. External causes:— (a) Suicide (b) Other forms of violence 65. Ill-defined	ises of the	5,947	106	22,508	34 (2)
the puerperal state:— (a) Abortion (b) Ectopic gestation (c) Toxaemias of pregnancy (d) Other conditions of the state. 61. Diseases of the skin, cell bones and organs of locory 62. Congenital malformation are early infancy:— (a) Congenital debility (b) Premature birth (c) Injury at birth 63. Senility 64. External causes:— (a) Suicide (b) Other forms of violence 65. Ill-defined	ild-birth and	94	Samounda 120	toangible	
(b) Ectopic gestation (c) Toxaemias of pregnance (d) Other conditions of the state. 61. Diseases of the skin, cell bones and organs of locor 62. Congenital malformation are early infancy:— (a) Congenital debility (b) Premature birth (c) Injury at birth 63. Senility 64. External causes:— (a) Suicide (b) Other forms of violence 65. Ill-defined	719		- Jose	Non-malie	
(c) Toxaemias of pregnance (d) Other conditions of the state. 61. Diseases of the skin, cell bones and organs of locor 62. Congenital malformation at early infancy:— (a) Congenital debility (b) Premature birth (c) Injury at birth 63. Senility 64. External causes:— (a) Suicide (b) Other forms of violence 65. Ill-defined		1,064	. 13 _{ort}	790	(1)
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62. Congenital malformation at early infancy:— (a) Congenital debility (b) Premature birth (c) Injury at birth 63. Senility 64. External causes:— (a) Suicide (b) Other forms of violence 65. Ill-defined	lular tissue,	13,557	141	161,856	395 Pe
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(a) Congenital debility (b) Premature birth (c) Injury at birth 63. Senility 64. External causes :— (a) Suicide (b) Other forms of violence 65. Ill-defined	nd diseases of	10017	94 1		
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63. Senility	.32	23	nosion 7 m	13	A -02
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(b) Other forms of violence 65. Ill-defined		Haleystem	of the nerve	her discuses	
65. Ill-defined	Uh	7 712	2	72 605	Tit
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225 and School (a) Standard (a)		326	40	Henr	
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28. Yellon-Fever 24. Male S2 11; 32 Male S2 (a) Benga 26. Ale Sala S3 (a) Benga S4 (b) Sala Sala S4 (c) Sala Sala Sala Sala Sala Sala Sala Sal		5.432		Bronglio-p	
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		and Davilla		thorediscase	
		1111	2	passagds	
Total	E85,263	108,618	4,520	878,417	11

TRAIL THE TOTAL OF THE PARTY SERVICE OF THE PARTY SERVICES OF THE PARTY AND THE PARTY OF THE PAR

Department, who advised the use of the strentment of the treatment of the strentment of the strentment

Plans for the country type Hospital Laboratory are now complete and have been approved. Alterations to the clinical laboratory at Jos and to the clinical laboratory at Kano City Hospital with a view to the creation there of an Area Pathologist's Laboratory have been under discussion.

GENERAL WORK

2. A brief summary of the work performed during the year is appended.

Headquarters, Medical Laboratory Service

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

Clinical Pathology (including Bacteriology, Biochemistry Autopsies 698

Rabies bounding over albert and any to see

3. 117 brains were received for examination, comprising

Port Harcourt some

Dog	2344	a armit o	100	111	107
Human					4
Cat	ndda	en were			4
Horse					1
Monkey	380 0				1

forty-three brains were positive including one human and one cat. Three of the positive brains were histologically negative, but were subsequently proved positive by the inoculation of white mice.

ads 14 steeldes bad a Ferez

4. Ten specimens of liver were received from suspected cases of yellow fever. All were negative.

Out-station Laboratories and to ample do a state of

5. (Nine. Eight staffed by Technical Assistants and one by Laboratory Superintendent and Technical Assistants).

Clinical Pathology ... more than 85,500 examinations.

Autopsies 264

missions. Of the countries I Vaccines and old and to see it won and doubt

Smallpox Vaccine

6. The total yield of pulp was 20,173 grammes from 576 sheep: an average of 36.3 grammes per sheep compared with 30 grammes per sheep in 1944. The

mortality rate among the sheep was 18.1 per cent compared with 35.5 per cent in 1944. This reduction in mortality is largely due to the work of the Veterinary Department, who advised the use of sulphuric acid in the treatment of diarrhoea. Final potency tests in batches prior to issue were carried out by primary single insertion vaccination in infants. The average success rate was over 90 per cent. A total of 142,659 tubes were issued during the year, equivalent to 2,853,180 single doses. The vaccine continues to be stored in the Yellow Fever Research Institute as shipping difficulties have delayed the arrival of the refrigerator plant.

Rabies Vaccine

7. 60,380 ccs. of vaccine were prepared and issued.

T.A.B. Vaccine

8. 1,140 ccs. were prepared and issued.

Yellow Fever Inoculations

9. 1,840 inoculations were given with Rockefeller Vaccine.

Media and Antigens

10. 1,400 ccs. of Kahn and 2,481 ccs. of Ide antigen were prepared. 327,465 ccs. of various media were prepared.

Training of Technical Assistants

11. The shortage of staff and the lack of accommodation in the Pathology Department, Lagos, continues. There were twenty-one Third Class Technical Assistants on probation. Of these, ten were appointed during the year. It is hoped that when Area Pathologists are stationed in Kano and Port Harcourt some of the teaching of probationers will be carried out in these laboratories, as it is desirable that not more than ten probationers should undergo training in Lagos. Vacancies for Technical Assistants remain to be filled and it is intended so far as possible to fill these with ex-servicemen, trained or semi-trained in laboratory work.

Teaching of Pathology

12. The syllabus for the teaching of Pathology and allied subjects at the Medical School was revised, a new feature introduced consisting of tutorial discussions in the Senior Clinical Pathology Class on the interpretation and significance of the more important biochemical estimations, with demonstrations of the technique of some of the more simple reactions.

Special Investigations

- 13. During the outbreak of epidemic typhus at Jos, Dr B. G. T. Elmes isolated a strain of Rickettsia from lice and maintained it for six passages. Rickettsial agglutination reactions were kindly performed in Accra by Brigadier G. M. Findlay. During the year Dr Cannon brought out Rickettsial suspensions, which are now in use at the Medical Research Institute.
- 14. A Penicillin Research Committee was formed in Lagos in the early part of the year and considerable experimental treatment was carried out in cases of tropical pyomyositis, tropical ulcers and yaws, with bacteriological control throughout.

SUMMARY OF WORK CARRIED OUT FOR THE ARMED FORCES DURING 1945

A. Headquarters, Medical Laboratory Service (Medical Research Institute, Yaba and Pathology Department, African Hospital, Lagos).

Blood Films for malarial parasites									
Urine Examinat	ions	***					5		
Stool Examinati	ons	provide "					401		
Stool Cultures							35		
Urethral Smears							953		
Kahn Tests							185		
Histopathology							51		
Miscellaneous							11		

VACCINES:

	 Inocula	104	geen)	0.4
Kahn Antigen	 	 	 	 575 ces.
Media (various)	 	 	 	 100,900 ees.
Field's stain	 	 	 	 3,000 ces.

B. — OUT-STATION LABORATORIES

Clinical Pathology — Total Examinations 1,408.

Appendix B

THE MEDICAL AND PHARMACY SCHOOLS

Staff.—One new Technical Assistant was appointed during 1945 to the Department of Physiology. Otherwise the permanent staff of the school consisted of the Assistant Principal, the Superintendent of the School of Pharmacy and a Laboratory Superintendent. Members of the Medical Staff of His Majesty's Forces, resident in Lagos, have again rendered most valuable service both in the teaching and in the examinations throughout the year.

- 2. Equipment.—Supplies have unavoidably been small and irregular. As a result, in spite of the exercise of rigid economy, the practical work has inevitably suffered.
- 3. Students.—A total of twenty-eight students attended classes during the year. One qualified for the Diploma, thereby bringing the total number now in practice to forty.
- 4. Examinations.—These were held in December 1944, March. July and September, 1945. There were fifty-one admissions to examination, of which ten were re-admissions. Of these, there were thirty-five passes and sixteen failures.

School of Pharmacy

5. Staff.—The staff consisted of the Superintendent and four African teachers.

6. Students .-

Part I		in approble	en dis			1903	 12	students
Part II								,,
Chemist	and	Druggist	Class	(old	regula	ation)	 6	,,,

7. Examinations.—These were held in July 1945. There were nineteen admissions. Of these, there were nine passes and ten failures.

Hydnocarpus Oil Preparation

- 8. 2,775 bottles of sterile oil with 4 per cent creosote were prepared for the Medical Stores. Investigations into the unsuitability of samples of oil show that the irritant substance found is in the nature of a peroxide, and to counter this steam is now passed through the oil before processing, thereby allowing the peroxide to volatilise.
- 9. Preparations of sterile injections of glucose, glucose-saline and morphine were made at intervals during the year for use in the African Hospital, while Dusting Powder and supplies of brilliant green solution were made for the Lagos Town Council.

Appendix C

SLEEPING SICKNESS SERVICE

A survey was done in the Obudu Division of Ogoja for the first time. 618 cases were found among 49,610 people seen—an infection rate of 1.24 per cent. Treatment was with the synergic antrypol tryparsamide mixture.

- 2. Surveys were also made in Calabar and Kabba in connection with development schemes. In the dense and extensive forest area between Calabar and Mamfe tsetse fly was present, but no case of human trypanosomiasis found. In Kabba Province, of 1,710 people examined, six cases of trypanosomiasis were diagnosed.
- 3. Resurveys were made in parts of the Northern Provinces by European Officers in charge of small teams. These showed that where the original infection rate had been between 7 per cent and 35 per cent, the present incidence varied between 0.3 per cent and 1.3 per cent in the 85,000 people examined.
- 4. Facilities for the treatment of sleeping sickness are available at sixty-two Sleeping Sickness Survey Dispensaries, dressing stations, or field-posts, thirty-two Native Administration Dispensaries, four Mission stations and at all Government Hospitals. At these centres, 15,324 cases were treated. The dispensaries function, in addition, as general dispensaries, and also undertake routine sanitary and anti-epidemic work in many districts.
- 5. Therapeutic trials are still being made with an American trivalent arsenical and with Pentamidine. Both are highly trypanocidal and rapidly effective in the early case, and have the advantage over antrypol in that no toxic effects result from the initial injection of even a full dose: further, optimal dosage can be given within a few days. Pentamidine can safely be given intramuscularly, but can be highly dangerous if given intravenously. For mass treatment of large numbers of

cases in various stages of the disease the combination of antrypol and tryparsamide is still advised.

- 6. In Zaria and Kano Provinces communal clearings were continued to protect village areas. Old clearings in these and other Provinces were inspected and it was observed that reslashing was efficiently done.
- 7. In the tsetse-free corridor in the Anchau District, more schools were built and the school-farms gave good yields in their first year. Propaganda teams continue to tour villages in the corridor advising village heads in matters relating to public health.
- 8. The Anchau cattle farm is now in charge of an Agricultural Assistant. The health of the cattle has been good and they are tended with care. Weekly dipping has greatly reduced the incidence of disease.

Appendix D

MINESFIELD MEDICAL FACILITIES

The following are the attendance figures for 1944 and 1945:-

			1944	1945
New out-patients	 	***	 12,002	9,373
New in-patients	 		 1,119	2,235
Total Attendances	 		 23,131	26,350

2. The decrease in new out-patients attending is coincident with the disappearance of "selected labour", but there has been a substantial increase in the pagan attendances, especially of women and children, throughout the year. Of the total attendances, 7,786 came from the Mines, 18,564 from the local population, as compared in 1944 with 8,381 and 14,756 respectively.

cases in various stages of the disease the combination of natrypol and my paramide is still advised.

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7. In the testse-free corridor in the Anchan District, more schools were built and the school-farms gave good yields in their first year. Propaganda teams continue to tour villages in the corridor advising village heads in matters relating to public health, but the corridor advising village heads in matters relating

S. The Auchau cattle farm is now in charge of an Agricultural Assistant.
The health of the cattle has been good and they are tended with care. Weekly

The same has been a the Arrican respirate while

Appendix D

MINESPIELD MEDICAL PACHFIES

The following are the attendance figures in 1941 and 1915 :--

Total Attendances 1945

12,002 0,373

New in-patients 2,235

Total Attendances 28,431

disapproachure of l'acleded labour. but there has been a substantial increase in the page attending is coincident with the disapproachure of l'acleded labour. but there has been a substantial increase in the page attendances, especially of women and children throughout the years of the total attendances, 7.786 came from the Mines, 18.561 from the local population, as compared in 1914 with 8.381 and 14.736 respectively.

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