

Annual report on the work of the Ministry of Public Health / Egypt.

Contributors

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MINISTRY OF PUBLIC HEALTH, EGYPT.

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ANNUAL REPORT

ON THE WORK OF THE

Ministry of Public Health

for the Year 1944



Government Press, Cairo.

GOVERNMENT PUBLICATIONS are on sale at the "Sale Room" Ministry of Finance. Correspondence relating to these publications should be addressed to the "PUBLICATIONS OFFICE," Government Press, Cairo.

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MINISTRY OF PUBLIC HEALTH

ANNUAL REPORT FOR THE YEAR 1944

Part I.—PUBLIC HEALTH

Chapter I.—VITAL STATISTICS

A.—*Population* :

The population of Egypt as estimated in mid year 1944 was 17,625,600 inhabitants as against 17,423,300 inhabitants in 1943.

B.—*Births* :

The number of births registered during 1944 throughout the Egyptian Kingdom was 722,166 or a birth-rate of 41 per thousand of population as compared with 689,771 in 1943. The highest birth-rate of 90·6 per thousand was recorded in Suez Governorate, and the lowest birth rate of 18·6 per thousand was recorded in Aswan Province.

C.—*Deaths* :

A total of 472,234 deaths were registered throughout Egypt during the year under review or a death-rate of 26·8 per thousand as compared with 28·3 per thousand in 1943. Suez Governorate recorded the highest death-rate of 78·7 per thousand. The lowest death-rate of 18·6 per thousand was recorded in Girga Province.

D.—*Diseases Causing Deaths* :

Table No. 4 gives the principal diseases causing deaths in localities having a health bureau, and the death-rate of each disease as compared to total deaths. According to this table, diarrhoea and enteritis figure foremost on the list with diseases of the respiratory system following.

E.—*Age and Sex Distribution of Deaths* :

Table No. 5 gives the number and rate of deaths of the different age groups in localities having a health bureau. It shows that almost half the deaths occur during the first three years of life.

F.—*Infantile Mortality* :

A total of 110,020 infantile deaths were recorded during the year or a ratio of 152 per thousand births. 60,235 infantile deaths or 20·2 per hundred births (vide table No. 6) were recorded in localities having a health bureau. Again diarrhoea and enteritis were mainly responsible for these deaths. Table No. 6 gives infantile deaths distributed according to age in localities having a health bureau.

**TABLE No. 1.—SHOWING RATES OF BIRTHS, DEATHS AND INFANTILE MORTALITY
IN EGYPT FROM 1935 TO 1944**

Year	Birth-rate per 1000 population		Death-rate per 1000 population		Infantile mortality per 1000 births	
	Egypt	Urban Districts	Egypt	Urban Districts	Egypt	Urban Districts
1935	39.4	42.5	25.1	27.7	166.6	202.5
1936	41.8	—	27.3	—	164	—
1937	43.5	46.1	27.2	29.8	165	206
1938	43.4	45.7	26.4	29.5	163	206
1939	43.2	46.8	26.0	29.3	161	200
1940	41.6	45.9	26.5	29.5	162	199
1941	40.8	44.2	25.9	31.0	150	200
1942	38.2	44.4	28.7	36.2	168	228
1943	39.6	49.8	23.3	37.2	160	225
1944	41.0	54.9	26.8	35.8	152	208

**TABLE No. 2.—SHOWING THE HIGHEST AND LOWEST BIRTH AND DEATH RATES DURING 1944
IN GOVERNORATES, PROVINCES AND TOWNS HAVING A HEALTH BUREAU**

	Govte., Prov. or Town having a Health Bureau	Rate per Thousand
BIRTHS		
Governorate or Province with highest birth-rate	Suez	90.6
" " " " lowest "	Aswan	18.6
Town or Bandar (chief town) with highest birth-rate	Suez Town	94.5
" " " " lowest "	Dabaiya	7.8
DEATHS		
Governorate or Province with highest death-rate	Suez	78.7
" " " " lowest "	Girga (1)	18.6
Town or Bandar (chief town) with highest death-rate	Edfu	101.7
" " " " lowest "	Allaki	9.3
INFANTILE MORTALITY		
Governorate or Province with highest infantile mortality	Suez Governorate	283
" " " " lowest "	Girga	93
Town or Bandar (chief town) with highest infantile mortality	Sennosis	346
" " " " lowest "	El Dei (2)	41

The birth-rate for all the population of Egypt was 41 per thousand.

(1) The death-rate in the Red Sea District was 16.9

(2) The Infantile mortality rate in Faroukia, Bolbais District was 27.

Towns or Bandars represents every locality, whether urban or rural, having a health bureau.

TABLE No. 3.—SHOWING DISEASE DISTRIBUTION OF INFANTILE MORTALITY IN LOCALITIES HAVING A HEALTH BUREAU DURING 1944

Disease	Number of Deaths	Rate per 1000 to Total Births	Rate per 1000 to Total Infantile Mortality
Measles	262	0.9	4.3
Whooping Cough	32	0.1	0.5
Diphtheria	59	0.2	1.0
Tuberculous Diseases	24	0.1	0.4
Syphilis	165	0.6	2.7
Rickets and Osteomalacia	180	0.6	3.0
Convulsions	252	0.8	4.2
Bronchitis	3,705	12.4	61.5
Broncho-Pneumonia	1,085	3.7	18.2
Pneumonia	747	1.2	5.8
Diarrhoea and Enteritis	33,047	112.6	553.6
Congenital Defects of Conformation	137	0.5	2.3
Congenital Debility	17,881	59.9	296.9
Perinatal Deaths	151	0.5	2.5
Consequences of Delivery	74	0.2	1.2
Infanticide	114	0.4	1.9
Accidents	122	0.4	2.0
Other Causes	1,988	6.7	33.0
TOTAL	60,235	201.6	—

TABLE No. 4.—SHOWING DISEASES CAUSING DEATHS IN ALL LOCALITIES HAVING A HEALTH BUREAU DURING 1944

Disease	Total Number of Deaths	Death-rate per 1000 of Total Deaths
Notifiable infectious and parasitic diseases exclusive of those marked * hereunder	7,417	37.3
Pulmonary tuberculosis*	3,581	18.0
Other tuberculous diseases	474	2.4
Syphilis	281	1.4
Malaria*	2,141	10.8
Dysentery	595	3.0
Pneumonia (acute, chronic and non-chronic, including broncho-pneumonia and capillary bronchitis)	7,357†	37.0
Bronchitis	15,040	75.7
Other respiratory system diseases	2,402	12.1
Heart diseases	4,545	22.9
Other diseases of the circulatory system	1,454	7.3
Diseases of urinary and genital system (other than Venereal)	7,572	38.1
Diseases of puerperium and delivery (other than puerperal septicemia)	789	4.0
Diseases of diarrhoea and enteritis	75,360	379.1
Senility	20,643	103.8
Accidental deaths including suicides	6,230	3.3
Other causes	42,988	215.8
TOTAL DEATHS	198,789	—

† This figure includes 5,626 deaths from pneumonia (Lobar or Bronchial).

TABLE No. 5.—SHOWING THE AGE AND SEX DISTRIBUTION OF DEATHS IN LOCALITIES HAVING
A HEALTH BUREAU DURING 1944

	Number of Deaths			
	Male	Female	Total	Percentage to Total Deaths
Less than one year	32,042	28,192	60,234	30·3
1- 2 years	14,969	15,129	30,098	15·1
2- 3 „	7,460	7,912	15,372	7·7
3- 4 „	3,475	3,521	6,996	3·5
4- 5 „	1,978	1,810	3,818	1·9
5-10 „	3,316	3,055	6,371	3·2
10-15 „	2,119	1,500	3,619	1·8
15-20 „	1,944	1,518	3,462	1·7
20-25 „	2,336	1,414	3,750	1·9
25-30 „	2,553	1,759	4,312	2·2
30-35 „	2,445	1,799	4,244	2·1
35-40 „	2,703	1,759	4,462	2·2
40-45 „	2,617	1,664	4,281	2·2
45-50 „	2,362	1,179	3,541	1·8
50-55 „	3,209	1,893	5,102	2·6
55-60 „	1,812	924	2,736	1·4
60-65 „	3,192	1,975	5,167	2·6
65-70 „	2,633	1,664	4,297	2·2
70-75 „	3,755	2,901	6,746	3·4
75-80 „	1,586	1,436	3,022	1·5
80-85 „	3,091	3,580	6,671	3·4
85-90 „	910	1,085	1,995	1·0
90-95 „	2,005	2,906	4,971	2·5
95 years and upwards	1,327	2,088	3,415	1·7
Unknown	89	18	107	0·1
TOTAL	105,928	92,861	198,789	—

TABLE NO. 6.—SHOWING THE AGE AND SEX DISTRIBUTION OF INFANTILE MORTALITY IN LOCALITIES HAVING A HEALTH BUREAU DURING 1944

Age		Male	Female	Total	Death-rate per 100 Births	Death-rate per 100 Deaths
0- 1 month	...	6,579	5,069	11,648	3.9	5.9
1- 2 months	...	2,542	2,159	4,701	1.6	2.4
2- 3 "	...	2,615	2,386	5,001	1.7	2.5
0- 3 "	...	11,736	9,614	21,350	7.1	10.7
3- 4 "	...	2,781	2,490	5,271	1.8	2.7
4- 5 "	...	2,435	2,477	5,112	1.7	2.6
5- 6 "	...	2,229	2,093	4,322	1.5	2.2
3- 6 "	...	7,710	7,066	14,776	4.9	7.4
6- 7 "	...	2,178	2,634	5,512	1.8	2.8
7- 8 "	...	2,269	1,988	4,257	1.4	2.1
8- 9 "	...	2,606	2,553	5,234	1.8	2.6
6- 9 "	...	7,823	7,180	15,003	5.0	7.5
9-10 "	...	1,948	1,739	3,687	1.2	1.9
10-11 "	...	1,794	1,660	3,454	1.2	1.7
11-12 "	...	1,431	910	1,971	0.7	1.0
9-12 "	...	4,713	4,339	9,112	3.1	4.6
GRAND TOTAL		32,042	28,193	60,235	20.2	30.3

TABLE NO. 7.—SHOWING BIRTHS, DEATHS AND INFANTILE MORTALITY IN EGYPT DURING 1944

	Estimated Population mid 1944	Births		Deaths		Infantile Mortality	
		Number	Rate	Number	Rate	Number	Rate
<i>Governorates :—</i>							
Urban (Cities only)*	2,483,100	143,388	57·7	87,361	35·2	30,924	216
Urban and Rural ...	2,637,000	160,228	57·0	90,973	34·5	31,828	212
<i>Lower Egypt :—</i>							
Urban (Bandars only)*	1,022,500	54,236	53·0	33,516	32·8	9,595	177
Urban and Rural ...	7,683,300	326,444	41·4	206,719	26·2	44,038	135
<i>Upper Egypt :—</i>							
Urban (Bandars only)*	925,400	45,833	49·5	37,548	40·6	10,221	223
Urban and Rural ...	7,105,300	245,494	34·6	174,462	24·6	34,154	139
<i>Egypt :—</i>							
Urban (Cities and Bandars)	4,431,000	243,457	54·9	158,425	35·8	50,740	203
TOTAL (all over Egypt)	17,625,600	722,166	41·0	472,234	26·8	110,620	152

* Urban comprises all towns having a Health Bureau provided there is a pure drinking water installation and a municipal or local council.

TABLE No. 8.—BIRTHS AND DEATHS RETURN FOR EGYPT, 1944

Governorates and Provinces	Estimated Population mid 1944	Births			Deaths			Infantile Mortality	
		Egyptians	Foreigners	Total	Rate per 1000 Population	Egyptians	Foreigners	Total	Rate per 1000 births
Governorates :—									
Cairo	1,457,400	81,96	825	85,788	58.9	53,015	563	53,583	26.8
Alexandria	755,700	38,39	1,467	39,446	52.7	21,346	1,131	22,477	29.7
Ismaïlia (including suburbs)	59,500	4,26	124	4,250	71.0	2,548	84	2,632	43.9
Port Said (including suburbs)	140,900	7,455	127	7,582	53.8	3,894	177	4,075	28.9
Suez (including suburbs)	56,400	5,085	27	5,112	90.6	3,933	506	4,439	7.7
Damietta	46,600	2,365	—	2,365	50.8	971	—	971	20.8
Sinai	20,000	1,016	—	1,016	50.8	48	—	48	21.4
Southern Desert	33,000	1,477	—	1,477	44.8	892	—	892	27.0
Western Desert	58,400	2,440	—	2,440	41.8	1,234	1	1,235	21.1
Red Sea District	10,700	352	—	352	32.9	1	—	1	16.9
TOTAL	2,637,000	147,638	2,570	159,228	57.0	88,566	2,467	90,973	34.5
Lower Egypt Provinces :—									
Behera... ..	1,171,100	44,380	3	44,383	37.9	26,224	174	26,398	22.5
Dakahlia	1,356,000	61,957	7	60,964	45.0	35,215	12	35,227	23.0
Gharbia	2,138,500	50,995	12	51,008	41.6	54,429	15	54,444	2.9
Menoufia	1,277,700	49,00	1	49,001	39.6	33,515	—	33,515	30.6
Kalubia	673,300	29,327	2	29,331	43.6	19,782	3	19,785	29.4
Sharkia	1,236,00	50,955	2	50,957	41.2	32,424	6	32,430	26.2
TOTAL	7,883,300	326,417	27	326,444	41.4	206,589	210	206,799	26.2
Upper Egypt Provinces :—									
A w n	307,000	5,655	1	5,656	18.6	9,243	—	9,243	30.1
Assiut	1,336,200	48,915	1	48,916	36.6	32,937	—	32,937	24.7
Beni Suef	66,600	22,422	—	22,422	35.8	13,111	1	13,112	20.9
Fayoum	656,300	23,227	—	23,227	40.0	19,776	1	19,777	30.1
Girga	1,265,900	42,667	—	42,667	33.7	23,563	1	23,564	18.6
Giza	778,400	35,686	107	35,793	46.0	22,635	131	22,766	19.2
Minia	1,027,400	39,387	7	39,394	38.3	26,628	8	26,636	15.9
Qena	1,107,500	24,398	1	24,399	22.0	26,393	2	26,395	23.8
TOTAL	7,105,300	245,377	117	245,494	34.6	174,318	144	174,462	24.6
GRAND TOTAL	17,635,600	719,452	2,714	722,166	41.0	469,413	2,821	472,234	26.8

TABLE No. 9.—BIRTHS AND DEATHS RETURN FOR GOVERNORATES AND CHIEF TOWNS OF PROVINCES FOR 1944

Governorates and Chief Towns of Provinces	Estimated Population mid year 1944	Births			Deaths			Infantile Mortality		Percentage of Infantile Mortality		
		Egyptians	Foreigners	Total	Rate per 1000 Population	Egyptians	Foreigners	Total	Rate per 1000 Population	Under one year	Under one year	
											Births	Deaths
Governorates:—												
Cairo	1,475,400	84,963	825	85,788	58.9	53,015	568	53,583	36.8	18,420	21.5	34.4
Alexandria	757,700	38,379	1,46	39,846	52.7	21,366	1,131	22,497	29.7	8,661	21.7	38.5
Ismailia (Town)	41,000	3,266	124	3,390	82.3	2,444	81	2,525	51.7	684	20.2	32.1
Port Said	132,200	7,699	123	7,822	54.6	3,771	10	3,941	29.8	1,401	19.4	35.5
Damietta	46,600	2,365	—	2,365	5.8	971	—	971	20.8	341	14.7	35.8
Suez (Town)	49,700	4,662	27	4,699	94.5	3,731	56	4,237	85.3	1,397	29.7	30.3
TOTAL	2,480,800	140,714	2,566	143,310	57.8	111,838	2,459	114,297	35.2	30,511	21.6	35.4
Lower Egypt:—												
Bahia	33,000	1,600	1	1,691	51.2	1,028	1	1,029	31.2	263	15.6	25.6
Damanhour	70,700	3,585	1	3,596	56.4	2,253	1	2,254	31.9	763	19.1	33.5
Mansoura	78,800	3,966	7	3,953	50.2	2,100	10	2,118	26.9	647	16.4	30.7
Shub el Kom	30,300	1,784	1	1,785	50.6	1,271	—	1,271	36.0	431	24.1	33.9
Tanta	101,900	4,940	4	4,944	47.1	3,275	2	3,277	31.2	923	18.7	23.7
Zagazig	67,300	3,666	1	3,667	54.5	2,289	5	2,294	34.1	618	16.9	26.9
TOTAL	300,000	20,011	15	20,026	51.3	12,224	19	12,243	31.4	3,645	18.2	29.8
Upper Egypt:—												
Assiut	64,500	2,923	1	2,924	45.3	2,056	—	2,056	31.9	590	20.2	28.7
Aswan	21,700	809	1	810	3.2	659	—	659	30.4	161	19.9	24.4
Bah el Suef	49,400	2,520	—	2,520	51.0	1,835	1	1,835	37.1	53	21.5	22.6
Fayoum	66,800	3,044	—	3,044	47.7	2,667	—	2,667	39.9	881	27.7	33.0
Giza	65,200	4,081	103	4,184	64.2	2,779	21	2,800	42.9	965	23.1	34.5
Minia	5,900	2,637	4	2,641	48.1	2,228	5	2,233	40.7	603	22.8	27.0
Qena	37,000	1,611	—	1,611	43.5	1,833	—	1,833	49.6	496	30.8	27.7
Souhag	35,000	1,806	—	1,806	50.6	1,100	1	1,161	2.5	393	21.9	25.8
TOTAL	395,200	19,571	109	19,680	49.8	15,218	28	15,246	38.6	4,635	23.6	30.4
GRAND TOTAL	3,266,000	180,326	2,690	183,016	56.0	123,300	2,500	125,800	35.2	39,191	21.4	34.1

Chapter II.—INFECTIOUS DISEASES

Incidence of Infectious Diseases.

TABLE NO. 14 —GIVES THE NUMBER OF CASES AND DEATHS RECORDED IN THE GOVERNORATES AND PROVINCES DURING 1943 AND 1944.

Typhus :

The following table is a statement of Typhus cases and deaths during the five years ending 1944 :

TABLE NO. 10

Year	Number of Cases	Case Rate per 100,000 of Population	Number of Deaths	Death Rate per 100,000 of Population	Case-Mortality Rate per cent
1940	4,416	26	863	5.1	19.5
1941	9,414	56	1,751	10.4	18.6
1942	22,054	128	4,411	25.8	20.0
1943	40,188	230	8,272	47.4	20.5
1944	18,477	104.8	4,043	22.9	21.8

It appears from the above that the number of typhus cases this year was 21,711 cases less than the previous year, thanks to the effective precautionary measures taken on a large scale against this disease, amongst which are the extensive delousing operations carried out in many parts of the country.

Regional Distribution of Typhus Cases :

Table No. 17 gives a comparative statement of typhus cases during the past ten years distributed according to governorates and provinces. It shows that typhus cases were recorded in Cairo and all the other provinces but were, on the whole, fewer than in the previous year.

Four-Weekly Distribution of typhus Cases :

Table No. 16 gives the four-weekly distribution of typhus cases compared with corresponding periods as far back as 1935. It shows that the upward curve of the disease began during the first 4 weeks of the year with 965 cases and gradually mounted until its peak of 3,325 cases was reached during the period ending the 20th week, after which the disease began its downward curve until the lowest number of 163 cases was recorded during the 44th week. A new upward curve began thereafter with 180 cases during the period ending the 48th week and 729 cases during the last four weeks of the year.

Typhus Cases and Deaths :

A total of 18,477 cases of typhus were reported during the year or a ratio of 1,049 per million of population as compared with 40,188 cases and a ratio of 2,304 per million of population in 1943.

Table No. 15 gives the number of typhus cases and deaths during the years 1905-1944 together with their ratio per million of population and case mortality rates per cent.

Plague :

The total number of cases of plague notified during the year was 644. The following is a statement of the disease during the past four years.

TABLE No. 11

Year	Bubonic			Septicæmic			Pneumonic			Total		
	Cases	Deaths	C.M.R.	Cases	Deaths	C.M.R.	Cases	Deaths	C.M.R.	C.	D.	C.M.R.
			%			%			%			%
1941	14	6	42.9	—	—	—	—	—	—	14	6	42.9
1942	7	3	42.9	3	3	100	4	4	100	15	10	66.5
1943	149	95	63.7	14	14	100	—	—	—	163	119	66.8
1944	638	387	60.6	6	6	100	—	—	—	644	393	61.0

Regional Distribution of Cases :

The disease was prevalent this year in Ismailia, Suez and Port-Said. It was severer in the first with 409 cases which occurred between March and July. 163 cases were recorded in Suez between January and November, and 72 cases in Port-Said between April and November.

The following table No. 12 gives the monthly distribution of these cases.

Month	Ismailia		Suez		Po. t-Said		Total	
	Bub.	Sep.	Bub.	Sep.	Bub.	Sep.	Bub.	Sep.
January ...	—	—	80	2	—	—	80	2
February ...	—	—	24	—	—	—	24	—
March ...	44	—	10	—	—	—	54	—
April ...	139	—	22	—	4	—	165	—
May ...	183	2	15	—	8	—	206	2
June ...	38	1	5	—	20	—	63	1
July... ..	4	1	—	—	20	—	24	1
August ...	—	—	—	—	12	—	12	—
September ...	—	—	—	—	2	—	2	—
October ...	—	—	3	—	2	—	5	—
November ...	—	—	2	—	1	—	3	—
December ...	—	—	—	—	—	—	—	—
TOTAL ...	408*	4	161	2	69†	—	638	6

* Three of these were traced in Upper Egypt and all were fatal.

† Excluding 3 cases proceeded to Upper Egypt where all died.

Anti-Plague Vaccination :

Most of the vaccination against plague was carried out in Ismailia, Suez and Port-Said: 12,000 being vaccinated in the first, 20,098 in the second and 8,073 in the third. Certain precautionary vaccinations were carried out in localities in Gharbia, Dakahlia, Sharkia, Behera, Giza, Beni-Suef, Fayoum, Assiut, Cirga, Qena, Alexandria and quarantine units.

Deratization :

The stationary posts set up in 1941 for deratization of river craft continued their activities in preventing the escape of rats from the ports to the interior of the country. These are situated at:—

- (1) Mouth of Ismailia Canal at Shoubra.
- (2) Mouths of Tewfiki, Menoufi and Beheri Rayyabs at Barrage.
- (3) Mouth of Ibrahimia and Bahr Yousfi Canals.
- (4) Walidia near Assiut town.

In 1942, posts were also provided at: Deirut town, Ather-el-Nabi Nile bank, Ismailia Canal-lock, and Mahmoudia. During the year, 71,102 rivercraft were provided with traps which caught 140,319 live and 8,682 dead rats, not including rats caught by rat gangs in towns and villages. To these posts may be attributed the disappearance of plague from the interior of the country. Investigations into the six cases of plague discovered in Assiut, Gi-ga, Qena, all fatal, proved that they came from the infected ports.

Typhoid and Para-typhoid :

A total of 5,019 cases and 790 deaths were notified during the year throughout the country, giving a case-rate of 28.5 and a death-rate of 4.5 per 100,000 of population and a case-mortality-rate of 15.7 %; as compared with 4,430 cases and 790 deaths or 25.4 and 4.5 per 100,000 of population and a case mortality-rate of 17.8 % in 1943. There was a marked increase in the incidence of the disease in Cairo and Alexandria, and a slight increase in Behera, Kaliubia, Sharkia, Aswan, Assiut, Beni-Suef, Giza, and Minia. In Ismailia, Port-Said, Damietta, Suez, Dakahlia, Frontiers Districts, Gharbia, Menoufia, Fayoum, Girga and Qena, the incidence was less than in the previous year.

Small-Pox :

A total of 11,194 cases of small-pox were recorded during the year. These affected all parts of the country in varying degrees, but were evident in Cairo, Gharbia, Alexandria, Dakahlia, Port-Said, Sharkia and scarce in Aswan, Frontiers Districts, Damietta, Beni-Suef and Ismailia. There were 1,016 deaths from small-pox making a case-mortality-rate of 9 %. The disease reached its peak in March since when it began to subside until a total of 140 cases and 18 deaths were reported during the last quarter.

Anti Small-Pox Vaccination : (Table No. 20).

As the whole country was more or less affected by the disease, a general vaccination of the whole population was carried out. A total of 3,370,715 persons were vaccinated during the year. Vaccination was carried out all the year round and in certain localities was continued during the following year.

Cerebro-Spinal Meningitis :

147 cases with 75 deaths were notified during the year giving a case-rate of 0.83 and a death-rate of 0.43 per 100,000 of population and a case-mortality-rate of 51% as compared with 114 cases and 57 deaths in the previous year or a case-rate of 0.65 and a death-rate of 0.32 per 100,000 of population and a case-mortality-rate of 50 %. Most of the cases were reported from Cairo and Alexandria.

Diphtheria :

Some 3,326 cases with 1,264 deaths were reported during the year or a case-rate of 18.9 and a death-rate of 7.2 per 100,000 of population and a case-mortality-rate of 38% as against 4,143 cases with 1,595 deaths in the previous year and a case-rate of 23.8 and a death-rate of 9.1 per 100,000 of population and a case-mortality-rate of 38.4 %. As compared with 1943, the incidence this year was less in Cairo, Alexandria, Port-Said, Dakahlia, Menoufia, Kaliubia, Aswan, Beni-Suef and Girga; and more in Ismailia, Damietta, Suez, Frontiers Districts, Behera, Gharbia, Sharkia, Assiut, Fayoum, Giza, Minia and Qena.

Diphtheria Anatoxin Immunization : (Table No. 22).

A total of 136,305 children between one and ten years of age received the three anatoxin injections for immunization against diphtheria. 219 of these contracted diphtheria after their immunization; 42 of which were reported in Cairo, 175 in Alexandria and two in Damietta.

Measles :

7,274 cases with 2,475 deaths were notified during the year or a case-rate of 41.3 and a death-rate of 14 per 100,000 of population and a case-mortality-rate of 34% as against 4,249 cases with 1,022 deaths during the preceding year or a case-rate of 24.4 and a death-rate of 5.9 per 100,000 of population and a case-mortality-rate of 24%. As compared with last year, the incidence of measles was more in Cairo, Ismailia, Port Said, Suez, Frontiers Districts, Behera, Gharbia, Menoufia, Kaliubia, Sharkia, Aswan, Fayoum, Giza, Minia and Qena.

Influenza :

A total of 11,203 cases of Influenza with 204 deaths were recorded during the year giving a case-rate of 63.6 and a death-rate of 1.15 per 100,000 of population and a case-mortality-rate of 1.8% as compared with 14,056 cases and 219 deaths in 1943 or a case-rate of 80.6 and a death-rate of 1.3 per 100,000 of population and a case-mortality-rate of 1.5%.

Pneumonia :

6,929 cases with 5,242 deaths were reported this year or a case-rate of 39.3 and a death-rate of 29.7 per 100,000 of population and a case-mortality-rate of 75.6% as compared with 6,935 cases and 5,762 deaths in the previous year or a case-rate of 39.8 and a death-rate of 33 per 100,000 of population and a case-mortality-rate of 83%.

Fever Hospitals :

During the year under review, there were 20 built up isolation hospitals, 15 shelters and 28 cordons consisting of tents. The total number of patients admitted to the fever hospitals was 65,609 (36,975 males and 28,634 females). 57,922 of these (32,117 males and 25,805 females) were discharged as cured and 5,631 (3,388 males and 2,243 females) died in hospital.

Pilgrims :

The total number of Egyptian pilgrims who proceeded to the Hedjaz this year was 9,924. The number of returning pilgrims who passed through Tor lazaret was 10,254. Eight Egyptian pilgrims died in the Hedjaz.

TABLE No. 13 SHOWING CASES AND DEATHS FROM INFECTIOUS DISEASES REPORTED
DURING THE LAST 4 YEARS AND THE CASE-MORTALITY-RATES

Disease	1941			1942			1943			1944		
	Cases	Deaths	Rate per cent	Cases	Deaths	Rate per cent	Cases	Deaths	Rate per cent	Cases	Deaths	Rate per cent
Plague... ..	14	6	42.9	15	10	66.7	163	119	66.8	644	393	61.0
Typhus	9,414	1,751	18.6	22,054	4,411	20.0	10,188	8,272	20.5	18,477	4,043	21.8
Typhoid and Paratyphoid	5,758	1,179	20.5	6,814	1,257	18.4	4,430	790	17.8	5,019	790	15.7
Scarlet Fever	91	—	—	39	2	5.1	54	3	5.6	30	—	—
Cerebro-Spinal Men ...	159	94	59.1	212	101	47.6	114	57	50.0	147	75	51.0
Diphtheria	4,037	1,931	47.8	3,950	1,832	47.6	4,143	1,595	38.4	3,326	1,264	38.0
Measles	9,769	2,864	29.3	9,764	3,654	37.4	4,249	1,022	24.0	7,274	2,475	34.0
T.B. of Lungs	6,206	3,026	48.0	6,608	3,472	52.5	6,770	3,647	53.8	6,950	3,803	54.7
T.B. of other organs	84	51	—	157	525	—	104	544	—	25	464	—
Chicken-pox	1,862	15	0.8	870	8	0.9	1,238	21	1.7	1,057	15	1.4
Puerperal Infection...	461	344	74.6	332	208	62.7	375	187	49.8	357	15	4.2
Dysentery	3,44	508	14.7	3,53	577	16.2	1,873	604	32.2	1,672	537	32.1
Influenza	11,120	178	1.6	12,965	218	1.7	14,050	219	1.5	11,203	204	1.8
Anthrax	22	5	22.7	21	4	19.0	15	9	60.0	13	2	15.3
Enceph. Letha....	7	9	—	6	5	83.3	4	3	75.0	1	1	10.0
Whooping Cough ...	2,923	173	5.9	2,27	142	6.3	2,054	105	5.1	1,208	105	8.6
Mumps	1,755	19	1.1	1,453	30	2.1	1,449	3	2.1	1,063	30	2.8
Undulant Fever ...	20	—	—	9	2	22.2	6	4	66.6	20	3	15.0
Leprosy	511	79	15.4	520	82	15.8	393	68	17.3	224	58	25.8
Rabies... ..	30	34	—	4	43	97.7	17	19	—	11	21	—
Tetanus	433	314	72.5	459	313	68.2	442	294	66.5	544	331	60.8
Acute Polio My li is..	16	9	56.2	5	1	20.0	7	2	28.5	11	4	36.3
Dengue	—	—	—	—	—	—	2	—	—	1	—	—
Erysipelas	4,502	465	10.3	3,100	312	10.1	1,956	209	10.6	1,671	156	9.3
Malaria	9,320	104	1.1	20,937	394	1.9	6,530	1,341	8.1	37,847	1,867	4.9
Rel. Malaria	—	—	—	—	—	—	—	—	—	218,231	14	0.006
Jaundice	3	2	66.6	1	—	—	2	1	50.0	—	—	—
Small-pox	—	—	—	—	—	—	4,138	384	9.2	11,194	1,016	9.0
Relapsing Fever ...	—	—	—	—	—	—	—	—	—	10	—	—
Acute Lb. Pneumonia	5,414	4,842	89.4	6,215	5,296	85.2	6,935	5,762	83.1	6,920	5,242	75.6
Glanders	—	—	—	—	—	—	—	—	—	—	—	—
TOTAL ...	77,468	18,452	23.8	102,360	22,949	22.4	111,703	25,284	22.6	335,391	23,071	6.8

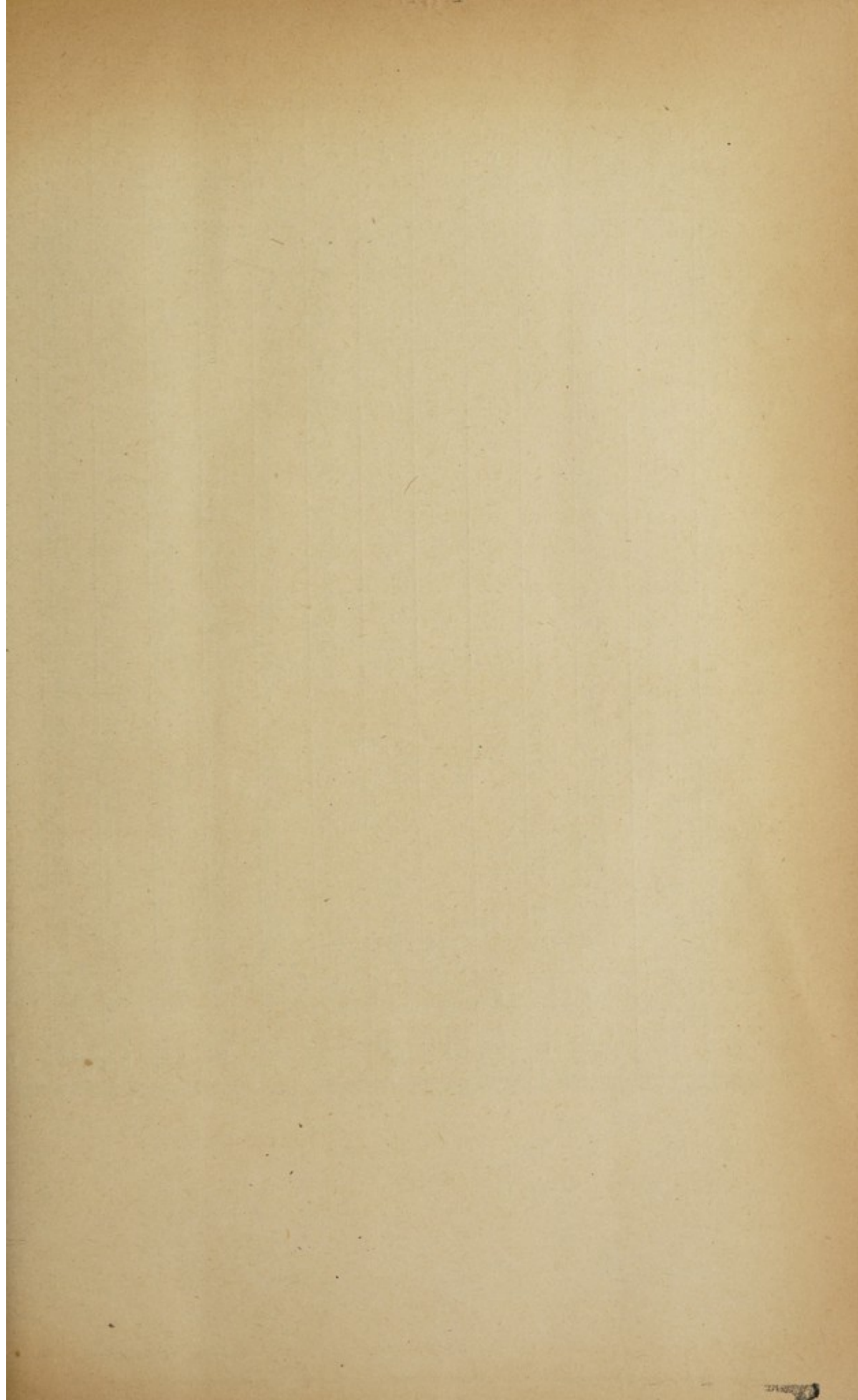


TABLE NO. 14—SHOWING INFECTIOUS DISEASES CASES AND DEATHS DISTRIBUTED

Governorate or Mudirch	Year	Small Pox		Plague		Typhus		Typhoid		Cerebro-Spinal Meningitis		Diphtheria	
		C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.
Cairo ...	1943	1,193	96	—	—	8,751	1,912	2,227	405	48	14	2,131	593
	1944	2,285	129	—	—	1,758	418	2,753	371	91	30	1,416	400
Alexandria	1943	111	15	—	—	1,473	388	844	132	27	16	493	135
	1944	1,419	164	—	—	443	108	93	140	31	24	419	137
Ismailia ...	1943	20	3	—	—	311	115	3	2	1	—	10	—
	1944	180	15	409	243	53	45	35	9	—	—	11	7
Port-Said ...	1943	46	2	—	3	264	2	332	29	9	4	75	17
	1944	790	69	72	31	8	9	29	22	5	2	31	5
Damietta ...	1943	—	—	—	—	14	1	5	1	—	—	4	8
	1944	65	9	—	—	1	1	3	1	—	—	24	18
Suez ...	1943	4	1	56	106	1,14	256	10	2	1	1	31	22
	1944	247	31	163	113	9	42	71	12	1	1	41	26
Front. Dis.	1943	12	—	—	—	22	3	3	1	1	—	1	1
	1944	92	5	—	—	6	1	31	3	1	1	12	1
Behera ...	1943	2	1	—	—	3,943	731	70	14	1	1	127	63
	1944	290	30	—	—	1,580	317	79	14	3	2	163	72
Dakahlia ...	1943	7	1	—	—	3,000	57	3	1	1	4	187	103
	1944	846	71	—	—	72	220	2	9	1	—	161	80
Gharbia ...	1943	447	27	—	—	4,400	1,007	109	21	6	4	281	161
	1944	1,640	131	—	—	2,94	60	50	17	8	8	29	143
Menoufia ...	1943	24	1	—	—	3,100	611	5	10	1	1	170	83
	1944	46	33	—	—	1,969	43	5	8	1	—	12	6
Kaliubia ...	1943	9	1	—	—	1,655	30	65	17	3	2	119	54
	1944	456	36	—	—	71	173	71	18	—	—	11	53
Sharkia ...	1943	21	2	—	—	3,78	69	3	14	1	3	9	58
	1944	733	42	—	—	3,20	53	41	1	—	1	9	4
Aswan ...	1943	16	1	—	—	451	6	1	2	1	—	3	15
	1944	16	1	—	—	440	120	7	3	—	—	2	14
Assiut ...	1943	1,101	127	—	—	704	19	140	23	2	—	6	42
	1944	191	42	—	2	1,31	254	16	31	—	1	74	36
Beni Suef ...	1943	230	2	—	—	75	13	4	4	4	4	6	43
	1944	94	12	—	—	470	129	63	14	—	—	2	14
Fayoum ...	1943	4	4	—	—	22	6	36	9	—	1	37	23
	1944	270	34	—	—	9	7	28	14	2	3	49	2
Girga ...	1943	17	23	—	—	1,208	257	43	13	—	—	31	22
	1944	21	41	—	2	762	163	35	12	—	—	1	9
Giza ...	1943	326	31	—	—	3,680	689	123	23	—	—	130	92
	1944	431	33	—	—	1,163	221	200	42	2	1	13	70
Minia ...	1943	83	9	—	—	14	46	47	14	1	1	58	43
	1944	397	55	—	—	423	130	62	15	1	1	63	37
Qena ...	1943	170	11	—	—	1,118	256	27	5	—	—	26	17
	1944	62	27	—	2	281	90	26	10	—	—	32	15
TOTAL ...	1943	4,138	384	163	169	40,188	8,272	4,430	790	114	57	4,143	1,595
	1944	11,194	1,016	614	393	18,477	4,643	5,619	750	147	75	3,316	1,264
Rate per ...	1943	237	22	9.1	6.2	2,304	474	254	45	6.5	3.2	234	91
Million ...	1944	635	57	3.6	2.2	1,648	229	281	44	8.3	4.2	188	71

ACCORDING TO GOVERNORATES AND PROVINCES FOR 1943 AND 1944

Measles		T.B. of Lungs		Acute Lob. Pneu.		Influenza		Malaria		Rel. Malaria		Other Inf. Diseases		TOTAL	
C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.
271	133	3,330	1,688	3,192	2,793	2,220	25	575	30	—	—	2,557	808	26,495	8,497
1,336	83	2,845	1,748	3,065	2,471	1,777	13	72	22	10	—	1,442	676	20,002	7,051
576	129	1,559	659	2,329	1,887	4,053	8	991	25	—	—	1,939	302	14,395	3,696
325	42	1,421	671	2,062	1,605	3,212	37	453	22	—	—	1,303	287	12,016	3,239
—	—	5	12	5	40	159	—	440	6	—	—	27	19	1,016	198
20	29	14	15	50	81	102	2	178	1	—	—	52	25	1,104	472
14	1	159	67	94	33	246	—	149	1	—	—	172	30	1,563	210
56	33	223	121	46	27	206	—	94	1	—	—	191	35	2,072	355
3	—	53	50	10	3	30	2	22	—	—	—	41	7	188	84
2	—	65	27	2	2	69	—	8	—	—	—	103	11	356	71
17	5	25	55	89	55	701	15	471	39	—	—	162	54	2,917	633
58	30	111	92	125	96	22	5	332	8	14	—	152	59	1,622	525
1	—	9	5	8	5	109	9	286	1	—	—	158	—	854	26
372	—	5	2	131	—	106	—	361	—	—	—	340	1	1,515	14
564	79	109	179	111	142	395	10	713	3	—	—	394	107	6,446	1,333
895	301	240	154	219	193	20	6	525	2	11	—	405	83	4,650	1,174
414	87	338	13	90	6	749	15	60	—	—	—	356	84	5,243	1,074
323	53	395	148	60	42	313	6	119	4	2	—	570	75	3,544	716
505	116	292	195	106	232	849	10	22	4	—	—	743	123	7,957	1,904
524	121	375	19	169	207	708	10	162	2	27	—	550	106	7,453	1,540
220	16	63	43	59	3	540	6	47	1	—	—	512	79	4,816	849
809	167	62	37	29	25	414	14	25	2	—	—	214	77	4,192	854
107	22	64	37	79	28	645	4	1,395	—	—	—	334	41	4,624	515
41	101	146	9	63	41	649	12	889	2	—	—	240	44	3,810	571
197	28	143	74	34	42	423	3	619	3	—	—	215	47	5,571	971
202	63	144	91	49	39	557	8	439	1	53	—	199	37	5,728	879
84	15	8	6	11	6	42	—	3,653	55	—	—	96	8	4,400	668
311	27	15	13	75	3	302	19	1,260	396	23,872	—	90	11	31,412	638
348	136	161	103	216	132	806	41	152	2	—	—	1,112	115	4,801	912
267	133	164	100	138	73	638	19	26,39	6	10,576	—	557	72	40,516	770
101	14	47	48	134	24	734	28	75	3	—	—	179	47	2,344	369
54	19	57	31	72	26	402	16	66	3	—	—	183	22	1,487	286
17	—	136	64	82	33	7	1	793	1	—	—	208	28	1,454	170
185	41	192	59	67	39	58	2	418	6	95	—	188	35	1,561	261
398	195	19	25	87	53	418	18	214	6	—	—	239	43	2,732	655
98	51	38	23	67	28	145	6	1,234	5	18,047	—	100	41	20,763	387
36	6	112	120	44	69	413	5	96	2	—	—	188	34	5,154	1,071
486	265	220	122	143	91	315	7	121	—	—	—	199	62	3,418	925
267	23	73	44	80	63	148	8	95	1	—	—	204	49	1,200	301
307	76	135	57	110	51	429	9	105	2	—	—	277	50	2,309	489
49	17	65	38	75	29	301	11	5,461	660	—	—	249	41	7,541	1,090
158	107	78	50	152	68	339	13	3,933	1,332	60525	14	280	76	165,871	185
219	1,032	6,110	3,641	6,935	5,762	14,056	219	16,530	1,344	—	—	9,985	2,066	111,701	25,266
214	2,473	6,950	3,803	6,929	5,242	11,303	01	37,847	1,861	218231	14	8,153	1,885	335,391	23,071
244	59	388	209	398	330	806	13	948	77	—	—	572	118	6,405	1,449
412	140	391	215	393	297	635	11	2,147	105	12,384	0.7	462	106	19,033	1,309

TABLE NO. 15—CASES AND DEATHS FROM TYPHUS, RATE PER 1,000,000 AND
CASE-MORTALITY-RATE IN EGYPT FROM 1905—1944.

Year	No. of Cases	Rate per 1,000,000	No. of Deaths	Rate per 1,000,000	Case Mortality Rate per cent	Year	No. of Cases	Rate per 1,000,000	No. of Deaths	Rate per 1,000,000	Case Mortality Rate per cent
1905	2,478	226	1,111	101	44.8	1925	1,314	94	290	21	22.1
1906	1,668	150	938	84	56.2	1926	966	68	201	14	20.8
1907	1,063	94	836	74	78.6	1927	794	56	189	13	23.8
1908	2,926	255	1,153	101	39.4	1928	599	41	138	9	23.0
1909	3,782	326	1,608	139	42.5	1929	1,141	78	214	15	18.8
1910	2,908	248	1,210	103	41.6	1930	288	19	74	5	25.7
1911	5,151	433	1,702	143	33.0	1931	265	18	57	4	21.5
1912	5,382	447	1,658	138	30.8	1932	2,298	153	399	26	17.5
1913	4,936	405	1,438	118	29.1	1933	7,865	515	1,332	87	16.9
1914	9,508	771	2,533	205	26.6	1934	7,536	488	1,418	92	18.8
1915	17,096	1,368	4,216	337	24.7	1935	3,151	202	516	34	16.7
1916	30,507	2,412	7,096	561	23.3	1936	2,757	174	389	25	14.1
1917	18,569	1,451	4,174	326	22.5	1937	2,083	130	311	19	14.9
1918	25,246	1,952	7,354	568	29.1	1938	2,811	173	405	25	14.4
1919	16,986	299	5,573	426	32.8	1939	4,296	260	788	48	18.3
1920	13,253	1,002	3,510	265	26.5	1940	4,416	263	863	51	19.5
1921	4,487	335	1,271	95	28.3	1941	9,414	558	1,751	104	18.6
1922	2,489	184	723	53	29.0	1942	22,054	1,289	4,411	258	20.0
1923	1,905	142	603	44	31.2	1943	40,188	2,304	8,222	473	20.5
1924	1,683	122	588	42	34.9	1944	18,477	1,049	4,043	2.9	21.8

**TABLE No. 16.—FOUR-WEEKLY DISTRIBUTION OF TYPHUS CASES
FROM 1935—1944**

Weeks	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944
1- 4	143	185	109	60	76	186	416	1,236	2,094	965
5- 8	585	388	195	182	334	531	855	2,331	3,293	2,163
9-12	561	461	157	285	804	980	1,739	3,145	4,730	2,910
13-16	694	592	259	491	876	966	1,898	4,469	7,383	3,002
17-20	573	427	675	726	908	777	1,796	4,623	9,408	3,325
21-24	270	350	385	506	631	407	1,211	2,689	6,123	2,524
25-28	143	242	164	203	345	250	425	1,337	3,834	1,461
29-32	53	41	63	103	133	102	234	527	1,758	561
33-36	31	12	35	70	46	68	92	190	591	329
37-40	17	9	8	19	16	26	20	142	221	165
41-44	6	10	10	8	13	22	31	152	275	163
45-48	24	15	10	9	11	29	235	291	114	180
49-52	51	25	13	49	103	72	462	922	347	729
TOTAL	3,151	2,757	2,083	2,811	4,296	4,416	9,414	22,054	40,171	18,477

**TABLE No. 17.—TYPHUS CASES AND DEATHS FROM 1934-1944 AND
THE LAST FOUR YEARS DISTRIBUTED ACCORDING TO**

Governorate or Mudiriah	1934		1935		1936		1937		1938		1939	
	Cases	D.	Cases	D.	Cases	D.	Cases	D.	Cases	D.	Cases	D.
Cairo	48	9	37	9	70	24	103	35	128	37	209	43
Alexandria	36	16	73	22	14	7	87	17	43	11	60	11
Front. Adm.	18	1	15	3	45	3	15	1	51	—	3	2
Port-Said	10	2	8	—	4	1	6	—	1	—	3	—
Suez	—	—	1	1	2	—	4	—	—	—	4	—
Ismailia	—	—	—	—	—	—	2	—	—	—	—	—
Damietta	46	4	—	—	—	—	2	2	1	—	1	1
Kaliubia	30	11	26	2	37	5	39	8	124	15	260	44
Sharkia	292	77	160	46	125	25	44	20	86	19	100	41
Menoufia	1,383	263	342	80	126	20	147	22	354	43	529	110
Gharbia	1,966	371	1,027	124	862	93	590	44	316	47	1,195	224
Dakahlia	859	191	222	40	312	58	362	61	2,274	46	76	121
Behera... ..	2,716	443	1,008	147	867	91	423	61	574	61	318	69
Giza	4	2	70	13	103	36	18	7	168	25	183	38
Beni-Suef	—	—	14	2	—	—	10	1	—	—	28	3
Fayoum	3	2	2	—	6	—	4	1	2	—	12	2
Minia	3	—	17	2	8	1	36	3	48	4	5	1
Assiut	39	14	23	7	34	4	38	1	54	5	19	18
Girga	27	3	13	2	16	4	34	8	102	16	242	43
Qena	49	9	8	6	90	15	77	1	323	41	206	15
Aswan	7	—	85	20	36	2	43	7	162	35	3	2
TOTAL	7,536	141.8	3,151	526	2,757	389	2,083	311	2,811	405	4,297	788

**RATE PER MILLION OF POPULATION FOR
GOVERNORATES AND PROVINCES.**

1940		1941				1942				1943				1944			
Cases	D.	Cases	D.	Rate per 1,000,000 of Population		Cases	D.	Rate per 1,000,000 of Population		Cases	D.	Rate per 1,000,000 of Population		Cases	D.	Rate per 1,000,000 of Population	
				C.	D.			C.	D.			C.	D.			C.	D.
364	58	168	34	12	2	2,244	554	158	39	8,751	1912	610	133	1,758	418	121	23·7
117	28	170	47	23	6	521	151	71	21	1,473	388	198	52	413	108	54·6	14·2
5	1	91	8	77	7	113	18	95	15	225	3	188	2·5	63	1	52·0	0·9
21	—	24	—	18	—	68	7	50	5	260	23	135	12	89	9	63·1	6·3
2	1	4	2	7	4	91	28	165	51	1,148	256	2,083	465	99	42	176	74·4
2	—	—	—	—	—	85	31	145	53	311	115	536	168	53	45	88·4	75·1
—	—	—	—	—	—	6	6	13	13	14	11	31	24	5	1	10·7	2·1
15	4	250	43	29	7	363	110	55	17	1,655	305	250	46	713	173	105·6	25·9
74	21	688	135	58	11	1,477	274	123	23	3,785	697	311	57	1,209	538	260	43·5
680	121	678	102	55	8	2,367	426	191	34	3,166	612	254	49	1,968	431	156	34·2
924	151	2,152	366	102	12	4,978	870	232	41	4,400	1007	203	47	2,944	605	135	27·7
699	145	1,763	370	134	28	4,069	708	307	53	3,004	575	225	43	724	220	53·7	16·3
816	187	1,835	384	163	34	2,788	628	244	55	3,948	731	348	63	1,580	317	135	27·1
228	35	350	64	47	8	1,481	296	195	39	3,680	689	41	90	1163	229	150	26·4
105	29	911	137	151	22	411	72	67	12	725	130	117	21	470	129	75·1	20·6
18	2	5	1	8	2	8	1	1	0·1	22	6	3·3	0·9	9	7	1·3	1·0
3	—	5	1	1	0·2	55	14	5	1	144	46	14	4·5	423	136	41·2	13·2
74	16	171	35	13	3	356	76	27	6	700	191	53	14	1,311	255	98·2	19·1
140	42	109	14	9	1	351	73	28	6	1,208	257	96	20	762	169	60·4	13·3
38	5	38	8	3		165	54	15	5	1,118	256	100	23	281	90	24·9	7·6
91	17	2	1	0·6	0·7 0·3	63	14	20	4	451	62	139	19	440	120	141	38·3
411·6	863	9,414	175	55	10	2,206	4411	128	26	40,188	8252	230	47	18,477	4043	104·8	22·9

TABLE NO. 18.—BLOOD SAMPLES IN 1944 FOR WEIL FELIX REACTION

Governorate or Mudiriah	No. of Samples sent to Labs.			No. Positive			No. Negative			No. Spoiled		
	From Alive	From Dead	Total	From Alive	From Dead	Total	From Alive	From Dead	Total	From Alive	From Dead	Total
Cairo ...	271	109	380	67	49	116	204	43	247	—	17	17
Alexandria ...	906	—	906	310	—	310	596	—	596	—	—	—
Suez ...	44	319	759	21	22	43	415	297	712	4	—	4
Damietta ...	1	13	14	—	—	—	1	13	14	—	—	—
Canal ...	355	—	355	157	—	157	198	—	198	—	—	—
Fr. Adm. ...	445	16	461	114	—	114	195	14	349	40	—	42
Gharbia ...	2,990	1,971	4,962	1,410	176	1,586	1,354	1,393	2,747	200	394	594
Dakahlia ...	719	1,181	1,900	170	198	368	511	88	1,399	31	152	183
Sharkia ...	1,935	1,085	3,020	533	166	699	1,061	45	1,516	128	445	773
Behera ...	1,742	386	2,128	661	20	681	95	24	1,112	129	126	255
Menoufia ...	2,302	1,582	3,884	1,090	350	1,440	902	871	1,773	310	360	670
Kaliubia ...	2,221	341	2,562	1,102	88	1,190	884	16	1,014	235	85	320
Giza ...	584	495	1,079	69	73	142	452	373	825	85	—	85
Beni-Suef ...	337	340	677	2	23	25	326	262	588	9	55	64
Fayoum ...	141	135	276	1	3	4	139	99	238	—	46	46
Minia ...	311	323	634	193	118	311	97	131	228	21	57	78
Assiut ...	1,916	534	2,450	408	23	431	1,184	313	1,567	334	140	474
Girga ...	1,780	277	2,057	644	21	665	1,110	174	1,294	134	85	219
Qena ...	1,048	—	1,048	178	—	178	836	—	836	29	—	29
Aswan ...	1,931	292	2,223	47	55	102	1,136	10	1,238	317	130	447
TOTAL ...	22,370	9,400	31,770	7,617	1,415	9,032	12,651	5,187	18,548	2,239	2,394	4,363

TABLE NO. 19—SHOWING NO. VACCINATED AGAINST PLAGUE IN 1944

Governorate or Mudiriah	No. of Vaccinated		No. of Cases				No. of contacts observed
	One injection	Two injections	After 1st inject.		After 2nd inject.		
			Cured	Died	Cured	Died	
Cairo	—	—	—	—	—	—	—
Alexandria... ..	1,253	—	—	—	—	—	—
Damietta	—	—	—	—	—	—	—
Canal	—	20,073	—	—	—	—	—
Suez	20,098	double dose	—	—	—	—	—
Frontiers Adm....	—	320	—	—	—	—	—
Gharbia	—	100	—	—	—	—	—
Dakahlia	—	84	—	—	—	—	—
Sharkia	73	485	—	—	—	—	—
Behera... ..	3	25	—	—	—	—	—
Menoufia	—	—	—	—	—	—	—
Kaliubia	—	—	—	—	—	—	—
Giza	19	—	—	—	—	—	—
Beni-Suef	76	76	—	—	—	—	—
Fayoum	—	23	—	—	—	—	—
Minia	—	—	—	—	—	—	—
Assiut	6	358	—	—	—	—	—
Girga	251	473	—	—	—	—	—
Qena	30	52	—	—	—	—	—
Aswan... ..	—	—	—	—	—	—	—
TOTAL	21,809	22,673	—	—	—	—	—

TABLE No. 20.—SHOWING NO. VACCINATED AGAINST SMALL-POX IN 1944

Districts	Population in 1937	Beginning of vaccination	End of vaccination	No. of vaccinated
Alexandria	685,736	16-1-1943	29-2-1944	918,034
Damietta	93,918	13-2-1944	20-5-1944	116,043
Sharkia	1,120,826	1-1-1944	1-5-1944	939,665
Fayoum	602,122	7-1-1944	24-6-1944	1,397,073
TOTAL	2,502,602	—	—	3,370,715

TABLE No. 21.—SHOWING INOCULATION AGAINST TYPHOID IN 1944

Governorate or Mudirich	No. inoculated once		Total	No. inoculated twice		Total	No. of contacts observed
	By Health Officers	By Private Doctors		By Health Officers	By Private Doctors		
Cairo	108,434	—	108,434	93,826	—	93,826	—
Alexandria	106,665	2,159	108,824	55,460	1,821	57,281	—
Suez	83	—	83	579	248	827	—
Damietta	—	—	—	285	—	285	—
Canal	—	—	—	4,570	70	4,640	—
Frontiers Adm.	3,91	—	3,917	5,466	77	5,543	418 simple high temper
Gharbia	296	12	298	2,255	105	2,361	—
Dakahlia	219	15	234	1,151	50	1,201	—
Sharkia	742	169	991	848	—	848	—
Behera	334	31	365	1,389	158	1,547	—
Menoufia	153	—	163	2,053	—	2,053	—
Kaliubia	442	—	442	970	—	970	—
Giza	781	—	781	1,831	295	2,126	—
Beni-Suef	217	14	231	864	25	889	—
Fayoum	199	—	199	204	—	204	—
Minia	958	331	1,289	3,855	547	4,402	—
Assiut	1,540	—	1,450	2,486	48	2,534	—
Girga	439	—	439	1,033	376	1,409	—
Qena	190	—	190	387	—	387	—
Aswan	57	—	57	115	—	115	—
TOTAL	225,666	2,731	228,397	179,627	3,821	183,448	—

TABLE No. 22.—ANATOXIN INOCULATION AGAINST DIPHTHERIA IN 1944

Governorate or Mudiriah	No. inoculated			No. of cases observed after the 3rd inoc.	Complications
	One injection	Two injections	Three injections		
Cairo	—	—	44,799	42	—
Alexandria	41,613	32,772	18,663	175	—
Suez	39	52	2,441	—	—
Damiet a	3	381	988	2	—
Canal	161	241	4,151	—	—
Front. Adm.	7,173	7,173	7,274	—	87 Simple high temper and some local inflam'
Gharbia	3,959	3,074	7,261	—	—
Dakahlia	342	316	4,679	—	—
Sharkia	2,487	2,441	3,122	—	—
Behera	635	298	2,734	—	—
Menoufia	1,231	1,321	6,738	—	—
Kaliubia	537	562	2,651	—	—
Giza	2,392	2,360	3,488	—	—
Beni-Suef	2,401	2,078	2,069	—	—
Fayoum	2,259	2,240	4,419	—	—
Minia	62	138	4,394	—	—
Assiut	3,666	3,537	4,045	—	—
Girga	377	386	1,906	—	—
Qena	51	50	2,025	—	—
Aswan	562	7,097	8,458	—	—
TOTAL	70,350	66,517	136,305	219	—

TABLE No. 23.—FEVER HOSPITALS STATISTICS FOR 1944.

Name of the Fever Hospital	Admitted			Cured			Improved			Died		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Alexandria...	75,10	6,389	13,899	6,460	5,957	12,417	529	130	659	581	333	914
Abbassia ...	5,601	6,915	12,517	4,999	6,548	11,527	—	—	—	652	443	1,095
Port-Said ...	1,832	55	2,367	1,679	461	2,140	80	25	105	143	51	194
Suez	2,074	1,115	3,189	1,200	672	1,872	410	217	627	201	108	309
Damietta ...	394	148	542	351	119	470	18	9	27	28	22	50
Damanhour ...	733	510	1,243	658	421	1,079	—	—	—	69	78	147
Mansura ...	1,199	530	1,729	1,927	469	2,396	—	—	—	61	58	119
Mit Ghamr...	710	752	1,462	650	677	1,327	—	—	—	60	75	135
Tanta	2,828	1,788	4,616	2,625	711	3,336	—	—	—	231	127	358
Zifta	670	360	1,030	600	330	930	—	—	—	43	30	73
Fakous	910	779	1,689	793	63	856	—	—	—	135	97	232
Shebbin El Kom	1,361	1,171	2,532	1,171	1,053	2,224	16	13	29	144	97	241
Zagazig ...	2,296	1,713	4,009	2,166	1,503	3,669	—	—	—	120	185	305
Beni-Suef ...	1,066	733	1,799	913	674	1,587	32	9	41	107	61	168
Minia	1,085	832	1,917	961	755	1,716	—	—	—	118	79	197
Assiut	981	604	1,585	809	570	1,379	13	5	18	102	42	144
Suhag	571	289	860	510	261	771	3	1	4	67	32	99
Qena	298	157	455	238	125	363	17	6	23	43	23	66
Luxor	389	143	532	368	126	494	—	—	—	25	11	36
Imbaba	4,457	3,143	7,600	3,759	2,69	6,455	108	83	191	475	296	771
TOTAL	33,975	28,634	65,609	32,117	25,865	57,982	1,226	498	1,724	3,388	2,243	5,631

No. of Hospitals 20. — Fever Hospital, Alexandria, included.

No. of V. Shelters 15.

No. of Cordons 28.

TABLE NO. 24 - VACCINATION AGAINST TYPHUS 1944

Governorate or Magharish	No. Inoculated			No. of Cases						Complication
				After 1st Inj.		After 2nd Inj.		After 3rd Inj.		
	Once	Twice	Three times	Cured	Died	Cured	Died	Cured	Died	
Cairo	—	—	1,2996	—	—	—	—	—	—	—
Alexandria	4,693	1,456	9,112	2	2	3	—	2	1	—
Suez	361	—	1,323	—	—	—	—	—	—	—
Damietta	5	1	—	—	—	—	—	—	—	—
Canal	132	26	1,196	—	—	—	—	—	—	—
Frontiers A. m.	1,66	228	1,36	—	—	—	—	—	—	—
Gharbia	2, 2	1,8 8	5,108	—	—	—	—	—	—	—
Dakhla	177	162	4,489	66	—	65	—	65	—	—
Sharkia	7,419	74,226	74,56	23	2	1	—	172	15	—
Behara	1,065	517	1, 7	15	—	2	1	—	1	—
Menaia	3, 7	1, 38	2,5 5	2	—	—	—	2	—	60
Kaliubia	36	4	175	—	—	—	—	—	—	—
Giza	1,6 7	6 2	731	—	—	—	—	—	—	—
Beni-Suef	2	—	845	—	—	—	—	—	—	—
Fayoum	111	119	5	—	—	—	—	—	—	—
Minia	7 3	795	4	—	—	—	—	—	—	—
Assiut	7,039	7,687	7,4 7	—	—	—	—	—	—	—
Gharbi	88	6 8	4	—	—	—	—	—	—	—
Qena	28	25	12	—	—	—	—	—	—	—
Aswan	6, 3	5,715	5, 08	24	10	23	—	10	—	—
TOTAL	117,685	103,788	129,673	312	33	94	1	251	17	60

TABLE NO. 25-MEDICO LEGAL STATEMENT FOR 1944

Locality	Fatal cases		Serious Cases		Slight Cases	
	Criminal	Accidental	Criminal	Accidental	Criminal	Accidental
Cairo	3	5	205	103	33,754	2,167
Alexandria	—	—	200	7,691	4,719	900
Canal	23	789	172	745	1,477	1,254
Suez	151	132	18	9	1,896	312
Damietta	9	28	3	7	766	134
Frontiers Administ.	28	54	52	81	171	434
Behera	133	217	442	621	3,464	1,413
Sharkia	154	233	209	295	2,811	1,417
Dakhla	325	464	857	442	4,955	1,593
Gharbia	287	497	375	278	7,315	2,743
Kaliubia	99	273	285	201	1,270	834
Menaia	192	218	426	254	2,955	1,025
Assiut	246	267	344	221	3,194	1,632
Aswan	14	26	21	21	274	216
Beni-Suef	46	134	192	171	2,326	702
Fayoum	77	136	151	178	1,320	397
Girga	189	333	228	281	3,533	714
Giza	79	108	192	54	1,700	627
Qena	63	154	157	52	2,053	253
Minia	178	151	236	216	3,632	612
TOTAL	2,296	4,219	4,765	11,921	83,585	19,379

Chapter III—INDUSTRIAL HYGIENE

Unhealthy, Inconvenient and Dangerous Establishments.

1.—Applications for New Permits :

The number of applications for new permits for unhealthy establishments of the first class received during the year 1944 was 250, as compared with 216 in 1943. Applications for new permits for Establishments in Dakahlia, Gharbia, Behera, Menoufia and Damietta Governorate are excluded as these are being dealt with by the Department of Labour.

2.—Licensed Establishments actually working :

The total number of unhealthy establishments of the three classes licensed and actually working in Provinces and Governorates (excluding Establishments in Alexandria) was 8,434 in 1944.

3.—Ministerial Arrêtés :

Three Ministerial Arrêtés were issued during the year 1944 for the improvement of the sanitary conditions of establishments, as against 27 in 1943.

A Ministerial Arrêté was also issued on January 24, 1944 for the transfer of some establishments from classes II and III to class I and the amendment of the title of some other establishments.

TABLE No. 26 —CENSUS OF UNHEALTHY, INCONVENIENT AND DANGEROUS ESTABLISHMENTS FOR 1944

Governorate or Province	Sec. I	Sec. II	Sec. III	Total
Cairo	2,516	11,331	4,319	18,166
Damietta	269	1,301	395	1,965
Canal	217	1,322	435	1,974
Suez	106	622	241	969
Kaliubia	166	2,859	378	3,403
Menoufia	161	4,710	559	5,432
Gharbia	836	6,996	1,178	9,010
Dakahlia	531	4,369	708	5,608
Behera... ..	429	3,668	486	4,583
Sharkia	240	1,917	299	2,516
Giza	150	3,217	437	3,804
Fayoum	111	2,475	292	2,878
Beni-Suef	880	1,834	267	2,981
Minia	220	3,516	515	4,251
Assiut	219	4,113	526	4,858
Girga	79	2,542	417	3,038
Qena	1,111	2,111	285	3,507
Aswan	52	1,273	133	1,458
TOTAL	8,345	60,263	11,879	80,487

Chapter IV.—FOOD CONTROL

STATISTICS SHOWING WORK DONE BY FOOD CONTROL GANGS IN CUSTOMS HOUSES DURING 1944

TABLE No. 27

A.—Consignments examined and Results of Samples taken therefrom:—

No. of Consignments examined	No. of Samples taken	Results of Analysis		
		Genuine	Unfit	Adulterated
8,630	401	241	147	13

Imported Foodstuffs condemned or refused entry into the Country

kind of Foods	Kilos	Cans or Bottles	Boxes	Sacks
1.— Fresh Foods :—				
Vegetables	7,119	—	—	—
Fruits	1,394,055	—	318	—
Meat	91	—	—	—
2.— Canned Foods :—				
Jams and Dried Fruits	18,814	1,033	1,254	—
Milk and its Products... ..	87	3,029	—	—
Meat	13,111	156	304	—
Fish	10,165	96,350	2	900
Vegetables and sauce... ..	357	348	37	—
3.— Oils :—				
Olive oil	824	15	—	—
Peanut oil	—	1	—	—
4.— Flour :—				
Flour	8,665	—	—	12,965
Flour Products	12,055	—	1,101	—
Sweets and chocolate	200	66	—	—
Butter	21	—	—	—
Masli	9,070	48	—	—
Margarine and Fat	410	—	—	—
Tea	16,450	—	313	—
Coffee	202,897	—	342	—
Wine	—	244	—	535
Beer	—	1,800	—	—
Seeds and Corn	242,609	—	1,053	—
Nuts and Almonds	—	—	—	79
Spices	10,366	—	—	—
5.— Other Foods	32,660	4,082	4	1,028
TOTAL	1,90,305	68,12	4,630	5,07

TABLE No. 28 —SHOWING NO. OF SAMPLES OF MILK TAKEN DURING 1944
AND RESULT OF THEIR ANALYSIS.

No. of samples	Result of Analysis			
	Genuine	Adulterated by removal of fat	Adulterated by addition of water	Adulterated by both
12,375	11,356	591	403	15

TABLE No. 29.—VARIOUS STATISTICS 1944

P.V. drawn up under article II of Law No. 41 of 1941	No. of P.V. drawn up against Itinerant Vendors	No. of P.V. drawn up against Milk Vendors	Bandars to which the itinerant ven- dors regulations was applied	Bandars to which the milk vendors regulations was applied	No. of itinerant vendors licensed during 1944	No. of milk vendors licensed during 1944
2,133	8,790	3,133	9	9	563	297

TABLE NO. 30.—SHOWING QUANTITIES OF FOODSTUFFS CONDEMNED, NUMBER OF SAMPLES TAKEN AND RESULTS OF THEIR ANALYSIS DURING 1944.
(This List does not include the *F. gures* for *Caïro* and *Alexandria* Governates and the *Food Control Squads* at the *Ports*)

Name of Article	Foodstuffs Condemned					Samples taken					Percentage	
	Number	Bottles	Cans	Bottle (lb)	Okes	Number of Samples	Genuine	Adulterated	Unfit	Not analysed	Adulteration	Unfitness
1.— Fresh Foods :—												
Fruits and Vegetables...	25,215	—	6	18,362	47,456	—	—	—	—	—	—	—
Fish	1,21	—	31	1,072	30,066	—	—	—	—	—	—	—
Meat	2	—	—	1,32	217	—	—	—	—	—	—	—
Other Fresh Foods	18,766	77	—	1,152	1,440	—	—	—	—	—	—	—
2.— Cooked Foods												
	17,350	—	—	1,137	1,742	—	—	—	—	—	—	—
4.— Canned Foods :—												
Jams	1,449	225	912	235	342	4	4	—	—	—	—	—
Milk and its Products...	1	29	—	70	—	70	55	15	—	—	21.4	—
Fruits and Vegetables...	167	49	3,388	266	1,193	5	47	11	—	—	25.5	—
Meat	1	—	196	3	118	1	1	—	—	—	—	—
Fish	22	—	18,54	980	642	4	—	—	4	—	—	100
Other Canned Foods	144	15	3	67	94	5	3	1	1	—	20	20
4.— Oils :—												
Olive Oil...	7	—	—	47	72	121	89	14	18	—	13	14.04
Sesame Oil	—	—	—	48	16	676	658	9	9	—	1.1	1.1
Linseed Oil	—	—	—	171	56	527	478	36	13	—	6.8	2.4
Lettuce Oil	—	—	—	13	58	70	57	13	—	—	18.6	—
Safflower Oil	—	—	—	1	20	89	70	6	13	—	6.6	13
Cotton-Seed Oil	—	—	—	23	11	40	34	6	—	—	15	—
Other Oils	—	—	—	—	27	91	84	7	—	—	7.6	—

Part II.—SOCIAL HYGIENE

Chapter V.—MATERNITY AND CHILD WELFARE

The chief concern of the Ministry is in reducing infantile mortality. Hence great interest is taken by the Ministry to ameliorate the condition. Of the measures taken, the following may be cited.—

1. Providing more Maternity and Child Welfare Centres until there is a centre for every 15,000 of the population. There were 63 centres in service during this year.

2. Raising the educational standard of midwives and exercising more control over their work.

3. Graduation of the maximum number of assistant midwives and health visitors at schools annexed to M. C.W. Centres. 140 assistants graduated this year.

4. Care of foundlings. The number of foundlings this year was 288.

Added to the above, is the care of stray children who lost their parents through air raids or other catastrophes or whose parents are unfit to look after them, *e.g.* mentally deficient. There were 48 of these children during the year.

Where diseases are hereditary or transmissible through society, *e.g.* syphilis and tuberculosis, both deadly to the youth of the nation and cause the withering of body and mind and produce manifold afflictions such as paralysis, the child welfare units have succeeded in reducing the mortality rate of syphilis from 16 to 3 per cent.

A total of 9,347 hereditary syphilis and 88,675 skin diseases cases were treated by maternity and child welfare units during the year. 45,622 blood specimens were taken for Wassermann test. 1,418 children completed the course of treatment for syphilis.

A total of 83,210 deliveries were attended by personnel of the C.W. units and 1,52 deliveries were referred to hospitals.

It is hoped that when M. & C. W. units are provided at the rate of a unit for every 15,000 of the population, the present figures will appear but trifles. There are 4,852,300 inhabitants served and 189,940 deliveries attended annually by the M. & C.W. units.

The procedure of providing beds in M. & C. W. Units for the accommodation of pregnant women who get the pains of labour while in the unit, or who are destitute or come from distant places and require care during and after delivery or whose homes are insanitary, has been extended to more welfare units.

The following table is a brief statement of the activities of the M. & C.W. units during 1944.

**TABLE NO. 31.—GIVES DETAILS OF THE WORK CARRIED OUT
BY THE CHILD WELFARE CENTRES IN EGYPT DURING 1944**

Cases	Number
Old Pregnants	369,519
New Pregnants	95,962
Blood specimens taken for Wassermann Reaction ...	45,622
Positive for Wassermann Reaction	2,774
Children attending Centres	1,354,967
Children vaccinated against Small-Pox	24,817
Children immunized against Diphtheria	20,624
Confinements undertaken by midwives	16,662
" " " assistant midwives	66,282
" " " medical officers	266
" " " from " outside (not registered)	7,313
Total confinements	83,210
Expectant mothers removed to hospitals	1,527
Premature still births	322
Still births within first 3 months of pregnancy ...	108
" " " second 3 months of pregnancy ...	214
Maternal mortality due to child birth	107
Full term still births	961
Infantile mortality within first month of life ...	708
Medical officer visits to sick puerperals	1,741
Midwife visits to pregnant during 9th month ...	45,135
" " " puerperal mothers	491,567
Other visits	31,579
Visits to homes of pregnant by health visitors ...	19,598
" " " " infants by health visitors ...	65,691
Cases of Eclampsia	191
" Laceration of perineum	56
" Placentitis	73
" Puerperal sepsis	2
Urine samples	440,051
Post Parturition Albuminuria	5,904
Diabetic before delivery	5,263
Lectures delivered by medical officers	6,038
" " " midwives	10,147
Milk contributions to mother and baby... ..	25,100
Garments contributed	6,517
Cloth material contributed... ..	12,972

FOUNDLINGS HOMES

The following is a statement of Cairo Foundlings Home during the year.

1. Admitted during the year 1944	440
Remaining from previous year	410
	850
2. Died during the year	192
Handed over to their mothers	57
Removed to other homes	68
Adopted	48
	365
3. Remaining on December 31, 1944	485
With wet nurses	423

New Units opened during the year were as follows:-

- (1) A school for Assistant Midwives at Shebin el Kom Bandar.
- (2) A Day Nursery at Sayeda Zeinab.
- (3) A Child Welfare Centre at Abbassia.
- (4) " " " at Kafr el Dawar.
- (5) " " " at Sherbin.

Maternity and Child Welfare units celebrated the Coronation Day and H.R.H. Princess Ferial's Birthday. Fairs were held within the centres during which various gifts were presented to poor mothers and children and prizes awarded to infants with best health.

Chapter VI.—CHEST DISEASES

Statistical Data :

According to latest official records, there were 48,016 tuberculous patients at the end of 1943. A further 6,608 positive cases were recorded in dispensaries during 1944, making a total of 54,624 cases at the end of the year.

During 1944, the following units were opened :-

1. Port Said dispensary with a 20-bed in-patient section opened on March 1, 1944
2. A 20-bed in-patient section within Damanhour dispensary, opened on March 25 1944.
3. A branch of Shebin el Kom dispensary annexed to Benha Government Hospital in May 1944. Work is carried out in this branch once a week.
4. Giza village sanatorium (opened on March 27, 1944) with an accommodation of 300 beds, now accommodating 150 patients.
5. The preventorium in Mehalla el Kobra was transferred back to its original premises in Alexandria in August 1944.

The Chest Diseases Units now comprise :-

16 dispensaries, 3 in Cairo :

- (a) Mobtadayan.
- (b) Khalifa.
- (c) Boulac.

9 in Lower Egypt at Tanta, Mansoura, Zagazig, Damanhour, Mehalla el Kobra, Shebin el Kom, Alexandria, Port Said, Damietta.

4 in Upper Egypt at Fayoum, Minia, Assiut, Qena.

4 chest diseases branches at :

- (1) Menouf, branch of Shebin el Kom dispensary.
- (2) Benha, branch of Shebin el Kom dispensary.
- (3) Samallout, branch of Minia dispensary.
- (4) Luxor, branch of Qena dispensary.

8 in-patient Sections at Tanta, Zagazig, Mansoura, Port Said, Damietta, Damanhour, Fayoum, Assiut. Total number of beds is 180.

3 Sanatoria (Helwan, Abbassia, Giza) with a total number of 1,100. beds

2 Institutions for surgical tuberculosis (Helwan, Alexandria), 180 beds.

4 Preventoria at Zeitoun, Marg, Alexandria and Assiut, accommodating 240 children.

1 Settlement at Marg for Convalescents, can hold 100 families and now accommodating 21 convalescents.

Of 104,807 new patients examined during the year, 6,608 were returned positive or tuberculosis, of which 251 were children, the remaining 6,357 were adults.

f

Of 7,409 contacts (3,168 children and 4,241 adults) examined, 230 developed tuberculosis.

Health visitors paid tuberculous patients 20,242 home visits ; the Medical Officers paid 5,391 home visits.

Appended to this report are detailed statistical data of the work carried out by the various dispensaries and other institutions.

Therapeutic and Social Activities :

Treatment and Social Activities proceeded according to original plans referred to in previous reports. During the year, however, sanction of the financial authorities was obtained regarding the following :—

1. Transport expenses of poor convalescents and their families from their places of residence to Marg settlement will be borne by the State.

2. Poor patients who live more than 120 kilometers from the nearest treatment centre will be removed to sanatoria in-patient sections, to complete their treatment at the expense of the State.

Subsidiaries :

A sum of L.E. 5,000 was granted this year which, together with other funds contributed by some of the Municipal and Provincial Councils, were distributed among dispensary tuberculosis patients. About 1,000 families benefited by these grants, the total amount distributed being L.E. 6,530.

In commemoration of the happy escape of His Majesty the King from the Kassasseen motor accident, a sum of L.E. 1,000 was approved by the Council of Ministers for distribution among chest diseases patients. A sum of L.E. 50 was allotted to each dispensary for distribution among its destitute patients.

It was observed that destitute patients who live a long way from the dispensary or its branches do not attend to receive their allotments of provisions as the expenses they incurred in coming were almost equal to the cost of what they got. It was therefore decided to issue country patients living more than 10 kilometers from the dispensary dried provisions once a month, money being paid instead of such fresh provisions as will quickly deteriorate, *e.g.* meat, vegetables and bread.

Marg Settlement for Convalescents :

Reference was made in last year's report to the circumstances attending the creation of this settlement which happens to be the first of its kind in Egypt - and the object of its creation. Herebelow are some details about the settlement :—

1. The settlement consists of 120 houses in which 21 convalescents and their families numbering 47 are now accommodated.

2. Seven workshops have been set up in a building within the settlement which once served as a village school. These are :—

- (a) A carpentry shop employing 4 convalescents.
- (b) A tailor's shop employing 4 convalescents and 4 ex-patients appointed on the establishment of the Section.
- (c) A shoe-making shop employing 5 convalescents.
- (d) A soldering shop having 1 convalescent.
- (e) A broom-making shop having one convalescent.
- (f) A palm thatching shop employing 2 convalescents.
- (g) Agricultural Labourers comprising 4 convalescents.

3. During 1944, the following works were carried out by the various workshops :

The carpentry shop manufactured all furniture required by the settlement and other chest diseases units.

The tailor's shop.—All tailoring required by the chest diseases units and such other units of the Ministry of Public Health as are forwarded by Central Stores.

The shoe-making shop made all sandals and slippers required by the chest diseases units.

The soldering shop.—A large number of spittoons for the various units was made by this shop which, in addition, carried out all repairs required in the settlement and other units.

The broom-making shop } These are still under completion. The object of these
The palm thatching shop } two shops is to train convalescents in professions which
suit them best.

In November 1944, a Committee was convened to organise the settlement and simplify procedure. Recommendations regarding clerical work, accountancy, stores, orders and wages for convalescents have since been carried out.

The following are the professions of positive patients met with in the various dispensaries during 1944 :—

- 384 tradesmen: consisting of 116 foodstuff sellers, 40 poultry and cattle merchants, 69 grocers, 49 fruiterers, 110 other trades.
- 539 employees: including 267 civil servants, 115 commercial employees, 45 teachers, 112 other employees.
- 1,995 craftsmen: consisting of 44 cooks, 61 waiters, 126 barmen, 35 domestic servants, 45 servants (farrashes), 28 gate-keepers, 107 barbers, 69 laundrymen, 85 drivers, 118 tailors, 90 shoemakers, 112 carpenters, 57 painters, 120 building workmen, 125 employees in firms, 114 weavers, 204 mechanics, 31 painters and 424 other occupations.
- 1,227 farmers.
- 153 pupils.
- 2,310 unemployed, including :
 - 1,811 invalids,
 - 303 children,
 - 196 unemployed.

6,608

The following is a list of the different forms of treatment followed in the dispensaries and the results thereof :—

TABLE No. 32

DOMICILIARY TREATMENT				ARTIFICIAL PNEUMOTHORAX			
			Number				Number
CONDITION ON 1ST EXAMINATION IN DISPENSARY	Tuberculous patients		6,123	No. of patients treated with A.P. 1494			
	Sputum	Positive	4,459	No. of 1st. Inductions 431			
		Negative	1,664	No. of Refills 19,804			
	Lesion	Unilateral	2,086	CONDITION BEFORE TREATMENT	Sputum	Positive... ..	1,247
		Bilateral	4,037			Negative	247
		Cavitary	2,896		Lesion	Unilateral	1,247
	Last Sputum Ex.	Positive... ..	4,316			Bilateral	247
		Negative	1,807			Cavitary	804
	Increase of weight		2,021	Haemoptysis 195			
	Decrease of weight... ..		1,455	Unilateral A.P. 1,282			
Stationary... ..		1,790	Bilateral A.P. 111				
RESULT OF TREATMENT	Died		857	Extrapleural A.P. 10			
	Unable to work		2,336	STOPPED A.P. & CAUSE	Continued refills 1,084		
	Walking		1,644		Adhesions 110		
	Light work		1,032		Bilateralisation 89		
	Full work... ..		354		Effusion 98		
	Sputum still positive 679						
	Sputum still negative 200						
	Sputum returned negative ... 531						
	Sputum returned positive... .. 84						
	Increase of weight 816						
Decrease of weight 270							
Stationary 305							
Died 103							
Incapable of work 297							
Walking 359							
Light work 586							
Full work 149							

TABLE No 33 — STATISTICS OF PATIENTS IN SANATORIA AND IN-SECTIONS OF DISPENSARIES
(MANSOURA ZAGAZIG, DAMANHOOR, PORT SAID, ASSIUT AND FAYOUM, IN 1944)

						Sanatoria			In-patient Sections in
						Helwan	Abbassia	Giza	Dispen- saries
No. of patients present on January 1st, 1944						480	461	—	130
No. of patients admitted in 1944						1,129	791	340	509
No. of patients discharged						1,122	788	229	436
BEFORE ADMISSION	Spu um	Positive	820	57	169	357			
		Negative	302	217	60	79			
	Le i n	Unilateral	503	427	202	314			
		Bilateral	615	361	27	122			
		Cavitary	480	311	53	212			
	Tempe atu e	Normal	987	119	204	160			
		Abnormal	135	669	25	276			
	General treatment	560	691	126	286				
	Exercise	721	407	103	188				
	TREATMENT GIVEN	G ld he ap.	No. of patients	21	19	—	9		
No. of injections			86	115	—	87			
A.P.		Inductions	450	316	20	275			
		Refills	7,191	8,220	824	5,818			
Extrapleural A.P.		—	2	—	—				
Phrenic Crush		135	112	—	8				
Pleurotomy... ..		4	13	—	—				
Aspiration		39	310	18	22				
Thoracoplasty		—	19	—	—				
A he sion Se tion		207	210	—	14				
CAUSES OF DISCHARGE	Complications	1,057	73	12	49				
	No. of other injections given	1,568	7,038	134	942				
	Pts. went on leave and did not return	59	11	9	11				
	A their own	Pts. refused treatment	389	307	58	18			
		Pts. having special difficulties	80	92	46	15			
	Consent of Physician	489	378	105	249				
	Weight	Increase of weight	668	421	172	300			
		Decrease of weight	351	183	17	72			
	Tempera u e	Stationary	103	184	40	58			
		Normal	857	479	211	349			
CONDITION ON DISCHARGE	Spu um	Abnormal	265	307	18	84			
		Still positive	654	382	92	233			
		Still negative	263	51	47	81			
		Became negative	166	323	77	111			
		Became positive	39	32	13	5			
		Successful A.P. continued	401	327	66	26			
	A. P. failed	71	38	4	29				
	Condition improved	641	459	146	256				
	Condition worse	73	98	16	51				
	C n dition stationary	303	130	56	115				
	Died		105	101	11	14			
			6	35	17	52			
	Ability to Work	Working	Fully	558	321	127	227		
		Partially	453	331	74	144			
		Incapable	152	203	66	117			
			417	43	18	118			
	Average duration of stay in days	695	325	211	318				
	Patients stayed 6 months or more								
	Patients stayed less than 6 months								

TABLE No. 34.—NUMBER OF POSITIVE T.B. CASES NOTIFIED BY THE DISPENSARIES DURING THE YEAR 1944 ACCORDING TO RESIDENCE

Unit	Cairo	Alexandria	Damietta	Port-Said	Canal, Suez and Ismailia	Behera	Qharbia	Menoufia	Dakahlia	Sharkia	Kalubia	Giza	Bent-Suef	Fayoum	Minia	Assiut	Girga	Qena	Aswan	Cases	Total
Boulac Dispensary	807	5	1	3	5	3	3	14	7	8	38	18	3	—	—	—	—	3	1	—	919
Mobtadayan "	422	7	4	—	17	—	33	27	31	32	29	249	2	4	2	5	3	2	1	—	870
Khalifa "	685	4	—	2	4	2	6	8	2	4	26	18	1	1	4	1	3	4	1	—	776
Mansoura "	—	—	1	1	1	2	131	1	391	9	—	—	—	—	—	—	—	—	—	—	537
Tanta "	—	—	—	1	—	4	231	29	—	—	3	—	—	—	—	—	—	—	—	—	318
Damanhour "	—	1	—	—	—	316	87	—	—	—	—	—	—	—	—	—	—	—	—	—	404
Zagazig "	—	—	—	1	15	—	—	—	15	291	16	—	—	—	—	—	—	—	—	—	333
Mehalla el Kobra "	—	—	—	—	—	—	239	—	—	9	—	—	—	—	—	—	—	—	—	—	248
Alexandria "	—	609	—	—	—	47	—	—	—	—	—	—	—	—	—	—	—	—	—	—	656
Shebin el Kom "	—	—	—	—	—	—	—	118	—	—	12	—	—	—	—	—	—	—	—	—	130
Damietta "	—	—	164	—	25	—	52	—	168	—	—	—	—	—	—	—	—	—	—	—	409
Fayoum "	—	—	—	—	—	—	—	—	—	—	—	—	53	219	—	—	—	—	—	—	272
Assiut "	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14	167	20	—	—	—	201
Minia "	—	—	—	—	—	—	—	—	—	—	—	—	2	—	100	13	—	—	1	—	206
Qena "	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	73	5	—	80
Port Sid	—	—	—	231	7	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	243
TOTAL	1,914	625	179	239	74	380	82	157	614	333	124	285	61	224	210	186	28	82	9	—	6,608

TABLE No. 35.—AGE DISTRIBUTION OF DEATHS RECORDED IN CHEST DISEASES DISPENSARIES DURING THE YEAR 1944

Dispensary	1-5 Years	5-15 Years	15-25 Years	25-35 Years	35-45 Years	Over 45 Years	Total
Boulac	12	37	110	83	28	23	298
Mohadayan	4	9	39	29	20	5	106
Khalifa	4	14	53	35	19	14	139
Tanta	—	4	20	25	10	6	65
Mansoura	5	12	13	18	13	5	66
Shebin el Kom	—	4	14	14	5	3	40
Mahalla el Kobra	4	4	14	19	16	5	62
Zagazig	—	—	9	8	5	—	22
Damanhour	2	3	15	5	5	4	34
Alexandria	2	4	42	36	12	11	107
Port Said	2	7	14	20	5	8	56
Damietta	—	7	39	27	7	—	80
Fayoum	—	1	16	24	9	4	54
Assiut	6	1	8	9	1	10	35
Minia	1	2	6	14	8	1	32
Qena	—	2	3	6	1	—	12
TOTAL	42	111	415	372	154	104	1,208

TABLE No. 36.—NUMBER OF CHEST DISEASES UNITS SINCE 1929

Year	Chest Diseases Dispensaries	In Patient Sections	Sanatoria	T.B. Bone Sanatoria	Preventoria	Settlements
	branches					
1929	2	—	—	—	—	—
1930	3	—	—	—	—	—
1931	3	—	—	—	—	—
1932	3	—	—	—	—	—
1933	4	—	—	—	—	—
1934	4	—	1 ⁽¹⁾	—	—	—
1935	5	—	1	—	—	—
1936	6	—	1	1 ⁽²⁾	—	—
1937	8	—	1	1	—	—
1938	12	2	2	1	1	—
1939	13	2	2	1	1	—
1940	14	4	2	1	4	—
1941	14	4	2	1	4	—
1942	15	6	2	2	4	—
1943	15	6	2	2	4	1
1944	16	8	3	2	4	1

N.B.—⁽¹⁾ Fouad Sanatorium, Helwan, was attached to this Section in September 1934

⁽²⁾ Maritime Sanatorium, Alexandria, was attached to this Section in September 1936.

TABLE NO. 37.—ANNUAL RETURN OF SANATORIA AND CHEST DISEASE

(New T.B. Cases in the Dispensary) or (New Patients admitted)																								
New Cases seeking Treatment (Dispensary)	T.B. Cases				Age Groups														Professions					
	Total	Sputum +	X-Ray +	Other Chest Diseases	From 1-9 Years		From 10-19 Years		From 20-29 Years		From 30-39 Years		From 40-49 Years		From 50-59 Years		Over 60 Years		Vendors	Officials	Workmen	Peasants	Students	Others
					M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.						
10-745	919	588	331	9826	17	15	88	61	230	142	10	76	79	43	28	17	10	3	39	78	340	102	28	
8-119	870	560	310	7249	16	14	91	53	206	92	177	80	75	33	22	3	7	1	67	103	291	79	29	
7-718	76	540	236	6912	27	23	72	46	211	87	126	61	65	21	22	6	8	1	73	96	245	65	37	
8-673	537	383	154	8136	4	2	44	33	151	59	91	51	46	25	18	6	6	1	31	33	88	183	12	
8-216	318	233	85	7898	9	7	21	17	81	41	58	21	38	6	12	2	2	—	16	31	74	81	6	
9-040	319	251	88	8701	6	6	26	13	87	43	56	39	27	11	12	7	4	2	14	8	84	99	7	
8-674	248	185	63	8182	10	14	15	12	52	27	45	21	21	12	9	5	4	1	7	10	82	47	6	
4-492	130	97	33	4362	—	—	—	—	31	15	30	20	6	4	2	5	1	1	4	8	24	35	1	
4-627	404	328	76	4223	5	5	35	29	105	30	71	38	41	13	15	5	9	3	24	22	77	143	4	
7-246	656	483	173	6590	15	12	75	43	190	58	122	27	57	19	21	6	7	4	32	63	319	24	4	
7-012	40	263	146	6693	7	8	39	15	119	45	74	27	27	13	24	3	7	1	28	15	131	92	8	
4-770	243	165	78	427	4	1	32	16	62	23	37	23	20	12	7	4	2	—	19	23	111	5	4	
6-327	272	245	27	5568	1	1	14	11	49	27	85	25	28	13	6	8	4	—	13	15	11	100	1	
4-627	201	162	39	4426	7	7	11	8	44	22	39	25	13	7	9	6	2	1	3	18	25	78	5	
2-935	206	182	24	2729	3	2	14	9	35	24	37	45	19	7	6	2	3	1	10	10	35	61	—	
1-586	80	56	24	1503	2	1	7	1	21	5	27	4	10	—	2	—	—	—	4	9	16	33	1	
TOTAL	104801	660	4121	188791668	133	118	596	373	1674	710	1215	583	572	239	214	85	76	20	384	539	1995	1227	153	
864	8	7	1	800	—	—	1	—	1	3	2	—	1	—	—	—	—	—	1	1	2	—	—	
428	10	9	1	418	—	—	—	—	5	—	—	—	2	—	—	—	1	—	1	4	4	—	—	
562	31	27	4	531	—	1	4	1	4	4	5	8	2	1	—	—	1	—	2	1	4	5	—	
863	48	29	19	815	—	—	5	1	14	2	15	3	6	—	2	—	—	—	2	6	9	27	—	
1,129	1125	836	289	4	3	1	141	83	496	132	172	56	74	31	19	4	5	2	69	142	361	154	77	
791	57	560	97	34	26	21	98	69	291	68	114	37	34	16	10	3	4	—	46	82	20	96	54	
340	329	225	104	11	—	—	53	—	169	—	70	—	39	—	8	—	1	—	24	40	212	58	3	
TOTAL	2,260	2211	1621	599	49	23	22	292	152	866	200	356	93	147	47	37	1	10	2	139	61	876	368	

Exam. of (Sanat.)	Old Cases (Disp.)						Visits (Disp.)		Discharged Patients												
	Teeth	Nose	Throat	Ears	Total	T.B. Cases	Under Observation	Contacts	Other Chest Diseases	Nurses Visits	M.O. Visits	Total	Sputum on Discharge	Improved	Stationary	Worse	Died	Ability to Work			
																		Complete	Partial	Unable	
27	—	—	—	—	6,441	4,061	665	484	1,231	2,397	393	349	199	150	191	56	47	55	2	214	7
—	—	—	—	—	8,277	6,457	598	686	536	1,912	393	392	221	171	246	75	36	35	—	248	10
—	—	—	—	—	7,987	6,425	1,138	1,274	150	1,326	289	205	95	110	100	47	44	14	15	101	7
—	—	—	—	—	4,865	3,980	179	143	563	1,076	292	171	112	59	100	49	12	10	2	52	10
—	—	—	—	—	7,494	3,923	553	320	2,698	1,325	371	85	40	36	57	17	9	2	3	40	4
—	—	—	—	—	9,606	4,483	1,010	498	3,585	1,251	279	40	24	16	25	8	7	—	—	14	2
—	—	—	—	—	6,103	2,398	50	262	2,913	1,399	351	41	30	11	8	27	—	6	2	19	1
—	—	—	—	—	5,658	2,560	896	126	2,076	453	452	24	10	14	14	—	10	—	—	14	1
—	—	—	—	—	6,100	2,791	328	229	2,752	1,188	438	75	46	29	58	9	5	3	5	43	2
—	—	—	—	—	17,419	11,341	4,273	766	1,089	1,203	180	141	81	60	84	35	13	9	2	53	7
—	—	—	—	—	6,984	4,519	20	213	1,932	1,511	374	177	101	76	136	11	18	12	—	75	9
—	—	—	—	—	8,353	1,305	271	180	6,597	527	201	38	18	20	22	12	1	3	19	4	1
—	—	—	—	—	7,098	1,953	718	612	3,815	1,401	314	40	24	16	31	2	5	2	—	23	1
—	—	—	—	—	2,290	1,687	219	101	283	1,460	368	65	42	23	35	16	9	5	2	34	2
—	—	—	—	—	4,008	2,888	536	257	327	1,209	400	30	20	10	11	7	8	4	1	9	1
—	—	—	—	—	1,914	543	110	46	1,215	504	245	15	10	5	8	4	2	1	—	5	—
TOTAL	27	—	—	—	110597	60,344	12,294	6,191	31,762	20,242	5,391	1,888	1,082	806	1,126	375	226	161	53	955	71
—	—	—	—	—	434	44	3	—	387	49	101	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	132	2	11	—	119	4	4	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	447	252	75	68	62	45	6	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	1,004	379	81	24	620	266	162	9	6	3	5	3	1	—	—	3	—
1068	337	765	279	—	—	—	—	—	—	—	—	1,122	693	429	641	303	73	105	6	558	40
915	684	684	684	—	—	—	—	—	—	—	—	783	414	374	459	130	98	101	35	321	3
84	181	181	181	—	—	—	—	—	—	—	—	229	137	92	146	56	16	11	17	127	7
TOTAL	667	120	1620	1144	—	—	—	—	—	—	—	2,139	1,244	895	1,246	489	187	117	58	1,006	83

N. B. :—

Number of patients on 1st Jan. 1944	480
Number of patients admitted during the year	1129
Number of patients discharged during the year	1122
Average duration of stay	139
Number of patients on Dec. 31, 1944	487

Helwan	Abbassia	Mansoura	Zagazig
480	461	27	1
1129	791	92	4
1122	783	94	4
139	182	160	12
487	464	25	1

DISPENSARIES DURING THE YEAR 1944

Sanatorium:					New Contacts (D sp.)			Cases under Observation (D sp.)	Hemoptysis	Sputum Examination					X-Ray Examination						
(Disp.)		Classes of Sanat.)			Children	Adults	T.B. Contacts			Total of Sputum	Sputum of New Cases		Sputum of Old Cases		Total of X-Ray	New Cases		Old Patients			
for Sanat.	Cases admitted to Sanat.	1st	2nd	3rd Paying							3rd Gratis	No.	Pos.	No.		Pos.	No.	Pos.	No.	Pos.	No.
453	201	—	—	—	—	463	443	31	22	—	2,151	1,728	588	423	109	857	728	323	129	—	—
488	338	—	—	—	—	453	588	26	80	48	1,533	1,172	560	331	86	786	692	192	87	7	—
291	16	—	—	—	—	339	588	1	—	—	1,827	1,286	510	541	162	879	717	606	8	154	—
363	245	—	—	—	92	132	258	29	108	50	1,733	1,37	383	696	306	293	121	57	171	1	—
132	85	—	—	—	—	3	235	207	21	152	53	1,033	592	231	511	118	33	318	235	19	2
171	111	—	—	—	—	42	122	279	17	89	21	1,201	682	251	519	183	43	332	229	87	1
119	31	—	—	—	—	117	129	5	78	—	740	555	185	185	48	272	251	1,0	21	—	—
27	28	—	—	—	—	71	75	1	—	—	437	293	97	144	10	170	130	130	12	28	—
127	79	—	—	—	—	53	99	123	4	128	4	913	539	328	374	18	609	537	404	60	12
242	172	—	—	—	—	531	66	43	78	2	2,339	1,109	483	1,250	525	723	745	656	8	—	—
303	120	—	—	—	—	118	187	311	39	307	17	1,310	732	263	578	211	920	612	308	292	22
47	20	—	—	—	—	12	125	192	11	55	—	514	286	165	228	83	96	63	61	34	2
37	37	—	—	—	—	37	134	180	—	225	63	1,079	706	245	373	101	184	92	64	60	2
62	62	—	—	—	—	62	81	117	6	27	1	733	319	162	334	16	329	293	201	33	3
49	31	—	—	—	—	61	79	1	66	13	681	482	182	199	67	183	170	77	12	1	—
29	15	—	—	—	—	28	66	2	11	—	149	120	56	29	5	65	57	53	7	1	—
940	1,674	—	—	—	539	3,188	4,241	230	1,711	286	18,363	11,598	4,721	6,765	2,365	7,148	5,858	3,751	1040	250	22
2	2	—	6	—	—	13	11	—	—	—	14	13	7	1	—	8	8	8	—	—	—
1	1	—	—	—	—	—	—	—	—	—	13	13	9	—	—	10	10	10	—	—	—
8	4	—	—	—	—	3	5	—	—	2	51	48	27	3	2	—	—	—	—	—	—
14	6	—	—	—	—	15	40	2	6	—	81	66	29	15	3	35	30	26	4	1	—
—	—	1	54	100	97	—	—	—	—	34	4,302	1,129	836	3,173	1,841	1,306	134	134	1172	—	—
—	—	—	24	93	674	—	—	—	—	388	4,498	778	560	3,820	1,553	1,570	778	718	768	27	—
—	—	—	—	310	—	—	—	—	—	72	778	333	225	445	222	203	177	173	26	—	—
—	—	1	78	193	198	—	—	—	—	494	9,678	2,240	1,021	7,488	3,616	3,079	1,086	1,025	1966	27	—

Treatment				Operations												No. of Deaths	REMARKS	
Gold	Other Injections	Exercise Treatment	General Treatment	Aspiration	Intrapleural Pneumothorax		Internal Pneumonolysis	Phrenic Operations	Extrapleural Pneumothorax		Bronchoscopy or Bronchography	Thoracoplasty	Thoracotomy	Pleural Lung Drainage	Refused admission to Sanatorium			
					Induction	Refills			Induction	Refills								
—	—	—	—	—	—	461	—	—	—	—	—	—	—	—	—	—	298	Boulaq Dispensary
—	—	—	—	5	1	1,945	—	—	—	—	—	—	—	—	—	2	106	Mottadayan
—	—	—	—	4	—	1,893	—	—	—	—	—	—	—	—	—	—	139	Khalifa
31	63	—	—	48	62	1,867	—	—	—	—	—	—	—	—	—	10	66	Manroua
—	—	—	—	4	33	1,422	—	—	—	—	—	—	—	—	—	9	63	Tanta
—	—	—	—	7	28	1,589	—	—	—	—	—	—	—	—	—	26	22	Zagazig
—	87	1109	1789	13	1	450	—	—	—	—	—	—	—	—	—	10	62	Mehalla el Kobra
—	—	—	24	—	1	328	—	—	—	—	—	—	—	—	—	2	40	Shebin el Kham
—	—	48	75	1	59	1,655	—	—	—	16	—	—	—	—	—	17	34	Damanhour
—	—	—	—	22	1	1,465	—	—	—	—	—	—	—	—	—	—	107	Alexandria
—	300	82	117	6	99	2,407	—	—	—	—	—	—	—	—	—	5	80	Damietta
—	—	—	—	3	31	602	—	—	—	—	—	—	—	—	—	19	56	Port Said
58	141	—	—	8	29	876	—	—	—	—	—	—	—	—	—	14	54	Fayoum
4	289	—	—	11	28	581	—	—	—	—	—	—	—	—	—	—	3	Assiut
—	—	—	—	4	1	107	—	—	—	—	—	—	—	—	—	—	32	Minia
—	—	—	—	16	4	131	—	—	—	—	—	—	—	—	—	—	12	Qena
93	810	1239	1503	111	30	17,812	—	—	—	15	—	—	—	—	—	114	208	TOTAL
—	—	—	—	—	—	83	—	—	—	—	—	—	—	—	—	—	—	Menouf Branch.
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Benha Branch.
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8	Samatut Branch.
—	—	—	—	10	3	76	—	—	—	—	—	—	—	—	—	—	7	Luxor Branch.
16	1450	129	140	40	429	5,724	273	210	—	—	6	—	1	15	—	—	—	Helwan Sanat.
115	7038	90	304	310	316	8,220	210	112	2	—	4	19	—	13	—	—	—	Abbassia.
—	347	53	46	18	139	1,839	—	—	—	—	—	—	—	—	—	—	—	Giza
231	8835	272	540	368	881	1,787	481	322	2	—	10	19	1	28	—	—	—	TOTAL

Damietta	Fayoum	Tanta	Assiut	Damenhour	Port Said	Giza Sanat
54	18	18	14	—	—	—
118	37	43	62	53	52	340
120	40	52	61	32	36	229
112	180	131	119	103	60	66
22	15	19	15	21	16	111

TABLE No. 38.—ANNUAL RETURN OF CASES ADMITTED TO EL MARG T.B. CONVALESCENTS SETTLEMENT DURING THE YEAR 1944

Month	No. of Convalescents	Below 20 Years	20-29 Years	30-39 Years	40-49 Years	Above 50 Years	Carpenter	Tailor	Shoe-Maker	Peasant	Other Industries	Health Condition still under Treat.	No. of Resident Contacts	Kind of Relation					Discharged		Referred to sanatorium		REMARKS
														Wives	Sons	Mothers	Fathers	Brothers	Convales.	Contacts	Convales.	Contacts	
January	3	—	—	2	1	—	2	—	1	—	—	—	11	3	8	—	—	—	2	8	—	1	
February	4	—	1	2	1	—	—	2	—	2	—	—	12	4	7	—	1	—	2	6	—	—	
March	5	—	1	3	1	—	1	1	1	—	2	—	20	5	14	1	—	—	1	5	1	—	
April	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
May	1	—	1	—	—	—	—	1	—	—	—	—	1	—	—	—	—	1	1	—	—	—	
June	3	—	2	1	—	—	—	—	2	—	1	—	9	2	3	2	—	2	2	6	—	—	
July	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
August	1	—	—	—	1	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	
September	1	1	—	—	—	—	—	1	—	—	—	—	1	—	—	1	—	—	—	—	—	—	
October	1	—	—	—	1	—	—	—	—	—	1	—	4	1	3	—	—	—	—	—	—	—	
November	2	—	—	1	1	—	—	1	—	—	1	—	—	—	—	—	—	—	2	—	—	—	
December	4	1	1	1	1	—	1	—	1	—	2	—	4	1	3	—	—	—	—	—	—	—	
TOTAL	25	2	6	10	7	—	4	6	5	2	8	—	62	16	38	4	1	3	10	26	1	1	

No. of Convales. on 1st. Jan. 1944... 10 No. of Convales. discharged during the Year 10

" " admitted during the year 25 " " on Dec. 31, 1944. 25

TABLE NO. 39.—ANNUAL RETURN OF THE WORK OF

	Discharged	Diseases attacked children during their residence						Result of mantoux test in the child		NEW CHILDREN									
		Other diseases	Skin	Ophthalmic	Chest	Intestinal	Stomach	+	-	Details of their relative patients									
										Condition					Relation				
										Lesion		Alive	Dead	Other relative	Sister	Brother	Mother	Father	
										Sp.	X.R.								
Zeitoun Preventorium	104	17	18	19	11	6	73	72	23	53	66	114	10	1	1	10	57	53	
Marg "	37	12	23	56	—	—	—	6	10	9	31	40	2	—	—	2	1	39	
Alexandria Prevent....	58	7	1	—	—	—	2	65	2	—	—	66	1	—	—	10	4	53	
Assiut Prevent....	25	16	96	23	—	4	1	9	9	9	9	27	1	5	—	—	14	9	
TOTAL	244	52	138	103	11	10	76	152		76	106	27	14	6	1	22	76	156	

N.B.—

	Zeitoun	Marg	Alex.	Assiut
Number of Children on 1st. January 1944	81	45	38	37
" " admitted during the year ...	124	42	67	29
" " discharged " " ...	122	37	63	25
" " on Dec. 31, 1944.	83	50	42	40

TABLE NO. 40—ANNUAL RETURN OF CASES TREATED IN ALEXANDRIA MARITIME SANATORIUM AND

OUT-PATIENT SECTION

New Patients											Old Patients					Treatment		Minor Operations	Dressings	X-Rays
Total	Under 5 years		5-10 years		Over 10 years		Rickets	T.B. spine	T.B. bones and joints	Other diseases	Total	Rickets	T.B. Spine	T.B. bones and joints	Other diseases	By Electricity	By Ultra Violet			
	M.	F.	M.	F.	M.	F.														
302	49	15	33	17	87	81	23	27	56	106	335	21	15	163	171	—	75	36	226	8
327	9	11	27	17	160	103	7	115	15	90	397	10	161	112	114	—	—	—	—	—
629	58	46	60	34	247	184	30	142	111	286	732	31	176	289	215	—	75	36	226	8

N.B.—

	Alexandria	Helwan
Number of patients on January 1, 1944	63	93
" " " admitted during the year ...	103	166
" " " discharged during the year ...	103	164
" " " remaining on Dec. 31, 1944 ...	78	160

PREVENTORIA DURING THE YEAR 1944

SMITTED

AGES																								No. of new children
above 10 years		10 years		9 years		8 years		7 years		6 years		5 years		4 years		3 years		2 years		1 year		Under one year		
F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	
1	1	3	3	5	2	4	6	8	8	8	7	4	7	3	7	4	6	4	3	0	1	15	14	124
3	1	2	3	1	1	1	3	2	1	1	1	3	4	4	2	—	4	2	—	3	—	—	—	42
2	2	—	2	4	3	3	4	6	6	2	4	2	3	6	—	7	2	2	2	1	1	2	1	67
—	—	—	—	—	—	1	1	4	1	3	—	3	2	2	2	—	3	—	2	—	—	2	2	28
6	4	5	8	10	6	9	14	20	16	14	12	12	16	15	11	11	15	8	7	4	2	19	17	251

PRINCESS KHADIGA ABBAS HALIM HOSPITAL FOR BONE DISEASES AT HELWAN DURING THE YEAR 1944

IN-PATIENT SECTION

New Patients												Discharged				Treatment		Major Operations	Plaster	X-Rays		
Total	Under 5 years		5-10 years		Over 10 years		T.B. Spine	T.B. Knee	T.B. other joints	T.B. Hip	Other diseases	Total	Cured	Improved	Stationary	Discharged in plaster	By Electricity					By Ultra Violet
	M.	F.	M.	F.	M.	F.																
08	9	7	18	12	35	27	33	21	36	12	6	103	27	47	23	6	—	—	27	39	228	Alexandria Maritime Sanat.
66	9	6	23	12	71	45	54	14	17	7	74	164	19	47	48	10	—	400	36	120	720	Princess Khadiga Abbas Halim Hosp. for Bone diseases at Helwan
74	18	13	41	24	106	72	87	35	53	19	80	267	86	94	71	16	—	460	63	159	948	

Chapter VII.—VENEREAL AND SKIN DISEASES

Table No. 41 shows that the total number of patients attending the skin and venereal diseases clinics during the year and were found suffering from venereal diseases was 226,092 as compared with 204,511 in 1943.

The number of gonorrhoea cases treated during the year was 15,618 as against 24,891 in the previous year.

14,785 cases of syphilis were treated during this year as against 16,914 in 1943.

64,831 patients were under treatment for other venereal diseases as against 76,695 last year.

Attendance in Clinics :

The number of patients who ceased to attend treatment before complete recovery was 47,451 or about half the number of last year, namely 76,960. Table No. 43.

Treatment Technique :

Sulphonamide compounds and preparations (Sulphathiazol and Sulphadiazin) are now in use in venereal diseases clinics for the treatment of gonorrhoea. It is proposed to introduce penicillin in the treatment of syphilis, gonorrhoea and other skin disease when this drug becomes available.

TABLE NO 41 - SHOWING THE NUMBER OF NEW CASES AND VISITS TO THE SKIN AND VENEREAL DISEASES CLINICS DURING THE YEAR 1944

Locality of Clinic	New Cases			Number of Visits			Total		
	Male		Female	Male		Female	New Cases	Old Cases	N. of visits
	Under 16 years	Over 16 years	Total	Under 16 years	Over 16 years	Total			
	Under 16 years	Over 16 years	Total	Under 16 years	Over 16 years	Total			
Sayeda Zainab ...	3 9	1,013	1,412	1 96	827	1,023	3,346	2,518	5,864
Shoubra ...	3, 64	4,398	7,962	2,432	7,298	9,730	31,712	20,007	51,719
Gamalia ...	1,188	2,67	3,251	2,673	16,325	18,998	8,406	43,227	51,633
Port Said ...	1,439	1,4 3	2,551	3,192	4,875	8,739	1,157	20,858	29,754
Suez ...	1,36	2,811	4,250	2,507	4,114	6,621	12,806	18,001	30,807
B-nha ...	1,36	1,36	2,736	2,053	2,007	4,060	5,17	9,8 3	1,960
Shebin el Kom ...	2,594	2,047	4,641	4,709	7,32	12,034	9,561	28,909	38,470
Tanta ...	3,351	3,444	6,83	2,68	9,96	1,9 5	12,8 1	28,788	41,009
M hella el Kobra ...	9 8	1,522	2,435	1,711	5,104	7,211	4,185	14,711	18,896
Zagazig ...	2,4 3	2,946	5,379	2,7 2	8,523	11,305	9,454	19,026	28,480
Mansoura ...	1,11	2,169	3,48	1,304	6,919	8,223	7,166	21,919	29,185
M t-Ghamr ...	69	1,5 7	2,23	2,846	4,025	6,871	8,677	20,263	28,916
Damanhour ...	2,512	2,174	4,686	5,871	5,0 2	10,553	16,187	2,140	17,371
Giza ...	17	320	337	56	1,67	2,237	1,05	7,245	8,297
Fayoum ...	733	1,396	2,15	1,035	5,071	6,106	4,606	13,965	18,571
Beni-Suef ...	538	1,277	2,15	802	1,87	2,673	4,489	7,912	1,401
Minia ...	2,957	1,936	4,893	1,564	4,771	6,335	10,322	15,182	25,504
Assiut ...	1,342	2,345	3,687	4,10	10,102	14,202	8,43	24,32	33,135
Dei ut... ..	26	115	141	987	4,316	5,303	668	12,411	13,079
Girga ...	509	3,877	4,386	1,245	2,160	3,405	10,67	3,863	4,197
Tah ...	1,777	2,12	3,903	201	441	642	8,903	11,0 4	21,991
Sonhag ...	9 1	1,531	2,522	945	5,326	6,271	4,74	11,112	15,886
Qena ...	1,25	1,475	2,500	1,225	2,176	3,401	6,289	9,7 7	15,996
Nag Hammadi ...	1,32	1,166	2,198	214	2,657	2, 7	5,084	7,556	12,640
Lux r ...	800	1,040	1,840	4,045	5,7 3	9,748	3,57	16,22	20,400
Aswan ...	2	89	1 1	225	2,129	2,354	247	7, 03	7,3 0
Moharram Bey ...	8	3,161	3,970	8,069	35,36	43,432	6,228	70,067	76,295
Kafr el-Kay ...	2, 96	7,754	10,250	18,5 9	45,454	64,113	18,378	110,838	129,216
TOTAL...	37,562	58,857	96,417	79,8 2	113,181	293,036	21 626	3,3 818	8,2 966

TABLE No. 42.—SHOWING NUMBER OF VENEREAL DISEASES CASES TREATED

Clinic	Gonorrhoea						Syphi					
	Acute		Chronic		Total		Primary		Secondary		Tertiary	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Say d Zeinab ...	56	126	437	1,565	997	1,691	101	10	138	63	43	21
Shoubra ...	224	249	240	466	464	75	122	29	72	60	63	46
Gamalia ...	1,229	2,011	200	1,644	1,435	3,655	439	69	178	107	20	8
Port-Said ...	131	6	9	63	140	69	56	5	68	30	9	—
Suez ...	106	27	37	18	193	45	22	—	26	6	14	3
Bahia ...	50	9	110	284	160	23	8	—	7	10	14	11
Shebi el Kom ...	74	18	3	91	100	109	89	9	107	102	15	14
Tanta ...	188	84	70	38	258	42	139	20	101	87	82	23
Mohalla el Kobra ...	82	37	17	12	99	49	8	1	78	38	36	4
Zagazig ...	308	44	2	1	310	45	169	9	68	69	26	28
Mansoura ...	8	31	4	111	89	142	10	17	82	63	27	18
Mit-Ghamr ...	31	1	1	18	32	2	28	2	10	7	4	3
Damanhour ...	85	127	15	26	100	343	18	9	39	26	32	18
Giza ...	46	134	17	12	103	310	40	2	17	14	11	8
Fayoum ...	116	144	15	33	131	177	40	3	126	126	99	50
Senouris ...	11	—	2	—	13	—	16	6	11	15	11	9
Bani-Suef ...	89	13	26	98	115	111	38	2	108	76	16	12
Minia ...	170	11	9	184	18	195	385	12	132	70	11	6
Assiut ...	54	19	15	59	69	7	40	2	42	16	11	10
Deiut ...	4	1	2	1	6	2	24	0	40	31	22	46
Girga ...	11	3	6	7	17	10	77	2	87	119	24	19
Tah ...	5	5	12	61	17	66	2	—	19	28	41	76
Suhag ...	28	—	2	—	30	—	24	—	65	38	17	29
Qena ...	31	12	20	46	51	58	27	1	43	36	19	21
Nag-Hammadi ...	1	3	3	16	18	19	28	2	61	71	3	3
Luxor ...	28	4	30	31	58	35	69	5	50	38	32	19
Awan ...	8	1	12	6	20	7	4	1	12	7	11	15
Maharram Bey ...	204	93	149	181	353	274	45	4	239	154	76	71
Karnak ...	405	13	154	29	619	426	173	38	332	303	118	91
TOTAL	4,494	3,354	654	6,676	6,188	9,430	2,498	266	2,478	1,768	899	682

TABLE No. 43.—SHOWING NUMBER OF VENEREAL DISEASES CASES TREATED

Locality of Clinic	Patients Completed Treatment										Percentage		
	Gonorrhoea			Syphilis			Other Diseases			Grand Total	Gonorrhoea	Syphilis	Other Diseases
	M.	F.	Total	M.	F.	Total	M.	F.	Total				
Sayeda Zeinab ...	97	21	118	—	11	11	63	19	82	211	55.92	5.22	38.86
Shoubra ...	103	432	535	6	2	8	135	9,562	9,697	10,241	5.22	0.7	94.7
Gamalia ...	447	866	1,313	88	56	138	62	719	1,347	2,799	4.42	4.93	48.1
Port-Said ...	801	689	1,490	660	71	1,377	145	773	3,586	41,555	38.43	2.20	2.20
Suez ...	122	28	150	—	—	—	3,0	6,231	9,335	9,481	1.58	—	9.42
Bahia ...	22	17	39	25	25	40	2	—	2	107	36.45	37.38	26.17
Shebin el Kom ...	—	—	—	—	—	—	3,103	3,110	6,913	6,933	—	—	100
Tanta ...	81	190	271	210	224	434	4,106	3,12	7,222	7,934	3.41	5.47	91.11
Mohalla el Kobra ...	45	12	57	6	4	10	1,027	1,123	2,520	2,619	2.17	3.8	97.45
Zagazig ...	6	—	6	11	6	17	12	13	277	100	2	5.66	92.34
Mansoura ...	16	88	104	9	38	47	72	330	1,500	1,701	6.11	2.76	91.1
Mit-Ghamr ...	5	3	8	—	—	—	1,19	2,17	3,39	3,378	.24	—	99.6
Damanhour ...	25	5	30	1	6	7	3,984	4,4	3,378	8,478	.83	.08	99.04
Giza ...	31	5	36	—	—	—	8	11	19	100	81	—	19
Fayoum ...	7	19	26	2	—	2	1,02	1,223	2,271	2,499	4.09	.08	95.8
Senouris ...	9	—	9	44	27	41	—	17	17	67	13.44	61.19	25.37
Bani-Suef ...	46	50	96	—	—	—	3,06	3,910	6,972	7,068	1.4	—	98.6
Minia ...	54	73	127	7	5	12	6	—	6	145	87.58	8.28	4.14
Assiut ...	18	25	43	—	—	—	—	—	—	43	100	—	—
Deiut ...	2	—	2	—	—	—	—	—	—	2	100	—	—
Girga ...	6	7	13	19	47	66	4,525	3,97	8,500	8,579	.15	.76	99.09
Tah ...	15	45	60	—	—	—	2,515	3,54	6,055	6,115	.9	—	99.1
Suhag ...	5	—	5	1	—	1	—	516	1,481	1,487	.34	.06	99.6
Qena ...	36	55	91	3	5	8	—	—	—	99	91.91	8.09	—
Nag-Hammadi ...	11	13	24	80	94	174	7	1	8	106	11.65	4.46	3.9
Luxor ...	2	3	5	—	2	2	1,20	1,31	2,520	2,527	19	.0	99.74
Awan ...	5	7	12	—	—	—	—	—	—	12	100	—	—
Maharram Bey ...	171	137	308	303	236	539	1,42	2	2,149	2,596	10.23	1.8	71.72
Karnak ...	236	191	427	510	147	657	4,51	3,96	8,899	10,213	49.68	8.39	86.93
TOTAL	2,474	3,141	5,615	1,955	1,837	3,792	39,10	31,242	39,351	99,758	—	—	—

AT THE SKIN AND VENEREAL DISEASES CLINICS DURING THE YEAR 1914

								Other Diseases					
Latent		Hereditary		Nervous		Total		Chancroid		Other Venereal Diseases		Total	
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
50	105	12	24	—	—	344	223	53	12	18	8	71	20
20	7	12	31	—	—	289	17	—	—	6,73	8,261	6,732	8,261
139	139	10	15	—	—	78	33	291	66	739	1,097	1,030	1,163
61	99	20	18	—	—	214	152	9	—	29	73	3	73
11	39	5	7	—	—	7	15	21	—	—	—	21	—
62	9	15	39	—	—	106	15	2	—	—	—	2	—
55	162	56	4	—	—	32	335	—	—	4,213	4,476	4,213	4,476
94	184	64	69	—	—	40	37	13	2	—	—	13	2
43	80	3	29	—	—	282	12	4	—	2,050	1,549	2,054	1,549
20	95	6	4	—	—	283	25	69	1	4,717	3,824	4,786	3,825
57	11	2	12	—	—	29	226	188	8	5	1	19	9
72	218	70	3	—	—	184	26	—	—	1	4	1	4
10	28	5	6	2	—	186	8	—	—	4,400	4,843	4,400	4,843
28	37	8	9	—	—	104	70	4	—	147	31	151	318
6	25	9	7	—	—	200	21	—	—	—	2	—	2
5	41	16	29	—	—	59	10	—	—	—	26	—	26
14	24	8	10	1	1	18	10	5	—	2	14	7	14
27	6	19	29	3	—	577	185	66	—	—	—	66	—
9	19	52	68	—	—	236	25	—	—	—	—	—	—
17	61	31	46	—	—	134	150	1	1	—	—	1	1
16	52	19	29	3	—	220	221	—	—	—	—	—	—
68	142	65	76	—	—	19	322	1	—	—	—	1	—
47	11	32	42	1	—	18	222	7	—	—	—	7	—
35	79	25	40	1	1	151	178	—	—	—	—	—	—
18	45	7	78	—	—	117	119	10	2	—	—	10	2
72	136	25	43	—	—	248	241	4	—	—	—	4	—
44	9	9	1	1	—	81	139	—	—	—	—	—	—
231	213	19	19	4	21	703	482	161	25	1,875	1,020	2,036	1,041
182	179	41	31	55	39	96	681	23	56	7,174	5,1	7,208	5,92
1,615	2,812	721	844	110	62	8,291	6,494	1,169	113	32,102	31,387	33,211	31,560

AT THE SKIN AND VENEREAL DISEASES CLINICS DURING THE YEAR 1914

Patients who Ceased to attend before Completion of their Treatment

Gonorrhoea			Syphilis			Other Diseases			Grand Total	Percentage		
M.	F.	Total	M.	F.	Total	M.	F.	Total		Gonor.	Syphilis	Other Dis.
325	446	771	97	88	185	7	1	8	96	9.9	19.19	83
72	102	154	10	120	130	81	115	200	504	10.5	29.76	39.69
858	2,380	3,238	258	29	556	120	18	30	4,102	78.74	13.56	7.5
6	10	16	12	25	37	249	425	674	72	22	5.08	12.72
65	23	88	2	17	40	411	200	617	791	11.4	6.13	82.15
100	21	121	81	11	199	—	—	—	320	37.81	61.19	—
96	47	143	233	178	441	312	95	1,247	1,830	7	24.8	68.2
177	232	409	270	147	417	1,20	1,164	2,46	3,336	13.75	12.50	73.74
17	8	25	51	40	91	—	—	—	110	21.55	78.45	—
302	44	346	272	199	471	4,575	3,69	8,204	9,081	3.12	5.1	91
58	86	144	167	156	323	1,50	100	2,300	2,87	5.05	11.35	83.6
6	8	14	2	55	81	92	1,702	2,60	2,725	52	2.97	16.51
59	247	306	91	42	133	297	431	728	1,13	25.2	11.3	62.33
20	100	120	52	21	73	3	51	84	27	43.3	26.3	30.4
62	50	112	10	50	150	20	273	53	795	14.08	18.86	67.06
2	—	2	25	33	58	—	9	9	68	2.89	84.05	13.05
64	66	130	83	57	140	1,175	1,314	2,489	2,750	2.7	5.1	50.2
131	122	253	570	168	738	6	—	60	1,051	24.07	70.22	5.71
19	20	39	74	127	201	—	—	—	20	16.25	83.75	—
4	2	6	50	60	110	1	1	2	11	5.0	93.22	1.7
4	1	5	24	20	44	224	492	716	765	60	5.7	93.59
12	11	23	5	97	153	536	765	1,301	1,477	1.5	10.33	88.08
25	—	25	104	135	239	1,57	1,006	2,58	2,87	97	8.16	90.87
8	10	18	40	53	93	—	—	—	11	16.2	83.78	—
7	6	13	37	25	62	3	1	4	79	16.45	78.48	5.07
40	21	61	93	61	154	114	221	335	550	11.9	28	60.91
15	—	15	38	73	111	—	—	—	126	11	89	—
182	137	319	400	246	646	612	320	932	1,897	16.81	34.0	49.14
333	235	568	45	334	789	2,492	1,06	3,554	5,0	9.78	13.51	76.71
3,049	4,485	7,534	3,844	3,643	6,887	16,953	16,077	33,030	47,451	—	—	—

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TABLE NO. 44.— SHOWING TREATMENT DURING
THE LAST FIVE YEARS

Year	No. of Clinics	New Patients	No. of Visits
1940... ..	23	145,801	622,220
1941... ..	23	148,194	636,503
1942... ..	25	168,074	548,545
1943... ..	27	204,511	739,376
1944... ..	29	226,032	606,874

TABLE NO. 45.—DISTRIBUTION OF BEDS

Hospital	1st Class	2nd Class	3rd Class Spec.	3rd Class Ord.	Children	Opth. Branch	Total Beds for Patients	Beds for Staff	Total No. of Beds
Hod-el-Mar-soud... ..	—	—	14	263	—	—	277	8	285
El-Kabbary	—	—	20	183	—	—	203	6	209
TOTAL ...	—	—	34	446	—	—	480	14	494

TABLE NO.—46 NUMBER OF IN AND OUT-PATIENTS TREATED AND VISITS TO HOSPITALS DURING
THE YEAR 1944

Hospital	In-Patients	Out-patients	No. of visits
Hod-el-Mar-soud	3,552	1,535	5,928
El-Kabbary	1,888	742	2,481
TOTAL	5,440	2,277	8,409

TABLE NO. 47.—SHOWING HOSPITALS AND PATIENTS TREATED THEREIN DURING THE YEAR 1944

Hospital	In-Patients						Out Patients	
	Treated during the year	Discharged during the year				Remaining	New Cases	No. of Visits
		Cured	Relieved	Not imp.	Died			
Hod-el-Marsoud	3,552	2,406	1,031	—	—	115	346	5,928
El-Kabbary	1,888	1,736	—	—	—	92	742	2,481
TOTAL	5,440	4,202	1,031	—	—	207	1,088	8,409

TABLE NO. 48.—NUMBER OF IN-PATIENTS TREATED AND NUMBER
OF DEATHS DURING THE YEAR 1944

Hospital	No. of In patients	No. of deaths	Percentage
Hod-el-Mar-soud	3,552	—	—
El-Kabbary	1,888	—	—
TOTAL	5,440	—	—

Chapter VIII.—MENTAL DISEASES

The year under review —1944—surely marks a new epoch in the history of lunacy in Egypt. For in this year the first Lunacy Act (Law No. 141 of 1944) was passed by both Houses of Parliament, signed by H.M. the King on September 11, 1944 and came into force as from October 11. Before the passing of this Act, the certification and admission of the insane to government mental hospitals, and their detention therein were effected under administrative orders issued by the Minister of Interior about half a century ago, while their admission to and detention in private hospitals and nursing homes were carried out without any certification whatever.

Accommodation :

The number of beds remained as in last year; and only a few necessary repairs were carried out, especially at the Abbassia Hospital.

Admissions :

The number of cases admitted to both hospitals was 2,404 of which 920 were females and 1,484 males. The number remaining on January 1, 1944 was 4,020. Thus the total cases treated amounted to 6,424 i.e. 210 more than the year 1943.

The number of those discharged during the year was 1,792, the deceased numbered 434; the patients remaining in both hospitals on December 31, 1944 numbered 4,198. The number of patients transferred between both hospitals was 349, of which 269 were transferred from Abbassia and 80 from Khanka. Of the admissions, 560 were recurrent cases.

Accused Persons :

The number of accused persons sent by the Procurer General for mental examination was 204.

Reports were sent on 16 other patients originally admitted as ordinary patients. Thus the total number of cases reported to the Procurer General amounted to 220. Among the persons sent for examination 19 were accused of murder or attempted murder, 67 of theft and 8 of assault.

Accused Lunatics in Residence :

The number of accused lunatics in residence amounted to 853 as against 833 in 1943.

Discharges :

The number of cases discharged was 1,792, of which 138 were recovered, 1,218 relieved, 532 not improved, 80 not insane and 4 escaped. The number of those discharged as not insane is comparatively high this year. This may be due to the great number of soldiers and internees feigning insanity with a view to escape internment camps or active service.

Pellagra :

The number of pellagrous admissions was 769 patients, of which 166 were females and 603 males. This is roughly the same number as in 1943.

Pellagrous patients whether admitted with pellagra or developing pellagra during their stay in hospital have been the subject of the special concern and attention of the Division. Nutritional diets, vitamins, and tonics were given to the patients. They were also provided with additional clothing and bedding. These efforts bore good fruit in that there was a decrease in the number of deaths as shown below.

Ages of Patients :

The following table illustrates the number of admissions at different ages.

TABLE No. 49

Ages	Number
10 to 15 years	62
Over 15 to 20 years.	373
" 20 " 25 "	455
" 25 " 30 "	370
" 30 " 35 "	307
" 35 " 40 "	209
" 40 " 45 "	155
" 45 " 50 "	116
" 50 " 55 "	75
" 55 " 60 "	58
" 60 " 65 "	29
" 65 " 70 "	24
" 70 " 75 "	3
" 75 " 80 "	7
" 80 " 90 "	4
Total Persons admitted	2,247

Physical Condition of Patients :

Table No. 50.—shows the physical condition of patients on admission, since 1936

TABLE No. 50

Year	Number admitted	Percentage to total admissions		
		Good or Fair	Poor or Bad	Very Bad
1936	2,064	61	28	11.
1937	2,314	53.5	32	14.5
1938	2,538	53.7	30.5	15.8
1939	2,294	55.6	29.5	15
1940	2,188	58.5	28.5	13
1941	2,272	62.1	29.7	8.2
1942	2,346	69.2	24.2	6.6
1943	2,291	59.3	34.9	5.9
1944	2,404	62.2		3

The ratio of cases admitted in poor physical condition is therefore 38.8 per cent of the admissions. Those admitted during the year with intercurrent diseases or injuries were 1502. This number does not include the pellagra cases.

Deaths :

434 deaths occurred during the year 1944 as compared with 641 in 1943 ; the death rate to the total treated being 6.75 per cent in 1944 as compared with 10.31 in 1943. This shows the extent of success of the tremendous efforts undertaken to minimise the death rate.. Of the deceased, 213 cases died of pellagra or nearly 50 per cent of the total deaths.

Scabies :

Part of the efforts was directed towards scabies. The mounting cost of living especially the great rise in the price of soap, has manifested itself in the increasing number of patients admitted to the two hospitals with scabies. Drastic measures had therefore to be taken, including the provision of separate wards for scabies cases and the intensification of treatment. These were crowned with appreciable success, as proved by the lowering of the number of cases of scabies under treatment from 153 to 30..

Electric Shock Therapy

This has been carried out in Abbassia Hospital with good results in cases of depression and particularly in those suffering from involutional melancholia. The results of treatment in Schizophrenia were poor. In most cases with favourable outcome, the improvement occurred after six sittings, a few after ten. Additional treatment gave no better results and even tended to worsen the condition of the patient.

205 Schizophrenia cases were treated and gave the following results :—

77 Recovered or markedly improved.

29 Slightly improved.

99 No improvement.

30 cases of Manic-depressive insanity or involutional melancholia were treated and gave the following results :—

24 Recovered or markedly improved.

1 Slightly improved.

5 No improvement.

Convulsion Therapy :

This was carried out in both hospitals, mainly in Khanka by the use of Cardiazol or Tetracor. Ammonium Chloride was also used by Khanka Hospital. The following table shows the results obtained :—

TABLE No. 51

Method of treatment	Mental Disorder	Recovered or Markedly Improved	Slightly Improved	No Improvement	Total Treated
Cardiazol or Tetracor ...	Schizophrenia	32	23	41	96
	Manic Depressive	5	2	2	9
Ammonium Chloride ...	Schizophrenia	6	5	2	13
	Manic Depressive	1	—	1	2

Fever Therapy :

This method of treatment continued to be used in both hospitals.

Wassermann Tests :

These tests were carried out as usual by the Laboratories Department of this Ministry and gave various results. Specimens of cerebro-spinal fluid were also taken and examined, whenever it was found necessary.

Out-Patients Clinic :

Work at the out-patients clinic continued. 14 patients were examined and treated.

Dentistry and Ophthalmology Departments :

The number of patients who attended the Dental Clinic was 756 in Abbassia and 594 in Khanka. The work in this department is progressing, with good service to the patients.

In the Ophthalmology Department, the work was also carried out with useful results. The Khanka Hospital is visited by the oculist only once every month and it is proposed to make these visits weekly.

Artificial Feeding :

This was made on 7,637 occasions without accident.

Epileptic Fits :

,509 epileptic fits were recorded during the year.

Cases Treated Medically :

8,488 cases were treated locally from physical ailments other than their mental illness. This does not include the patients sent to other hospitals for surgical or other treatment.

Government Employees :

210 Government employees were examined for mental trouble, of whom 70 were in patients, the rest (140) being sent by the Central Medical Commission for examination and report.

Births :

Eight births took place in Abbassia Mental Hospital.

Accidents :

38 major accidents and 1,817 minor accidents happened in both hospitals. Out of the major accidents 4 were unfortunately fatal.

Suicide :

There were no cases of suicide during the year.

Escapes :

12 patients escaped during the year, 8 of whom were brought back to the Hospital by the police authorities.

X-Ray Department :

196 films were taken during the year, and 269 examinations by screen were made on patients.

Staff :

The war conditions have made it difficult to obtain candidates for the vacant posts of female attendants, and the number of vacant posts remained comparatively high ; amounting to nearly 20 per cent of the total number.

Lectures :

During the year a joint scientific meeting was arranged between Egyptian psychiatrists and their British and American colleagues serving in the Near East. It was held in the premises of the Royal Egyptian Medical Association (Dar-el-Hekma) on April 29th. Four papers were read, one on the Future of Psychiatry by Brigadier R.F. Barbour of the British Army, the second on the Medico-legal Aspects of Pellagra by the Director of the Mental Diseases Division, the third on Acute Schizophrenia in time of war by Capt. Flumerfelt, and the fourth on the Classification and Measures of the Depth of Dementia by Dr. Mohammed Abdel Hakeem, Director of Khanka Hospital. H.E. the late Minister of Public Health had attended the opening paper. The following day a visit was paid to Khanka Hospital.

A visit was made to Abbassia Hospital by British psychiatrists on the 5th of October

Other lectures were delivered as usual to the students of the final year of the Faculties of Medicine of both Fouad I and Farouk I Universities, to the Doctors attending the post graduate course in Psychological Medicine and Neurology and to the nursing staff of the two hospitals.

Khanka Farm :

Despite the difficulties of obtaining water and manure, the farm continued to perform the double purpose as a place of occupational therapy and as a means of supplying the hospital with vegetables nearly all the year round, also supplying Abbassia Hospital with any surplus vegetables that may not be needed at Khanka.

Chapter IX.—HEALTH PROPAGANDA

All available propaganda devices have been utilised in this field. Broadcasts, theatrical presentations, holding of fairs, publication of pamphlets and posters, production of models, etc. have all been introduced. Propaganda units have been equipped with the necessary apparatus and equipment, i.e. amplifiers, electric generators, gramophone records etc. Besides health education, propaganda units took an active part in the campaign against infectious diseases.

The following is a statement of the work achieved:—

PROVINCIAL HEALTH PROPAGANDA UNITS

Headquarters :

Considering that the activities of the units, when stationed in a village, are limited to that village only and any other village to which there is easy access, it was decided to station the headquarters of the units in the chief towns of provinces and districts which usually form a road junction to all parts of the province and thus pave the way to a far-reaching health propaganda. Besides, any repairs required for the apparatus or vehicles can be carried out in the many workshops available in the town and at the same time keep the unit under the constant supervision and guidance of the Public Health Inspector.

Facilities :

Propaganda units have been accommodated in new tents and supplied with electric current to enable them to hold propaganda meetings in their headquarters.

Instruction of Propaganda Sanitary Overseers :

Lectures on various diseases and other health problems were given to propaganda sanitary overseers with a view to raising their standard of instruction.

Procedure of Propaganda Work :

This has been so modified as to cover the largest possible number of villages. It is carried out on the following lines:—

Day Time Propaganda.—This is opened by broadcasting a few songs and musical compositions. As soon as the inhabitants assemble, the sanitary overseer begins his brief health lecture on the prevailing diseases and the safety of the individual. This propaganda involves villages, compulsory schools, public markets and other meeting places.

Evening Propaganda.—This is scheduled monthly. The meeting is opened by showing films on health or for amusement which are followed by two lectures; one deals with the prevailing diseases and the other with other health problems. The evening propaganda covers villages, societies, clubs, public playgrounds, social centres, rural reform associations, schools, factories, parks and fairs.

Propaganda Apparatus :

As propaganda work depends to a great extent on the efficiency of the apparatus in use, two experienced cinema mechanics tour the various units to repair and keep in good running order these apparatus. Modern motors, amplifiers and microphones have been supplied to the units to replace old ones.

Propaganda Units in Governorates :

Three units have been assigned to undertake health propaganda in the governorates of Cairo, Alexandria, Canal, Suez and Damietta. These have been supplied with entertaining health and social films to suit the different classes of the population. Large size models of insect vectors of disease have also been provided for showing to the public.

Propaganda in Cairo :

Several day-time propaganda meetings were held in Cairo for the benefit of those who could not attend the evening meetings. These were held in main thoroughfares and meeting places, in schools for compulsory education, or in child welfare centres and hospitals.

Evening propaganda meetings were arranged for members of societies and institutions. Others were held in public parks during summer months. These were well attended. Special propaganda meetings were held for the benefit of the Army. These dealt with important health problems. Other meetings were held in public playgrounds, social centres, reformatories and cooperative societies.

Propaganda through Broadcasting Station :

Use was made of the State Broadcasting Station in health propaganda as a popular means for approaching the public. Lectures in hygiene, prepared and delivered by specialists, were broadcasted fortnightly. Information on prevalent infectious diseases and advice and warnings to the public were included in the news-bulletin. Broadcasting of representations dealing with the particular diseases prevailing during the season. Six such representations were broadcasted dealing with malaria, plague, ophthalmias, flies and government hospitals.

Pamphlets and Posters :

Large quantities of pamphlets were distributed to the public during health propaganda meetings, as well as to clubs, societies, schools and other institutions. Attractive posters illustrating in bright colours the various diseases and measures of protection were published and distributed far and wide.

Preachers as means of Propaganda :

Considering the great respect and high esteem which preachers enjoy, it was decided to engage one for health propaganda. After having been instructed in health propaganda matters, he was allowed to give his health sermons in Cairo and provincial mosques.

Models :

Much interest is given to the question of models. Sufficient models and material are being prepared to equip 6 provincial museums of hygiene similar to King Fouad Museum of Hygiene in Cairo. The opportunity will thus be afforded the public as well as the pupil to visit these museums.

Cooperation with other Units :

Propaganda units cooperated in the activities of other units, e.g. assisting in the Tuberculosis week by holding meetings where chest diseases were discussed, undertaking an extensive anti-gambia propaganda in Assiut, Suhag, Qena and Aswan provinces, and proceeding to typhus stricken localities to assist infectious diseases gangs by demonstrating to the public the methods of combating the disease and protection therefrom.

Cooperation with other Ministries and Organisations :

Health propaganda is of necessity dependent upon the cooperation of other authorities and organisations. These have been approached with a view to laying down the principles for cooperation.

It was arranged with the Ministry of Education: (a) To hold propaganda meetings in primary, intermediate and higher schools where M.O.s. of the Ministry of Education and propaganda staff would lecture the students.; (b) To supply all schools with the various pamphlets and posters on all diseases; (c) To form health societies within the schools to undertake health propaganda in neighbouring localities, particularly during holidays.

It was arranged with the Ministry of Social Affairs to hold propaganda meetings in the various institutions: social centres, public playgrounds, cooperative societies etc., and to provide their members with the necessary instructions so that they may assist in health propaganda work in neighbouring villages.

It was arranged with the Ministry of Wakfs to provide health sermons to preachers to be delivered by them in mosques during the spread of diseases. Sermons dealing with typhus and malaria have been supplied and delivered on the appropriate occasions.

Meetings were arranged in conjunction with the Ministry of National Defence for the benefit of the army. Ministers of Army Units have also been instructed in health propaganda so that they can include this in their sermons.

Propaganda meetings were also held for the police forces of the Ministry of Interior. These included police units, Buluk Nizam and Police College. Such activities were commended by the Minister of Interior.

Table No. 52—STATEMENT REGARDING WORK DONE BY THE HEALTH PROPAGANDA SECTION
(Central Administration at Cairo).

	Number	No. of persons attending
1. Lectures broadcasted	22	—
2. Theatrical plays broadcasted	6	—
3. Number of Posters distributed	1,500	—
4. " " health pamphlets distributed	680,000	—
5. " " public parks meetings	17	156,700
6. Meetings in mouleds	2	2,500
7. " " seasonal occasions and fetes	20	15,000
8. " " schools	117	40,484
9. " " orphanages	19	5,495
10. " " for the Army	8	575
11. " " " Territorial Army	—	—
12. " " " Police	16	3,600
13. " " " workmen	4	1,150
14. " " during daytime at Cairo	—	—
15. Health propaganda meetings in cinemas	3	2,030
16. " " daytime meetings in Alexandria	53	2,100
17. " " evening meetings in Alexandria	45	19,000
18. " " meetings against malaria	249	122,500
19. " " " chest diseases	110	43,500
20. " " " plague	90	63,000
21. " " entertainment in public playgrounds	33	38,000
22. " " " for the various societies and associations	32	14,245
23. " " entertainment for sanatoria, hospitals & child welfare Centres	14	5,560
24. Health Propaganda entertainment for clubs	8	2,250
25. " " " social centres, " Wanderers " quarters, Cooperative & Charitable Institutions	18	21,900
26. Health propaganda in women associations and girl reformatory	45	10,870

TABLE NO. 53—WORK DONE BY THE PROPAGANDA SECTION IN THE PROVINCES.

	Number	No. of persons attending
Number of villages visited by the Units	1,192	—
" " habitations inspected	12,573	—
Nuisance sources inspected by the Units	13,015	—
Schools where speeches were given	797	—
Number of speeches given at schools	2,983	—
" " pupils who attended these speeches	330,522	—
" " thoroughfares or market places where propaganda was undertaken	339	—
" " speeches given in markets	630	12,900
Clubs	23	5,480
Orphanages	14	50,976
Schools	10	11,500
Factories	7	41,20
Societies	51	1,895,745
Villages	2,349	1,123,750
Markazes	497	22,150
Bandas	435	69,800
Thoroughfares	26	35,700
Fetes and Fairs	15	9,040
Other Meetings	17	8,500

Part III.—TREATMENT

Chapter X.—GENERAL HOSPITALS

Number of Hospitals :

There were 82 general hospitals in operation during the year. Of these, 27 are situated in the governorates and chief towns of provinces ; 53 in chief towns of districts ; and two general diseases out-patient clinics.

Hospital Accommodation :

The total number of hospital beds this year was 6,553, of which 4,664 were reserved for patients and 889 for hospital personnel.

Treatment :

A proportion of the hospital accommodation is still made available for emergency cases arising from the prevailing war-time conditions.

The number of in-patients amounted to 94,895, and the out-patients to 2,286,758. The number of visits to out-patient departments was 3,980,330.

Operations :

The number of surgical operations performed in the in-patient departments was 32,174, and in the out-patients 73,622. This gives a total of 105,796 operations as compared with 32,110 ; 71,096 and 103,206 respectively in the previous year.

X-Ray Examinations :

The number of cases examined and treated with X-ray this year was 21,639 as against 19,605 in the previous year.

Deaths :

The number of deaths amongst patients treated in the in-patient departments was 5,678 from a total of 94,895 patients, i.e. 5.99%

TABLE NO. 54.—SHOWING GENERAL HOSPITALS IN OPERATION SINCE 1934

Year	Hospitals in Governorates and Chief Towns of Provinces	Hospitals in District Chief Towns	Village Hospitals	Out-Patient Clinics
1934	19	45	50	1
1935	19	45	50	3
1936	19	45	50	3
1937	20	48	60	3
1938	20	48	62	3
1939	20	48	62	3
1940	20	51	62	3
1941	20	52	—	3
1942	20	52	—	4
1943	26	52	—	3
1944	27	53	—	2

TABLE NO. 55.—NUMBER OF BEDS IN GENERAL HOSPITALS

Year	No. of Beds	Note3
1934	5,309	Kasr el Aini Hospital was separated from the Ministry.
1935	5,852	
1936	5,964	
1937	6,341	
1938	6,822	
1939	6,979	The lock hospitals were separated from the Hospitals Section.
1940	6,926	
1941	6,969	
1942	6,880	Village hospitals were separated from the Hospitals Section.
1943	6,363	
1944	6,553	

TABLE No. 56.— DISTRIBUTION OF BEDS

Hospital	1st Class	2nd Class	3rd Class Special	3rd Class Ordinary	Children	Ophth.	Total beds for patients	Beds for Staff	Total No. of Beds
King's	—	—	—	217	9	—	226	81	307
Demerdash	—	19	—	29	10	50	45	151	616
Incurable Diseases, Helwan	—	—	—	118	—	—	118	13	131
Port-Said	2	2	12	17	13	—	207	14	221
Suez	4	11	—	193	—	2	23	18	251
Damietta	—	2	—	8	—	37	127	13	140
Damanhour	2	—	—	107	2	—	111	11	122
Tanta	—	4	—	210	2	—	224	28	252
Mansoura	—	—	—	192	10	—	202	12	214
Mit Ghamr	—	—	—	45	—	12	57	6	62
Zagazig	1	3	—	203	12	5	224	16	240
Shebin el Kom	—	2	—	88	—	—	90	5	95
Benha	—	—	—	75	—	3	78	10	88
Kaliub	—	—	—	74	—	—	74	4	78
Fayum	—	1	—	100	—	—	101	6	107
Beni-Suef	—	—	—	97	—	—	97	5	102
Minia	—	2	—	103	12	—	122	9	131
Fikria	—	—	—	30	—	13	43	4	47
Maghagha	—	—	—	—	—	—	—	—	—
Assiut	—	4	—	189	—	11	204	18	222
Mallawi	—	—	—	15	—	11	26	4	30
Subag	—	2	—	94	—	—	96	6	102
Tahta	—	—	—	26	—	—	26	2	28
Qena	—	1	—	90	—	—	91	8	99
Luxor	6	6	—	3	10	25	85	16	101
Ema	—	2	—	73	2	26	103	11	114
Aswan	1	2	—	48	—	25	76	3	79
Ismailia	—	—	—	84	—	8	92	12	104
Delingat	—	—	—	22	—	12	34	8	42
Kafr el Dawar	—	—	—	27	—	8	35	9	44
Rosetta	—	—	—	28	—	12	40	9	49
Shoubra el Khayma	—	—	—	21	—	12	33	9	42
Edfina	—	—	—	44	—	—	44	6	50
Kom Hamada	—	—	—	29	—	11	40	9	49
El Mahmoia	—	—	—	21	—	—	21	3	24
Dessouq	—	—	—	35	—	12	47	10	57
Mahalla el Kobra	—	—	—	115	—	—	115	12	127
Samannud	—	—	—	46	—	8	54	7	61
Tayeba	—	—	—	32	—	12	44	5	49
Sherbin	—	—	—	26	—	12	38	9	47
Zifta	—	—	—	45	—	—	45	11	56
Kafr el Sheikh	—	—	—	60	—	—	60	6	66
Fawa	—	—	—	36	—	6	42	6	48
Kafr el Zayat	—	—	—	26	—	8	34	8	42
Abht	—	—	—	—	—	—	—	—	—
Faraskour	—	—	—	23	—	8	31	9	40
Simbellawein	—	—	—	28	—	12	40	9	49
Manzala	—	—	—	33	—	—	33	5	38
Aga	—	—	—	48	—	8	56	10	66
Dikrines	—	—	—	47	—	8	55	11	66
Belbeis	—	—	—	24	—	12	36	9	45
Faqus	—	—	—	23	—	12	35	8	43
Minia el Qamh	—	—	—	26	—	8	34	9	43
Zwamel	—	—	—	—	—	—	6	3	9
Tala	—	—	—	21	—	12	33	8	43
Ashmoun	—	—	—	28	—	12	40	7	47
Merout	—	—	—	36	—	16	52	10	62
Zawyet el Na'oura	—	—	—	24	—	8	32	6	38
Shebin el Qanater	—	—	—	27	—	12	39	9	48

TABLE NO. 56 (contd.)

Hospital	1st Class	2nd Class	3rd Class Special	3rd Class Ordinary	Children	Ophth.	Total beds for patients	Staff Beds	Total No. of Beds
S ff	—	—	—	2	—	12	3	3	45
Ayat	—	—	—	39	—	16	55	10	65
Itsa	—	—	—	26	—	12	38	6	44
Wasta	—	—	—	26	—	12	3	9	47
Beba	—	—	—	29	—	12	41	10	51
B i-M zar	—	—	—	32	—	8	40	5	45
Fasha	—	—	—	23	—	11	34	6	40
Samslout	—	—	—	40	—	—	40	8	48
Deirout	—	—	—	30	—	12	42	10	52
Ba ari	—	—	—	31	—	—	31	7	38
S h l S lim	—	—	—	24	—	8	32	8	40
Man l ut	—	—	—	40	—	—	40	4	44
Abut g... ..	—	—	—	30	—	8	3	9	47
Akhmim	—	—	—	23	—	1	38	10	48
B liaa	—	—	—	34	—	12	46	6	52
Gi ga	—	—	—	25	—	12	37	9	46
D shna... ..	—	—	—	25	—	8	33	9	42
Kous	—	—	—	22	—	12	34	10	44
Nag-Hamadi	—	—	—	28	—	14	42	10	52
Kou -Ombo... ..	—	—	—	27	—	—	25	3	28
E fou	—	—	—	27	2	14	43	5	48
E eiba... ..	—	—	—	12	—	—	12	1	13
El Dirr	—	—	—	—	—	—	—	—	—
TOTAL	16	63	12	4,799	84	690	5,654	889	6,553

Treatment.

The following table shows the number of patients treated in the hospitals.

TABLE NO. 57.

Year	No. of In-Patients	No. of Out-Patients	No. of attend- ance to out- patient sections	Patients treated in Village Hospitals	Attendance to Village Hospitals
1940	104,475	3,015,066	5,435,477	1,175,477	2,671,104
1941	93,029	2,596,697	2,142,282	—	—
1942	95,587	2,375,913	2,358,883	—	—
1943	87,326	1,749,732	3,256,737	—	—
1944	94,895	2,286,758	3,930,336	—	—

The following table shows the number of deaths among in-patients during the last five years and their ratio to patients treated.

TABLE No. 58.

Year	No. of In-Patients	No. of Deaths	Percentage
1940... ..	104,475	6,822	6.53
1941... ..	93,029	6,943	7.46
1942... ..	95,587	7,248	7.53
1943... ..	87,326	5,860	6.71
1944... ..	94,895	5,678	5.99

The following table shows the number of operations and X-Ray examinations.

TABLE No. 59.

Year	In-Patient Operations	Out-Patient Operations	Total	X-Ray Examinations
1940... ..	37,815	80,198	118,013	47,088
1941... ..	30,890	81,781	112,671	30,226
1942... ..	33,007	79,024	112,031	26,746
1943... ..	32,110	71,096	103,206	19,605
1944... ..	32,174	73,622	105,796	21,039

VENEREAL DISEASES

The following table shows the number of prostitutes treated in the general and district hospitals during the year 1944.

TABLE No. 60.

	Number
Gonorrhoea	36
Syphilis	20
Other diseases	—
TOTAL	56

The following table shows the total number of patients treated from the venereal diseases in the general and district hospitals during the year 1944.

TABLE No. 61.

In-Patient Section			Out-Patient Section		
Gonorrhoea	Syphilis	Total	Gonorrhoea	Syphilis	Total
231	184	415	767	6,656	7,423

Chapter XI.—OPHTHALMIC HOSPITALS

New Units :

During this year, two new ophthalmic units were established in Zawyet el Na'ora and Itsa general hospitals, and two permanent hospitals in tents at Sennoures and Manfalout; thus bringing the total of ophthalmic units to 98, of which 83 are permanent and 15 travelling.

The extension of ophthalmic treatment centres to all parts of the country is being carried out gradually according to a pre-arranged plan and to the funds that are made available.

Clinical Work :

The following is a summary of the clinical work carried out during 1944 as compared with that of 1943 —

TABLE No. 62.

	1943	1944
New patients	1,048,307	1,120,901
In-patients	25,460	32,790
Operations	205,321	244,026
Out-patients attendances	6,086,272	6,945,535

The number of patients who were found blind in one or both eyes, excluding cases of cataract causing blindness, was 47,768, i.e. 3.7% of the total patients examined at the ophthalmic hospitals.

By adding the cataract cases causing blindness, the percentage becomes 3.9.

Acute ophthalmia represents 82% of the causes of blindness. The gonococcus is still the predominant etiological factor of acute ophthalmias; its percentage to total micro-organisms being 36.

Ages of Patients :

Of a total of 1,120,901 new patients treated, 91,192 or 8.1% were under one year of age; 362,920 or 32.4% between one and 15 years; 280,666 or 25.04% between 15 and 30; and 643,586 or 57.4% between one and thirty years of age. This shows that the masses appreciate the importance of ophthalmic treatment for infants, children and youths.

Ophthalmic School Clinics :

Ophthalmic clinics are at the present time provided in 36 Government primary schools in Cairo and in the provinces. Of a total of 19,021 pupils examined, 96.6% were found suffering from trachoma in its various stages. 19.2% of these were having trachoma in its most active stages, namely trachoma I and II; and as a result of ophthalmic treatment, this latter percentage fell to about 7.5.

It is noteworthy that a more accurate estimate of the prevalence of trachoma among pupils can be obtained in Government primary schools where examination and treatment are carried out regularly on pupils kept under the constant supervision and care of the treating medical officers.

Besides this, pupils of 75 other schools were examined and treated by the medical officers of the permanent or travelling ophthalmic hospitals in the localities where these units existed.

Other Services :—

Ophthalmologists of this Ministry pay regular visits to other institutes and hospitals, the chief of which are :—

Leprosy Colony and Hospital at Abu Zaabal and Suyoufia.

Mental Hospitals at Abbassia and Khanka.

Children Preventorium at Giza.

Children Preventorium at Zeitoun.

Children Dispensary at Mataria.

Fever Hospitals at Abbassia and Embaba.

Convalescence Home and Children Preventorium at Marg.

From time to time, ophthalmologists are also sent to Arish, Tor and the Oases for the examination and treatment of the inhabitants.

During pilgrimage an ophthalmologist accompanies the Medical Mission which is sent to Hedjaz to examine and treat pilgrims of all nationalities every year gratuitously. In this year, two ophthalmologists were sent, one to Mecca and the other to Medina, besides the Director of the Ophthalmic Hospitals who presided over the Medical Mission.

Facilities are also given to the ophthalmologists of other ministries to attend the ophthalmic hospitals to increase their knowledge and practice in ophthalmology and in ophthalmic surgical technique.

Experienced ophthalmologists are also detailed to ophthalmic units in other ministries and departments. A total of 153 ophthalmologists have been detailed to such units since the creation of the Ophthalmic Section until the end of 1944. This number does not include other ophthalmologists who resigned from the Ophthalmic section and might have joined such units.

Assistant midwives and female health visitors are trained at ophthalmic hospitals in ophthalmic treatment so that they may be able to deal with cases of ophthalmias and other eye diseases.

Accommodation :

The number of beds in all ophthalmic units was 2,255. Steps are taken to provide the inpatient departments of ophthalmic hospitals with more beds wherever space is available.

Post-Graduate Course of Ophthalmology :

Of 9 medical officers examined in April 1944 for the Diploma of Ophthalmology (Part I D.O.Ms.), 4 passed ; and of 3 examined in October 1944, one passed.

No medical officers entered for the final examination held in May 1944 ; 3 medical officers entered in November 1944 and two passed.

Experiments with Penicillin :

Penicillin was administered intramuscularly in cases of acute ophthalmias of various types, gonococcal ophthalmia in particular. Four hourly injections were given by day and night. Calculation of dosage was based on a dose of 2200 units per kilogramme of body-weight in 24 hours. Specimens for bacteriological examination were taken hourly during the first four hours and two hourly for the rest of the treatment. Cultures were taken when negative results were obtained.

In all cases, numbering 53, gonococci disappeared from the conjunctival discharge within 3-5 hours from the first injection. In one case, the gonococci showed great resistance and did not disappear until after 10 hours. Generally speaking, all cases treated by this method were cured, but the method is apparently tedious and impracticable, particularly so where large numbers of patients are concerned as it is the case in ophthalmic hospitals during summer.

By extending the interval between injections and doubling the dose the following findings were observed

The interval between one injection and another should not exceed 11 hours, and the injections should be maintained for at least two days. In other words, the patient should receive at least four injections with intervals of less than 11 hours in between, otherwise the bacilli will reappear, and relapse will occur. Complicated cases required longer periods of treatment.

Penicillin has a definite effect on the pneumococcus and its resulting ophthalmias. In Koch Weeks infections, however, the case is apt to improve clinically but the bacilli do not disappear and patients should be given sulphathiazol before discharge to prevent them from becoming carriers of the disease and a source of infection to others.

Penicillin has been indicated for use by all hospitals in the treatment of acute cases where loss of sight or life is threatened.

Sulphonamide Compounds :

Sulphonamide compounds are now in general use in all ophthalmic units for the treatment of acute inflammations affecting the different parts of the eye.

These were indicated in all acute ophthalmias in both children and adults with extremely good results. They were also given in trachomatous corneal complications whether infiltration, ulceration or pannus, and proved to be a prominent factor in early recovery.

Sulphonamide tablets and compounds were most effective in arresting inflammation and preventing infection in cases of dacryocystitis and panophthalmitis, particularly after cataract operations where perforation or infection is set in.

Good results were also obtained in cases of orbital cellulitis, particularly in tenonitis, after squint operations, acute inflammation of the lacrimal gland and in certain types of keratitis and abscess of cornea and dendritic ulcer.

Sulphonamide compounds were also used in ointment form in cases of suppurative blepharitis and multiple styes, and in powder form in wounds of lacrymal sacs and lids with equally good results.

Ophthalmic Library :

There is a circulating ophthalmic library in Rod el Farag Ophthalmic Hospital for the benefit of all medical officers in ophthalmic units. It is supplied with old and new ophthalmic literature and placed at the disposal of all doctors with the object of keeping them thoroughly acquainted with recent advances and new progress in the ophthalmic field. There are 228 volumes in the library which are loaned on request. Important books or those which are indispensable to recent medical officers are always provided in several copies to facilitate their circulation.

Modern Apparatus for Ophthalmic Hospitals :

The Ministry aims to provide Ophthalmic units with modern apparatus and instruments, but in view of the present war circumstances it was not possible to do so.

Chapter XII.—PHARMACIES

1.—*Private Pharmacies :*

The Ministry granted this year four permits for new pharmacies and agreed to the transfer of ownership of eleven pharmacies from non pharmacists to qualified pharmacists. This brings the total number of pharmacies in operation in Egypt to 487.

2.—*Cairo Night Service Pharmacies.*

Of the four night service pharmacies in operation in Cairo during last year, one ceased to give this service for lack of pharmacists, leaving three in operation. These dispensed 7,367 prescriptions during the night in addition to patented medicines which are dispensed without prescriptions.

3.—*Simple Drug Stores :*

Eight permits were granted this year by the Ministry (1 in Cairo, 2 in Kaliubia, 1 in Menoufia, 2 in Sharkia, 1 in Qena and 1 in Giza).

4.—*Trading in Medicinal Plants :*

Four permits were granted this year (three in Cairo and one in Alexandria).

5.—*Medical Practitioners authorised to prepare drugs in their Clinics for their private patients*

These were as follows :—

2 in Kaliubia Province.

2 „ Menoufia „

1 „ Behera „

1 „ Sharkia „

1 „ Dakahlia „

5 „ Gharbia „

2 „ Giza „

1 „ Beni-Suef „

1 „ Minia „

1 „ Qena „

1 „ Girga „

6.—*Schedule IV Drug Stores :*

5 permits were granted this year for Schedule IV Drug Stores (3 in Cairo, 1 in Minia and 1 in Menoufia).

7.—*Schedules 1 and 2 Drug Stores :*

Nine permits were granted this year as follows :—

6 in Cairo, 2 in Alexandria and 1 in Giza. One permit was withdrawn.

8.—*Registration of Egyptian Specialities :*

A total of 122 permits for the preparation and sale of Egyptian specialities were granted this year. 109 specialities were refused registration. This brings the total registered Egyptian specialities to 1,155.

9.—*Pharmaceutical Laboratories :*

Eight new pharmaceutical laboratories were authorised in Cairo this year and two were closed down.

10.—*Violation of the Law :*

A total of 384 contraventions were brought by the Ministry before the courts. Of these, 148 were for trading in and keeping poisonous drugs without permits, 25 for practising pharmacy without authorisation and 211 were against pharmacists and assistant pharmacists for contravening the law.

11.—*Agents :*

During the year 13 permits were granted by the Ministry to agents for trading in drugs. These were 7 in Cairo and 6 in Alexandria.

Part IV.—ENDEMIC DISEASES

Chapter XIII.—ANCYLOSTOMA AND BILHARZIA

New Units :

During this year, two new units were inaugurated namely :—

- (1) A Branch of Beni-Mazar District Hospital, inaugurated on November 18, 1944.
- (2) A Branch of Girga District Hospital inaugurated on December 2, 1944.

The total number of units thus reached 34.

N.B.—In spite of the inauguration of the above-mentioned two new units, the total number of Bilharzia and Ancylostoma units remained the same as in 1943, the two units attached to Minia Provincial Council, at Minia and Maghagha having been closed down.

Number of Patients Treated :

In the following table the number of new patients, injections, and anthelmintic doses are shown as compared with corresponding numbers of the previous year (1943).

TABLE No. 13

	1943	1944
Number of new patients	1,052,474	1,043,218
„ injections	3,527,622	3,423,332
Anthelmintic doses	450,088	283,340

The deficiency in the number of new patients this year is attributed to the engagement of 11 units in the Bilharzia treatment campaign in Fayoum Province.

Treatment of Pupils :

Pupils examined	51,864
Number of Bilharzia infected	13,819
„ Ancylostoma infected	4,293
„ Ascaris infected	11,782
Anthelmintic doses administered	11,170
Anti-Bilharzia injections given	8,619

Treatment of Territorial Force

- 1,569 soldiers were examined this year.
- 814 „ „ positive for Bilharzia.
- 469 „ „ „ Ancylostoma.
- 35,013 Anti Bilharzia injections given.
- 434 Anthelmintic doses administered.

Units undertaking Treatment in Neighbouring Localities.

Bilharzia and Ancy. units were directed to undertake treatment in neighbouring localities during intervals when attendance at their headquarters is at its lowest, especially during winter. Owing, however, to transport difficulties and lack of medical officers, this arrangement was only carried out by No. 9 Ancylostoma Unit at Abu-Kebir which undertook the treatment of the inhabitants of the Inspectorate of the Royal Khassa at Faridia village.

Treatment in In-Patient Sections:

Last year, 4 beds were secured in each of the following hospitals for the treatment of Endemic Diseases patients whose conditions do not permit treatment in out-patient Sections:—

- (1) At Dikernis, Menouf, Ayat, Aga and Rosetta District Hospitals.
- (2) At Damietta, Port Said, Kaliub, Mansoura, Zagazig, Shebin el Kom and Assiut General Hospitals.

More beds have been secured this year as follows:—

4 beds in each of Benha, Fayoum and Aswan General Hospitals.

2 beds in Zawyet el Na'oura District Hospital.

The number of hospitals providing beds for In-Patient treatment of Endemic Diseases is 16 with a total of 62 beds reserved for the purpose:—

The number of in-patients	...	...	555
Cases cured	...	...	288
Cases improved	...	...	220

Co-operation of Bilh. and Ancy. Units and Out-Patient Sections in Hospitals:

Two results have been achieved by the co-operation between Bilh. units and out-patient sections in Hospitals:—

- (1) Relief of congestion in out-patient Section. All patients must first report to the Ancylostoma branches for examination and only those requiring special treatment are referred to the out-patient departments.
- (2) Owing to shortage of M.Os., 2nd M.Os. of district general hospitals were engaged in Ancylostoma work in branches which had no M.Os. appointed for them.

Treatment of Pellagra:

Last year, dried dates and jews mallow, which are rich in nicotinic acid, were used as a substitute for yeast powder—then in short supply—in the treatment of Pellagra. As the results were not encouraging, the usual treatment with yeast and eggs was reverted to.

Regulations for Endemic Diseases Hospitals:

Endemic diseases technical instructions were first published in book form in 1926; a new edition has since been published including new technique in diagnosis and treatment of these diseases. The new book is divided into four sections:—

- (1) Working hours, duties of staff, admission and attendance of patients, recording examination and treatment results, examination and treatment of pupils.
- (2) Procedure of examination of specimens.
- (3) Clinical examination of patients with special consideration to endemic diseases characteristics.
- (4) Details of parasites treated and drugs used in treatment. Precautions against drug intoxication and methods of treatment thereof. Also treatment of deficiency diseases.

The book was published in 1944 and distributed to all Bilharzia and Ancylostoma units, departments and sections of this Ministry, Public Health Inspectorates and all interested medical Authorities in other Ministries and Departments.

Drug Intoxication:

Four fatal cases of drug intoxication were recorded this year: two from tartar emetic and two from oil of chenopodium. Two cases of Carbon tetrachloride intoxication were cured.

Treatment Campaign in Fayoum :

1. Reference was made in last year's report to the concentration of treatment in one locality at a time which was necessitated by lack of means of transport. According to the new method, the treating unit arrives at the village with an adequate staff to carry out the wholesale examination and treatment of all the population in the minimum of time (five weeks on the assumption that a complete tartar emetic course of treatment may require three additional injections over and above the regular number of 12 injections).

2. As the strength of the treating unit is obviously governed by the number of the inhabitants of the village, and as this varies considerably in one village from another (between 500 and 10,000), it was decided to undertake the wholesale examination and treatment of a large village with a view to studying the practical application of the method. Miniet el Hait village, with a population of 9,353 inhabitants was selected for the purpose. A unit composed of four medical officers undertook the examination and treatment. Work was started on 12th March and completed on 24th April during which period a total of 3,645 infected persons were treated.

Meanwhile, another experiment was carried out in Hawaret el Maktaa village, with a population of 4,761 inhabitants. Treatment of Bilharzia with intramuscular Stibophen injections was carried out by specially trained laboratory assistants to overcome the difficulty of shortage of medical officers. Treatment of the 1,788 infected persons was started on 2nd July and completed on 1st August. Four laboratory assistants were engaged under the supervision of a medical officer.

In the light of these experiments, it was possible to lay down all the necessary details regarding the composition of the units, reception of patients, recording of names, summoning of infected persons and methods of examination and treatment. This new method has since been adopted in other localities by 10 units which have joined the campaign. The following is a brief statement of the work done during 1944 :—

TABLE NO. 64 SHOWING THE WORK ACCOMPLISHED DURING 1944

Unit		Village	Population
Bilh.	Unit No. 4...	Minyet el Heit	9,352
		Ezbet Kalamshah	2,115
		Sesta	1,753
		Abu Dafia	1,165
"	" " 5...	Itsa	4,457
"	" " 7...	Kasr el Baid	3,935
		Kalamshah	7,282
		El Hamdia	1,226
"	" " 11...	El Azab	2,179
		Shedmoh	3,955
"	" " 14...	Hawaret Adlan	4,534
		El Lahon	5,237
"	" " 15...	Totoma	8,595
Bilh.	Hospital No. 14...	El Hagar	5,588
"	" " 19...	Hawaret el Makta	4,761
		Demeshkein	3,021
"	" " 25...	El Cahrak	9,635
"	" " 28...	Kalhana and Minshat Ramsi	2,429
		Defenou	5,688
TOTAL			86,242

Chapter XIV.—MALARIA

The incidence of malaria is still higher this year than in the previous year, the general ratio being 20·1% as against 16·9% last year. This is attributable to the increased activities of the malaria units on one hand and the gambia epidemic in Upper Egypt during the past two years on the other. This will be dealt with in a later chapter.

Malaria Units:

The permanent stations remained the same in number as in 1942, namely 10. The Station in Giza was attached to the Gambia Eradication Section. A new permanent malaria station was provided in each of Biala (instead of Teh el Baroud) and the Dakhla and Kharga Oases. The travelling stations were also the same in number as in the previous year. The quantities of drugs distributed this year increased in proportion with the increased number of patients and units.

Table No. 65 shows the distribution of the permanent and travelling stations as well as outposts during the year.

Blood Specimens:

A total of 75,845 blood specimens were taken from Lower and Upper Egypt during the year for examination. Of these 15,289 were returned positive for malaria (new or relapses) giving a ratio of 20·1%. Tables Nos. 66, 67 and 68 show the distribution of these cases according to the three categories:—

- (a) Patients attending Malaria Units,
- (b) Suspected persons in their homes, and
- (c) Patients undergoing general examination in Lower Egypt, Upper Egypt and in both. It is noted that the ratio is highest in the first category and lowest in the last; those attending the malaria stations are almost always suffering from malaria.

New Cases and Relapses :

Table No. 68 shows that 2,502 or 16·3% of all positive cases were new and 12,787 were relapses.

In addition, the Fouad I Institute and Hospital for Tropical Diseases examined such blood samples as were sent from different parts of the country. Table No. 69 gives the distribution of these specimens according to localities and the results of examination.

Age Distribution of Malaria:

Table No. 70 gives the general ratio of malaria distributed according to age. Infections in children are new hence the ratio is usually lower than other age groups.

Types of Malaria:

Table No. 71 gives the incidence of the three types of malaria (benign, malignant and quartan) in Lower Egypt and the Canal and Suez Governorates, and in Upper Egypt, (that part under the control of the Malaria Section) and Frontiers Districts and percentage to total positive cases.

Monthly Incidence of Malaria:

Tables Nos. 72 and 73 give the monthly incidence of malaria. The former deals with Lower Egypt and the Canal and Suez Governorates; and the latter with Upper Egypt and Frontiers Districts. The incidence of the benign type reached its peak between the months of July and October and that of the malignant type between September and December.

Malaria Cases recorded in Governorates and Provinces during 1943 and 1944 :

Table No. 74 shows that the number of cases recorded this year was 239,548 cases more than the previous year. There were 540 more deaths from malaria than in 1943. This is attributable to the spread of malaria in the Southern Provinces caused by the presence of *anopheline gambia*.

Search for Mosquito Breeding Places:

Malaria units adopted the same methods as last year in search for and detection of mosquito breeding places. In estimating the danger of these breeding places, the same considerations in so far as it concerns malaria and bilharzia were given this year as in the previous year. Such breeding places as were considered dangerous were reported to the Village Affairs Dept. and other Departments concerned for extermination. Tables Nos. 75 and 76 demonstrate the activities of these units.

Control Measures:

The same measures adopted last year were taken this year. A total of 244,682 kgs. of Paris Green and 145,258 kgs. of Mazut were used this year as shown in table No. 77. Permanent control measures were undertaken by the Village Affairs Department of this Ministry against its budget. According to table No. 78, some 40 ponds of an area of 30 feddans one karat and one sahm were filled in at a total cost of L.E. 17,598.830 mills.

Warnings and Contraventions :

Law No. 1 of 1926 was enforced where necessary. Warnings were served on offender to remove the cause of offence and contraventions were drawn up for failing to do so. Sentences were given in some cases ordering the Village Affairs Department to remove the cause of the offence and debit the proprietors with the cost.

Table No. 79 gives the number of warnings served and contraventions drawn up in Lower and Upper Egypt.

Filariasis (Elephantiasis):

Cases of filariasis were discovered in Fareskour town, Dakahlia Province and Belbeis town, Sharkia Province. Of 368 blood stains taken from the former, one was returned positive or a ratio of 0.27 %. The only case taken from the latter town proved positive for filariasis.

Drugs and Treatment:

Drugs for treatment were distributed after microscopical examination. The method of treatment this year was the same as in previous years. Table No. 80 gives the distribution of these drugs in Lower and Upper Egypt.

Malaria Law No. 1 of 1926 and Rice and Sugarcane Cultivations:

There was no need this year for the application of the law to new localities. Restriction of rice cultivation was effected by Military Orders. Military Order No. 472 was published to this effect.

Experiments on spraying water intakes of rice cultivations with Paris Green were suspended. No ministerial arrêtés were issued prohibiting rice cultivation within any locality.

Military Orders:

Military Order No. 472 was issued on March 8, 1944, restricting rice cultivations thus enabling the control measures to be taken against malaria mosquito carriers, the *anopheline gambia* in particular. This includes extermination of breeding places. Instructions were circulated for strict enforcement of the order.

Military Order No. 505 was also published in 1944 providing for the control measures against the spread northwards of the malaria epidemic which was caused by the *gambia* mosquito.

Article 3 of the order prohibits the sale of drugs issued gratis to patients for treatment. Article 4 provides for the punishment of offenders and seizure of drugs.

Another Military Order No. 549 was published on December 19, 1944, regarding the possession of pyreth in plants and extracts used in insecticides and trading therein. This provides that the Ministry of Public Health should be notified of the quantities of pyrethrin plant—dried, ground, extracted or prepared—which may be in the possession of any person. It also provides that the Ministry of Agriculture be notified of any areas in which pyrethrin is cultivated, and that the whole crop be handed to that Ministry at a fixed price. Article 6 prohibits the import of any substance containing pyrethrin without a permit from the Ministry of Public Health.

Ministerial Arrêtés :

No Ministerial Arrêtés were issued regarding the cultivation of aquatic plants. Military Order No. 155 of January 13, 1941 dealing with malaria control measures in localities occupied by troops being considered adequate for the purpose.

Propaganda :

Propaganda was carried out throughout the year with the cooperation of the Health Propaganda Section. The object was to instruct the population in the symptoms of malaria, the cause of its propagation, the means of infection and methods of treatment and protection.

Complaints :

All complaints reaching the Ministry or units received careful consideration and the causes of complaint were removed.

TABLE NO. 65

District	Permanent Station	Travelling Station	Outpost
<i>A.—Lower Egypt</i>			
Behera... ..	Edku, Kafr el Dawar	{Kafr el Dawar (3) (not yet started)	El Montazah, Bouselli, El Nazlia, Khorshed.
Gharbia	{Fowa Kafr el Sheikh Biala. (instead of Teh el Baroud.)	{Desouk (5)	Shabe, Kallin.
Dakahlia	Faraskour	Dekernes (4)	{Kafr Abu Nasir. {El Malsoura, Beni-Ebed,
Sharkia	{Abou Kebir (not yet started).	Belbeis (2)	{El Faridia, Tel El Kebir, {Faroukia, Anshas,
Canal	Ismailia	—	{Abou Sower, Nafisha, Dabis, {En Gosen, Sa abiom, Abou {Sultan, Port-Said, El Qantara
Suez	Suez	—	El Shalloufa, El Kobli.
Kaliubia	—	Toukh (6)	{Baha, Shebin El Kanatir, {Kaliub, Shoubra El Khima.
Menoufia	Quesna (not yet started)	—	—
<i>B.—Upper Egypt.</i>			
Fayoum	Fayoum	Abshaway, (1)	—
Western Desert... ..	{Wadi El Natroun ... Swa (not yet started).	—	—
Frontiers Govern. ...	Dakla and Kharga Oases	—	Baharia
Southern Desert ...	—	—	—

**TABLE No. 66.—SHOWING DISTRIBUTION OF BLOOD FILMS EXAMINED FOR MALARIA IN
LOWER EGYPT AND THE GOVERNORATES OF CANAL AND SUEZ, DURING THE YEAR 1944**

Category	No. of Specimens	Positive			
		New	Relapses	Total	%
1. Patients visiting Stations and their Banias	32,834	2,098	9,992	12,090	36·8
2. Suspected Cases from persons in their residence	9,943	213	718	961	9·6
3. General examination	18,858	39	916	955	5·06
GRAND TOTAL	61,635	2,350	11,626	14,006	22·7

**TABLE No. 67.—SHOWING DISTRIBUTION OF BLOOD FILMS EXAMINED FOR MALARIA IN
UPPER EGYPT AND THE SOUTHERN AND WESTERN DESERT GOVERNORATES
EXCLUDING PROVINCES UNDER CONTROL OF GAMBIA E.S.**

Category	No. of Specimens	Positive			
		New	Relapses	Total	%
1. Patients visiting Stations and their Banias	3,042	46	406	452	14·8
2. Suspected Cases from persons in their residence	2,806	3	57	60	2·1
3. General examination	8,362	73	698	771	9·3
GRAND TOTAL	14,210	122	1,161	1,283	9·0

**TABLE No. 68.—SHOWING GENERAL DISTRIBUTION OF BLOOD FILMS EXAMINED FOR MALARIA IN EGYPT
(LOWER AND UPPER EGYPT, CANAL AND FRONTIER ZONE)
EXCLUDING PROVINCES UNDER CONTROL OF G.E.S.**

Category	No. of Specimens	Positive			
		New	Relapses	Total	%
1. Patients visiting Stations and their Banias	35,876	2,144	10,398	12,542	34·9
2. Suspected Cases from persons in their Residence	12,749	246	775	1,021	8·00
3. General examination	27,220	112	1,614	1,726	6·3
GRAND TOTAL	75,845	2,502	12,787	15,289	20·1

TABLE No. 69—SHOWING NUMBER OF SPECIMENS EXAMINED FOR MALARIA BY
RESEARCH INSTITUTE DURING THE YEAR 1944

Governorate or Province	From Hospitals and Research Institute			From Ancylostoma Units		
	No of Spec.	Positive		No of spec.	Positive	%
Alexandria	533	3	0.5	—	—	—
Dakhla Oasis	2,844	334	11.7	—	—	—
Baharia Oasis	535	34	6.3	—	—	—
Ismailia	2,065	86	4.1	—	—	—
Suez	—	—	—	1,042	460	44.1
Wadi el Natroun	65	2	3.07	—	—	—
The Hospitals	11,769	2,760	23.4	—	—	—
Malaria Sec.	1	1	100	—	—	—
Research Ins.	1,586	614	38.6	—	—	—
Other Places	27	13	48.1	—	—	—
Behera... ..	3,491	106	3.03	—	—	—
Gharbia	1,605	256	15.2	9,328	3,245	34.7
Dakahlia	605	5	0.8	—	—	—
Kalubia	704	17	2.4	—	—	—
Giza	297	24	8.08	—	—	—
Fayoum	1,898	45	2.3	5,569	471	8.4
Beni-Suef	76	7	9.2	—	—	—
Minia	306	34	11.1	—	—	—
Assut... ..	7,544	1,342	17.9	—	—	—
Girga	4,939	861	17.8	—	—	—
Qena	44,700	10,009	22.6	—	—	—
Aswan	32,391	4,471	13.8	—	—	—
TOTAL	119,507	21,167	17.7	15,939	4,176	26.1

TABLE No. 70.—SHOWING MALARIA CASES IN DIFFERENT AGE GROUPS IN LOWER EGYPT, THE CANAL AND SUEZ GOVERNORATES,
UPPER EGYPT AND FRONTIERS ZONE DURING 1944.
EXCLUDING PROVINCES UNDER CONTROL OF GAMBIA ERADICATION SECTION

Governorate or Province	Children under 1 year			From 1 to 15 years			From 16 to 35 years			Above 36 years		
	No. of Specimens	Positive	Ratio %	No. of Specimens	Positive	Ratio %	No. of Specimens	Positive	Ratio %	No. of Specimens	Positive	Ratio %
Behera	495	77	15.5	6,470	1,475	22.7	3,414	1,153	33.8	1,827	691	73.8
Gharbia	429	68	15.8	6,401	2,126	34.7	5,629	1,97	31.8	2,726	793	29.09
Dakahlia	352	32	9.02	3,504	473	13.5	3,476	994	28.6	2,20	580	26.008
Canal	159	6	3.7	1,978	93	4.4	2,025	183	9.0	1,044	35	3.3
Suez	494	2	0.4	2,908	133	4.4	3,211	91	2.8	1,016	42	4.1
Sharkia	97	39	41.2	2,966	930	31.3	3,698	1,052	28.4	2,318	499	21.5
Kalubia	22	5	23.6	1,269	345	27.1	1,097	223	20.3	301	64	21.2
TOTAL	2,048	229	11.1	25,76	5,589	21.8	22,549	5,493	24.3	1,1402	2,706	2.55
Western Desert	10	3	30	60	10	16.6	77	12	15.5	54	4	7.4
Raycum	10	2	18.1	4,653	345	7.4	3,240	274	8.4	1,02	139	12.8
Southern Desert	6	1	16.5	2,709	325	11.6	1,631	142	8.7	678	26	3.8
TOTAL	26	6	22.2	7,422	680	9.3	4,918	428	8.6	1,814	169	9.3

TABLE No. 71.—SHOWING NO. OF CASES ACCORDING TO MALARIA SPECIES IN LOWER EGYPT AND THE CANAL AND SUEZ GOVERNORATES
AND IN UPPER EGYPT AND THE SOUTHERN AND WESTERN DESERT GOVERNORATES DURING 1944

Provinces or Governorate	Total of specimens	Total posit. cases	Ratio %	BENIGN TERTIAN				MALIGNANT TERTIAN				QUARTAN MALARIA			
				No.	New	Relapses	Ratio to posit. %	No.	New	Relapses	Ratio to posit. %	No.	New	Relapses	%
Behera...	12,206	3,396	27.8	2,871	329	2,542	84.5	525	47	478	15.4	—	—	—	—
Gharbia...	15,184	4,784	31.5	3,250	876	2,374	7.1	1,534	313	1,221	32.06	—	—	—	—
Dakahlia...	9,362	2,079	21.7	1,771	33	1,738	85.1	308	8	300	14.8	—	—	—	—
Canal...	5,206	322	6.1	202	44	158	62.7	120	10	110	37.2	—	—	—	—
Suez...	7,709	268	3.4	102	—	102	38.5	166	3	163	61.9	—	—	—	—
Sharkia...	9,079	2,520	27.7	2,002	416	1,586	79.4	518	161	357	2.5	—	—	—	—
Kalubia...	2,639	637	23.6	553	140	413	88.3	84	—	84	13.04	—	—	—	—
TOTAL ...	61,635	14,006	22.7	10,751	1,838	8,913	76.05	3,255	542	2,713	23.2	—	—	—	—
Wadi el Natroun ...	201	29	14.5	15	15	—	5.9	14	6	8	48.2	—	—	—	—
Fayoum ...	8,985	760	8.4	406	30	376	53.4	352	67	285	46.3	—	—	2	0.3
Southern Desert ...	5,024	494	9.8	344	4	340	69.6	142	—	142	28.8	—	—	8	1.6
TOTAL ...	14,210	1,283	9	765	49	716	59.6	598	73	435	39.5	10	—	10	0.3

TABLE NO. 72.—SHOWING MONTHLY DISTRIBUTION OF MALARIA CASES ACCORDING TO SPECIES IN LOWER EGYPT AND THE CANAL AND SUEZ GOVERNORATES DURING 1944

Month	Total of Specimens	Total of Positive Cases	BENIGN MALARIA				MALIGNANT MALARIA				QUANTAN MALARIA			
			No.	New	Relapses	Ratio %	No.	New	Relapses	Ratio %	No.	New	Relapses	Ratio %
January ...	3,28	596	307	55	252	5.18	289	51	238	51.3	—	—	—	—
February...	3,792	369	137	17	120	3.16	232	3	229	6.1	—	—	—	—
March ...	4,869	252	163	26	137	3.3	89	12	77	1.8	—	—	—	—
April ...	4,664	205	145	61	84	3.3	60	12	48	1.2	—	—	—	—
May ...	5,542	833	793	160	633	14.1	40	8	32	0.7	—	—	—	—
June ...	5,714	1,197	974	157	817	16.8	223	126	97	3.9	—	—	—	—
July ...	5,775	1,681	1,493	172	1,321	25.8	188	13	175	3	—	—	—	—
August ...	7,304	2,290	2,000	189	1,811	27.3	290	36	254	3.9	—	—	—	—
September	7,78	2,886	2,321	619	1,702	30.7	365	108	457	7.1	—	—	—	—
October ...	6,157	2,232	1,598	241	1,357	25.9	634	128	506	10.2	—	—	—	—
November	2,768	885	536	101	435	19.3	349	33	316	12.2	—	—	—	—
December	2,124	580	284	40	244	13.3	296	12	284	13.9	—	—	—	—
TOTAL	61,635	14,066	10,751	1,838	8,913	17.4	3,255	542	2,713	10.2	—	—	—	—

TABLE No. 72—SHOWING MALARIA CASES ACCORDING TO SPECIES IN UPPER EGYPT AND THE SOUTHERN AND WESTERN DESERT GOVERNORATES, DISTRIBUTED THROUGHOUT THE MONTHS OF THE YEAR 1944

Month	Total of Specimens	Total of Positive Cases	BENIGN MALARIA				MALIGNANT MALARIA				QUANTAN MALARIA			
			No.	New	Relapses	Ratio %	No.	New	Relapses	Ratio %	No.	New	Relapses	Ratio %
January ...	874	31	13	2	11	1.4	18	2	16	2.05	—	—	—	—
February ...	1,032	36	21	—	21	2.03	14	1	13	1.3	1	—	1	0.007
March ...	1,642	92	54	1	53	3.2	38	3	35	2.3	—	—	—	—
April ...	1,453	88	68	7	61	4.6	20	7	13	1.3	—	—	—	—
May ...	918	53	41	8	33	4.4	12	5	7	1.3	—	—	—	—
June ...	1,126	71	50	7	43	4.4	21	1	20	1.8	—	—	—	—
July ...	1,156	56	56	4	52	4.8	—	—	—	—	—	—	—	—
August ...	1,052	78	61	2	59	5.7	17	2	15	1.6	—	—	—	—
September ...	537	79	50	2	48	9.3	29	12	17	5.4	—	—	—	—
October ...	1,263	268	161	8	153	12.7	107	20	87	8.4	—	—	—	—
November ...	2,125	255	113	3	110	5.3	141	11	130	6.6	1	—	1	0.004
December ...	1,032	176	77	5	72	7.4	91	9	82	8.8	8	—	8	0.7
TOTAL ...	14,210	1,283	765	49	716	5.5	508	73	435	3.5	10	—	10	0.07

**TABLE No. 74.—SHOWING NUMBER OF MALARIA CASES AND
DEATHS NOTIFIED DURING THE YEARS 1943 AND 1944**

GOVERNORATE OR PROVINCE	1943		1944		Difference	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
Cairo	575	30	743	22	+ 159	— 8
Alexandria	991	25	458	22	— 533	— 3
Ismailia	440	6	178	1	— 262	— 5
Port-Said... ..	149	1	94	1	— 55	00
Suez... ..	471	39	346	8	— 125	— 31
Damietta	22	—	8	—	— 14	—
Sinai and The Red Sea ...	28	—	240	—	+ 212	00
Southern Desert	246	1	16	—	— 230	61
Western „	12	—	105	—	+ 93	—
Behera	713	3	536	2	— 177	— 1
Dakahlia	60	—	121	4	+ 61	+ 4
Gharbia	223	4	189	2	— 34	— 2
Menoufia	47	1	25	2	— 22	+ 1
Sharkia	519	3	497	1	— 22	— 2
Kaliubia	1,395	—	889	2	— 506	+ 2
Giza	96	2	121	—	+ 25	— 2
Beni-Suef	75	3	66	3	— 9	—
Fayoum	793	1	513	6	— 280	+ 5
Mnia	95	1	105	2	+ 10	— 1
Aisiut	252	2	36,961	6	+ 36,709	+ 4
Girga	214	6	19,281	5	+ 19,067	— 1
Qena	5,461	660	164,463	1,396	+ 159,002	+ 736
Aswan	3,633	553	30,132	396	+ 26,479	— 157
TOTAL	16,530	1,341	256,978	1,881	+239,548	+ 540

TABLE No. 76.—SHOWING No. OF EXAMINATIONS OF DIFFERENT BREEDING PLACES IN LOWER EGYPT AND CANAL ZONE AND IN UPPER EGYPT AND FRONTIER ZONE DURING THE YEAR 1944

Province or Governorate	Units									
	Burrow-Pits	Railway Ditches	Unburnt Brick	Wells and Saksias	Drains	Canaie & Irrigation	Ponds	Marshes	Rice Cultivation	Sugar Cane Cultivation
Behera...	495	30	8	—	4,237	1,495	lake 500	145	—	—
	185	—	—	—	18	54	29	6	1,141	—
	160	—	—	—	2,400	430	202	338	330	—
Dakahlia	—	120	1	—	21,000	18,000	—	—	460	—
	54	—	—	—	34	98	636	95	142	—
	6	—	—	—	923	20	100	113	4	—
Fowah	103	—	—	16	21	—	918	14	357	—
Kafr el Sheikh	—	72	—	—	—	—	240	15	20	—
Biala	—	4	—	3	60	23	12	196	—	7
Desouk	46	—	—	—	—	—	694	6	—	—
Toukh	10	—	—	—	—	—	95	—	24	—
Belbe's	—	84	—	—	5,117	—	452	—	—	—
Aushas	—	189	—	—	4,766	246	2,302	44	81	—
Ismailia	148	48	—	—	2,431	724	284	—	—	—
Suez...	38	—	—	—	—	—	—	—	—	—
TOTAL	1,245	547	9	19,47,242	1,139	6,218	972	2,559	7	5
Fayoum	—	211	117	—	507	327	749	99	—	—
Absh way	—	—	—	—	108	—	22	16	—	—
Dakhla Oasis	10	6	—	20	48	7	17	39	9	—
Wadi el Natroun	—	—	—	50	—	—	—	—	—	—
TOTAL	10	217	117	70	1,063	334	788	154	9	—

TABLE NO. 77.—SHOWING QUANTITIES OF PARIS GREEN
AND MAZUT CONSUMED THROUGHOUT THE YEAR 1944

District	Province or Governorate	Station	Paris Green	Mazut
			Kilograms	kilograms
Lower Egypt and Canal Zone ...	Behera ...	Idku	—	8·444
		Kafr el Dawar...	3	6·945
	Gharbia ...	Fowa	32	—
		Kafr El Sheikh...	52·010	1·670
		Biala	0·165	2·094
	Dakahlia ...	Faraskour... ..	30·000	16·980
		Dekernis	—	850
	Canal... ..	Ismailia	41	17·377
	Suez	Suez	13·440	29·660
	Sharkia ...	Belbeis	—	10·420
		Anshas	—	21·700
	Kaliubia ...	Toukh	15	15·572
TOTAL			186·606	131·722
Upper Egypt ...	Fayoum ...	Fayoum	46·076	10·916
		Abshaway... ..	12	2·600
	TOTAL		58·076	13·516
	GRAND TOTAL...		244·682	145·238

**TABLE No. 78.—SHOWING BIRKAS FILLED IN DURING THE FISCAL YEAR 1943-1944
BY THE VILLAGE AFFAIRS DEPARTMENT.**

Debited	No. of Birkas	Total Area			Total cost		Remarks
		F.	K.	S.	L.E.	Milliemes	
1.—Debited against supplementary funds of malaria section.							
Filling in birkas at Tahanoub village, Shebin el Kanatir District, Kaliubia Province ...	4	3	22	16	3,358	675	
Filling in Birkas at Ballana village, Eneiba District, Aswan Province	12	16	4	16	3,880	730	
Filling in Birkas at Eklit and Mansouria District, Aswan Province	15	4	3	17	1,536	—	
TOTAL	31	24	7	1	8,775	405	
2.—Debited against Provincial Council Accounts.							
Filling in Birkas at Tahanoub vill. Shebin el Kanatir District, Kaliubia Province	2	2	3	—	3,557	785	
3.—Debited against Girga Provincial Council Accounts.							
Filling in Birka at Manshah. village, Girga District	3	2	18	—	3,442	810	
Filling in Birka at Nagah el Tina and Awlad Yahya Bahari, Girga District	3	—	21	—	1,820	880	
GRAND TOTAL ...	39	30	1	1	17,596	830	

TABLE No. 79.—SHOWING NO. OF WARNINGS AND P.Vs. OF CONTRAVENTION, DRAWN UP BY MALARIA UNITS AND THEIR BRANCHES IN LOWER EGYPT AND CANAL ZONE AND IN UPPER EGYPT AND THE SOUTHERN AND WESTERN DESERT GOVERNORATES DURING THE YEAR 1944.

Province or Governorate	Unit	Burrow pits or puddles		Filling or covering disused wells or sakias and abolishing pumps		Cleaning drains or Miskas		Cleaning ponds or marshes		Prohibition of rice or sugar-cane cultivation	
		Ws.	P. Vs.	Ws.	P. Vs.	Ws.	P. Vs.	Ws.	P. Vs.	Ws.	P. Vs.
Behera...	Idku ...	—	—	—	—	159	90	—	—	173	47
	Kafr el Dawar ...	—	—	—	—	138	48	—	—	—	309
Gharbia ...	Kafr el Sheikh ...	3	—	9	—	4	—	—	—	—	—
	Bila ...	—	—	—	—	15	—	—	—	—	—
Dakhlia ...	Dekernis ...	—	—	—	—	5	—	—	—	—	—
Canal ...	Imailia ...	—	—	1	1	154	34	—	11	—	—
Suez ...	Suez ...	—	—	—	—	109	5	—	—	—	—
Sharkia ...	Belbeis ...	—	—	1	—	—	—	—	—	—	—
Kaliubia ...	Toukh... ..	—	—	—	—	51	21	—	—	—	—
	TOTAL ...	3	—	11	1	635	198	—	11	173	356
Fayoum ...	Fayoum ...	—	—	—	—	2	—	—	—	—	—
	Abshaway ...	—	—	—	—	5	6	—	—	—	—
	TOTAL ..	—	—	—	—	7	6	—	—	—	—

TABLE No. 80.—SHOWING TOTAL QUANTITIES OF MAIN DRUGS DELIVERED FOR TREATMENT DURING THE YEAR 1944

Kind of drug	Lower Egypt	Upper Egypt	Total
a.—Quinine (2 grains)	28,479 Tablets	20,939 Tablets	49,418 Tablets
" (5 "	14,446 "	4,007 "	18,453 "
" (Chocolate)	14,987 "	5,328 "	20,315 "
b.—Plasmochine (Simple 1 cgm.)	6,834 "	25 "	6,859 "
" " 2 "	2,844 "	1,032 "	3,876 "
" " "	—	—	—
" (Comp. 0.5 "	31,117 "	10,451 "	41,568 "
" " 1. "	22,302 "	3,106 "	25,408 "
c.—Atebrine	176,829 "	28,758 "	205,587 "

NB.— The above drugs do not include the quantities consumed in the treatment Campaign against A. Gambia in Upper Egypt.

Chapter XV.—A. GAMBIA IN EGYPT

By the strenuous efforts directed against A. Gambia, the Ministry was able to vanquish this mosquito.

The Royal Visit :

The 11th of February 1944 was a red-letter in the history of eradication of A. Gambia in Egypt. His Majesty the King had, since the invasion of Upper Egypt by A. Gambia taken special interest in the campaign. It was on His Birthday in 1944 that His Majesty decided to pay the afflicted villages a visit to see for himself how the campaign was progressing. There, His Majesty visited the sick in their homes disregarding all danger of infection, thus giving the example for self-denial and sacrifice.

As a matter of fact the Royal visit was a great stimulant in that energies were soon after intensified and funds became abundant; all of which accelerated the campaign towards a successful end.

Funds :

On the 26th of February, the Council of Ministers approved L.E. 100,000 for both eradication and relief. On the 8th of March this fund was raised to L.E. 700,000. On the 27th of April it was raised once more to one million pounds which were distributed between the Ministry of Public Health and the Ministry of Supplies as follows :-

L.E. 828,000 allocated for treatment and relief. L.E. 150,000 for eradication service and L.E. 22,000 for miscellaneous expenditures. On the 8th of June an additional sum of L.E. 100,000 was allocated for eradication work. Besides, a sum of L.E. 60,000 from the funds of the Higher Malaria Commission for year 1943/1944 was allocated for Gambiae Control.

On the 16th of November another half a million pounds was granted for the continuation of eradication and treatment services.

Mechanical Transport :

It became possible in 1944 to overcome the difficulty of transport which had greatly impeded the progress of anti-gambiae work. The Ministry of National Defence supplied the campaign with 60 military cars, with military drivers and assistants and personnel for maintenance and repair.

In August, this Ministry was able to requisition 10 cars which were sent directly to the field.

Under the Lend-Lease Act, the service was able to take over 36 cars from the Allied Armies with sufficient spare parts and a technical N.C.O. to supervise the maintenance of the cars.

It is to be pointed out that all these vehicles were engaged in mosquito eradication. There were others assigned for treatment, relief and filling of birkas.

Supplies :

During 1944 the campaign was amply supplied with insecticides

Through the M.E.S.C., 68 tons of Paris-green were received in September. This provided a sufficient stock and it was possible to use it as the main larvicide. Malariol was no longer used except for the exhaustion of the quantities in stock.

Through the courtesy of the British Army, 8,000 gallons of "shell tox" were received from Shell Co. during October. The stuff contained 1 per cent pyrethrin. Again in November another 50 gallons of 25 per cent pyrethrin extract were received from the British Army who promised to supply any amounts that would be needed in future. The British Army also supplied the service with 1/2 ton of commercial D.D.T. the use of which was restricted to the spraying of river craft, trains and aeroplanes in service between Upper and Lower Egypt. This spraying was done by a gasoline driven motor compressor kindly loaned by the U.S. Army.

Through the M.E.S.C. sufficient amounts of anti-malarial drugs were also supplied. In January four million tablets were received.

Through the Ministry of Supplies, 1/4 ton of paper was supplied in September and another 1/2 ton in October. This solved the difficulty of lack of writing paper and the impossibility of preparing the forms for the registration of the work.

External Helps :

During 1944, the Ministry received valuable help from outside which had a direct bearing on the success achieved by the complete eradication of the mosquito from the country. The most important of these emanated from:—

(1) *Egyptian Army*.—Reference was made on several occasions to the co-operation of the Ministry of National Defence in the Gambia campaign. Besides providing the eradication, treatment and relief services with vehicles and personnel, it detailed on March 17 a party of 2 officers, 3 N.C.Os. and 30 men for field eradication work in Adissat and Deir on the East bank of the Nile, south of Luxor. The Egyptian Army personnel engaged in the campaign continued to increase till in June there were 1391 officers and men on duty. Of these 900 were engaged in filling in of pools and swamps and 481 in mosquito control besides 2 M.Os., 3 N.C.Os. of the Army Medical Service.

(2) *British Army*.—The Army Medical Service had rendered the Gambia campaign assistance in different ways notably the supply of drugs and equipment. They also took an active part in field work. A unit composed of one officer and 15 men was posted at Assiut to survey the neutral area (barrier) separating the infested from the non-infested regions; an important area in arresting the northward advance of infestation. Another anti-malarial unit stationed in Cairo used to carry out occasional surveys in infested areas chosen at random. Reports about these surveys which represented a control on the progress of the eradication work were submitted directly to this Ministry. As a matter of fact this was of great importance because of the great number of allied troops that were in Egypt at that time. Moreover, on the 14th of April a unit of one officer and 15 soldiers was devoted to field eradication work in 10 *darakat* "zones" at Armant.

(3) *Rockefeller Foundation*.—During the early days of the epidemic, the U.S. authorities were approached with a view to delegating some experienced technical experts to help in the campaign. This was made impossible by the prevailing war-time conditions and the urgent need of the U.S. of America for all its men.

Early in July, however, it became possible to delegate one of the experts, Dr. JOHN A. KERR, who conducted the A. gambia eradication service in Brazil, to supervise the work here in Egypt. He took up his appointment as Director of the Gambia Eradication Section on the 15th of July. A few weeks later, a medical officer and a doctor of science joined the work. The first, Dr. STEPHEN, acted as field inspector and the latter, Dr. REIHL, supervised the experiments of D.D.T. spraying.

On the 15th of October, another expert, Dr. BRUCE WILSON, who took part in the eradication service in Brazil joined the campaign. He was appointed as Director of the field headquarters in Assiut.

Besides the four men, Dr. Fred L. Soper, representative of the Rockefeller Foundation in the Middle East, who directed A. Gambiae eradication in Brazil was kind enough to visit Egypt from time to time and give his advice.

(4) *Egyptian Relief Institutions*.—Much valuable relief work was done during 1944. Both Mohamed Ali Foundation and the Red Crescent Society had reorganised and set up their units in the infested areas. Stationary headquarters and mobile units were posted throughout the field. Thus relief work went hand in hand with mosquito eradication.

Review of the Condition of the Epidemic during 1944

Spread of Anopheles Gambiae :

It was mentioned that during 1944 the number of workers was continually increasing. This, of course, included both surveyors engaged in detecting larvae in breeding places in fields and others combating the adult mosquito within houses and bedrooms.

The spread of *Gambiae* during 1944 was certainly much less than in 1943. This is already shown by :—

- (a) comparing the figures of the two years after their modification on technical and uniform bases.
- (b) comparing breeding places in each zone during the two years.
- (c) the extent of the spread of malaria during the two years.

Table No. 83 shows the number of anopheline larvae collected during 1944 distributed according to posts and the number of *A. gambiae* in each place. It shows that *A. gambiae* represented only 18.4% of the total species collected.

Notification of Malaria :

Only new cases were notified during 1944. In 1943 notification included relapses which were recorded separately but were not shown on the official statistics.

Spread of Malaria :

It is now possible to study the official figures of cases and deaths of Malaria notified during 1944 in the four southern provinces distributed quarterly :—

TABLE NO. 81

Quarter	Aswan		Qena		Girga		Assiut	
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths
1st	439	303	1,358	1,141	54	2	17	—
2nd	126	84	1,287	152	10	3	12	—
3rd	3	3	209	53	35	—	29	—
4th	692	6	1,084	36	1,135	—	26,333	6
TOTAL	1,260	396	3,938	1,382	1,234	5	26,391	6

This gives the total cases of Malaria in the provinces infested with *A. gambiae* during 1944 as 32,823 cases. It need hardly be said that this is the nearest figure representing the true situation and no other estimate need be carried out.

At the end of 1943 the malaria epidemic caused by *A. gambiae* was largely localised in Qena province. It continued there during the whole of 1944 in a slightly moderate condition but with a relative increase in the death rate. The other three provinces remained free from the epidemic until early October when a sudden severe outburst of the epidemic occurred in Badari and Sahil Selim on the east side of the Nile in Assiut province. Drastic measures were thereupon taken against the epidemic. These consisted of early and efficient treatment, control of the adult mosquito in houses and the larvae in breeding places.

By this way it was possible to stop the epidemic while still at its onset and to prevent its spread elsewhere whether in Assiut or in any other province.

This same procedure was adopted in Adisat and Luxor during November when a relative increase was observed in the number of *A. gambiae* and malaria cases. The condition improved very quickly and the control measures had to be discontinued early in December.

The abortive methods of control had not only been effective in stamping out the disease, but also in reducing the number of deaths to almost naught. Thus amongst 26,000 cases only 6 deaths were recorded, an unprecedented record.

Segregation of the Mosquito.—

During 1944 segregation measures were tightening round *A. gambiae* in and around the infested area. These consisted of (1) quarantine measures, (2) neutral zone, (3) disinfection of means of transport.

(1) *Quarantine measures.*—All air and river craft arriving from the South were subjected to severe disinfection measures with the exception of the British Military aircraft which for military reasons were not always disinfested.

(2) *Neutral zone north of Assiut.*—This neutral zone proved of great value during the last quarter of 1944 when the Malaria epidemic overwhelmed Badari which bordered the zone.

(3) *Disinfection of means of transports.*—There was a chain of 12 disinfection stations set up at key points at Bellana, Aswan, Edfu, Isna, Luxor, Dishna, Nag Hamadi, Oasis junction, Girga, Assiut, Beni-Suef and Giza along the River Nile, the railway line and main road for the disinfection of all river, rail and road traffic proceeding northwards.

The insecticide used was a 0.15% solution of pyrethrum extract and kerosene which was sprayed by means of a spraying hand pump. On occasions, aerosol bombs were used for the disinfection of aircraft.

(4) *D.D.T. spray-painting.*—A new chapter in the use of D.D.T. was started in November 1944, when the ceilings of railway coaches were spray-painted with a 10% D.D.T. and kerosene solution. This was perhaps the first time this method was practised in the whole world. During that month (i.e. until the beginning of the following year) 85 coaches were spray-painted with 617 litres of solution, i.e. at a little more than 20 cms² of solution per square metre of surface. A petrol driven motor compressor was used with a spray gun.

(5) *Eradication.*—During 1944 the organisation of the Gambia eradication campaign was completed. The infested area from Bellana south to Assiut north was divided into 641 zones (darakat) which were serially numbered and the boundaries clearly frozen.

These "darakat" were so bounded that all larvicidal work within each could be carried out by one man in six days. In case the breeding places in any of the "darakat" increased as a result of temporary circumstances, e.g. flood, the local chief had the right to divide it into subdivisions under the original serial number and appoint a man to each subdivision. During 1944, the largest number of "darakat" was 900.

Every four or five "darakat" formed a "magmoua" or district under one local supervisor. The maximum number of these during 1944 was 151. The 641 "darakat" were grouped under 39 "dairas" or posts each headed by a medical officer or an engineer. The 39 "dairas" were again grouped under 10 "manatik" or "divisions" each headed by a senior malaria expert.

The Gambia eradication campaign was mainly directed against the larvae. The adult mosquito was not attacked except on two occasions for the control of malaria epidemics, namely:—

(1) at Badari and Sahel Sel'im where systematic disinfection of houses was done once a week. 262 men divided into 60 gangs, were engaged in the work. 162,692 houses were sprayed during the months of October, November and December. 28,971 litres of pyrethrum-kerosene solution were consumed in this work.

(2) at Adisat and Luxor, 8,965 houses were sprayed during the latter part of October and during November. 540 litres of insecticide were consumed.

As regards larvicidal work, Paris-green formed the principal larvicide and whenever more supplies of it were available, it was used more liberally. The Paris-green was mixed with dry earth from place of work to make a 1% mixture. This mixture was dusted by the hand over the surface of breeding places. The following table shows the amounts of larvicides consumed monthly during the second half of 1944. It is to be pointed out that the amounts of Paris-green shown are the pure stuff before being mixed by 99 parts of earth:—

TABLE NO. 82

Month	Paris-green (ton)	Malariol (ton)
July	small amount	328
August	4.0	139
September	7.2	81
October	14.8	47
November	13.0	67
December	14.3	31
TOTAL	53.3	691

Table No. 84 shows the number of personnel on the G.E.S. as at the end of each month in 1944, distributed according to different categories of work. This table shows clearly the progressive increase in the number of men in each category in 1944. The decrease in personnel from July to October was the result of replacing Malariol with Paris-green in the larvicidal work. The former needs more labourers than the latter which requires only one labourer with the overseer. The temporary increase in labourers in November was occasioned by an increase of Adult Mosquito Control gangs in Badari, Sahel Selim, Adisat and Luxor which usually engage larger numbers of labourers.

Treatment of Malaria Patients:

During 1944 the organisation of the Treatment Service was also completed. The 585 infested villages with a population of 2,444,564 inhabitants were divided into 16 "Manatik" each supervised by a treatment inspector. The maximum number of personnel in service was 1,026 consisting of 13 inspectors, 78 medical officers, 12 clerks, 117 sanitary surveyors, 753 overseers and 53 labourers. The service was provided with 54 cars of different types with headquarters at Luxor in the centre of the infested area.

The fundamental basis of the program of the service can be summarised in the following:—

1. House to house search for patients without waiting for their attendance at clinics or for notification by relatives.
2. Administration of medicines on the spot and ensuring as far as possible that patients take the drug systematically.
3. The doses were increased and the period of treatment prolonged to avoid relapses.
4. Health propaganda was carried out periodically by movies and broadcasts to entice the people to seek early treatment, to continue taking the medicine for a reasonable period and to teach them the methods of prevention.

The amounts of the anti-malarial drugs distributed during 1944 were 16,240,000 tablets of atabrine, 107,000 tablets of plasmoquine, 63,000 chocolate tablets of quinine, 492,800 pills of iron, 1,449 ampoules of quinine and 305 kilos of Epsom salt.

Relief:

During 1944 the Ministry of Supplies provided extra provisions, soap and clothes which were distributed to the needful in Badari and Sahel Selim by ladies of Mohamed Ali Foundation and in Adisat, Luxor and Armant by ladies of the Red Crescent Society.

In Badari area the Ministry of Education provided a midday meal to pupils of elementary and compulsory schools.

The Ministry of Public Health also provided a meal to all out-patients attending the general hospitals at Aswan and Qena provinces and at Badari and Sahel Selim towns.

Conditions at the Termination of 1944:

This is the third year of the battle against *A. gambiae* which still persists in almost one fifth of the infested area, but this time a well developed Eradication Service is leading the battle.

The outburst of malaria epidemic in Badari and Adisat was promptly suppressed and was soon on the decline.

It is worthy of mention here that the mosquito failed again to penetrate Northwards through the neutral zone.

TABLE No. 83.— SHOWING DISTRIBUTION OF ANOPHELINE LARVAE SAMPLES
COLLECTED DURING 1944, AND THOSE IDENTIFIED AS GAMBIA

Name of Post	Total Samples	Identified Gambia	Name of Post	Total Samples	Identified Gambia
Ballana	1	1	Ballas & Nakkada	35	19
Eneiba	12	12	Kous	43	30
Dirr	11	10	Qena	152	63
Khour Rahma	—	—	Deshna	117	43
Allaki	—	—	Hoe	309	5
Aswan	62	39	Nag Hamadi	1,111	6
Daraw	29	11	Abou Shousha	503	2
Benban	45	18	Al Khiam	105	—
Kom Ombo	1,134	317	Baliana	981	2
Akleet	124	52	Girga	954	11
Silwa	184	91	Suhag	560	26
Al Sirag	86	67	Akhmim	1,171	92
Atwani	148	84	Tahta & Tema	544	168
El Deir	24	21	Badari	1,749	667
Adisat	49	29	Abu Tig	367	122
Luxor	85	50	Assiut	730	17
Edfu	413	278	Abnoub	378	—
Busailia	365	215	Manfalout	513	—
Sibaeya	68	41	Mallawi	937	—
Esna	119	87	Abu Qirgas	1	—
Mataana	207	80	Minia	225	—
Armant	98	48	Deirut	500	—
Dabiya & Kurna	150	17			

Total Samples collected during the year	15,399
Total Samples identified A. Gambia	2,841
Ratio	18.4%

TABLE No. 84 SHOWING DISTRIBUTION OF PERSONNEL DURING 1944

Month	Medical Officers	Engineers	Supervisors	Observers	Overseers		Surveyors		Clerks & other Categories	other Posts and Workmen	Total
					Larvae Exterm.	Adult Mosquito Eradicat	Larvae	Adult Mosquito			
January	18	4	—	16	162	82	12	—	31	596	921
February	19	4	—	20	149	77	12	—	32	637	950
March	29	4	—	30	179	55	14	—	36	887	1,234
April	33	4	—	35	263	63	22	—	35	1,163	1,618
May	36	4	—	43	308	35	23	—	41	1,454	1,948
June	43	4	—	72	482	40	30	—	47	2,071	2,789
July	43	10	—	91	653	59	34	—	58	2,900	3,848
August	41	14	—	107	546	60	46	—	64	2,393	3,271
September	48	14	4	155	767	60	105	—	71	2,036	3,260
October	48	17	5	173	804	150	128	—	136	1,861	3,322
November	52	19	6	189	900	191	147	—	133	2,121	3,758
December	53	22	6	200	889	141	210	—	141	1,909	3,571

Chapter XVI.—BILHARZIA SNAIL DESTRUCTION

During the year 1944-1945, this section has been carrying forward its snail control work in Fayoum and Giza provinces and the Dakla Oasis. This has been extended to Aswan Province in conformity with the five year plan, which aims at covering the whole Egyptian territory.

Biological and seasonal factors have made it apparent that snail destruction work had better begin in April.

I.—PROGRESS OF THE CAMPAIGN IN THE FAYOUM

The work in this province is progressing satisfactorily in spite of various difficulties of survey and treatment. The division of the province into areas was revised, 18 main areas were established. These were subdivided into 51 units of work, some of which comprising a number of smaller areas making a total of 84 subdivisions. The following table gives the main surveys of the years 1942, 1943, 1944 and 1945.

TABLE No. 85

Spring Survey	Number of streams		Comparative Ratio	Lengths infested in Kms.
	Surveyed	Infested		
1942	27,370	6,806	25%	4,618
1943	45,234	5,318	12%	3,588
1944	92,241	7,263	8%	5,009
1945	139,723	5,706	4%	4,365

It is seen that the number of streams surveyed rose considerably each year with the increasing accuracy of the surveys while the number and lengths of infested streams decreased in proportion. At the same time the snail population in infested streams has been considerably reduced.

II.—PROGRESS OF THE CAMPAIGN IN GIZA PROVINCE

Survey and treatment of streams in this province are also satisfactory. The main areas were subdivided and operations more closely checked and controlled. Treatment of drains was restricted to those near villages or harbouring snails infested with schistosomes. Canals showing an infestation rate of less than 8 *Bulinus* snails in 100 dips were disregarded until the infestation rose. The results of 2 years work in the province are given in the following table by a comparison of the initial survey in 1943 and the first main surveys of the years 1944 and 1945.

TABLE No. 86

Spring Survey	Number of streams		Comparative Ratio	Lengths infested in Kms.	No. of <i>Bulinus</i> in 100 dips.
	Surveyed	Infested			
1943	4,111	1,616	39%	1,743	63
1944	10,934	2,040	19%	1,455	42
1945	12,950	2,001	15%	1,777	20

In this province, as in the Fayoum, the number of streams surveyed yearly increased and the number of infested streams is proportionally reduced. The degree of infestation is falling steadily but it was noted that the snails which disappear after each treatment re-establish themselves again after a lapse of 2-4 months.

III.—CAMPAIGN IN THE OASES

1.—Dakhla Oasis:

A complete survey of all water sources showed that the infestation with *Bulinus* snails, the carriers of human Bilharziasis, is concentrated in the eastern part, whereas *Limnaea* snails, the carriers of the liver-fluke of cattle is prevalent in the central and northern parts of the Oasis. Both species of snails are absent from the western and south-western parts. Out of 702 wells and streams examined, 58 contained *Bulinus*, 61 *Limnaea* and 5 had a mixed infection. The infestation with snails was heavy except in the village of Rashda, where several eradication campaigns were conducted in the past. All infested streams were cleared but only some could be sulphated owing to difficulties in the control of water during the season of rice cultivation. Samples of urine from all villages were examined. Bilharzia infection was found to be limited to 6 villages having a population of 9,000, out of which 1,500 persons were infected.

2.—Kharga Oasis:

Children from this oasis who had never left their native village were reported to have schistosomiasis (bilharziasis), and cattle from the slaughter-house showed liver-fluke infection. We propose to extend our work to this oasis shortly.

IV.—EXTENSION OF THE CAMPAIGN TO ASWAN

1.—Survey of Nubia:

The district was surveyed in July 1944. All perennial irrigation schemes were heavily infested with *Bulinus* snails. Great numbers were also found in the Nile, particularly the khors and the watering places used by the population upstream of the dam. Further south, thousands of empty shells were found on the banks of the river. Schistosomiasis is widely spread. Treatment of irrigation schemes in these regions is best carried out during summer when the water is low after the opening of the dam, but this will be left until communications become easier.

2.—The Area below the Dam:

This part of the province has been divided into two areas: Kom Ombo area to the south and Edfu area to the north. The estates of the Kom Ombo cultivation company, where perennial irrigation by pumps has been in practice for the past 40 years, have become a centre of Bilharzia infection (80 %). In Edfu area where the pumps started to function in 1934, the infection, which until then had not exceeded 11% rose markedly, reaching 75% in some villages. Both areas were surveyed, as shown in the following table.

TABLE No. 87

Area	Cultivated land in Feddan	Population	No. of streams		Length infested in Kms.	No. of <i>Bulinus</i> in 100 dips
			Surveyed	Infested		
Kom Ombo	41,000	61,000	3,283	392	460	76
Edfu	45,500	122,000	6,786	407	407	65

In Edfu area where the small distributaries dry up between irrigation rotations, the infestation is concentrated in the larger streams.

Both areas were then subdivided into smaller areas for treatment.

V.—RESEARCH

The following studies were carried during the year 1944 :—

1. Studies on the effect of the winter closure of water upon *Planorbis* snails infected with larval schistosomes showed that a great percentage of infected snails die and that the development of the larval stages within the snails is retarded.

2. The Nile was surveyed for snails in Giza Province (28 kms. on the western bank and 86 kms. on the eastern bank). Only 36 snails were found and these were all in pockets containing weeds.

3. Experiments on the effect of copper sulphate solutions applied in various ways on hibernating snails which are withdrawn into their shells, showed that these were not killed in the same measure as active snails. The spraying of snails lying on the mud with copper sulphate solution did not affect the snails unless they were in puddles containing the solution. *Planorbis* snails, under similar conditions were less affected than *Bulinus*

Chapter XVII.—LEPROSY CONTROL

The campaign against leprosy in Egypt began in 1929. An independent section for that purpose was created in 1940. From 1929 till 1937 leprosy control was a branch of the endemic diseases section and from 1937 till 1940 it was a branch of the anti tuberculosis and leprosy section of the ministry. Since the creation of the section great efforts were made towards combating the disease and isolating the greatest possible number of patients within the very limited accommodation notwithstanding the difficulties occasioned by the war which handicapped the progress of the section. In general, treatment of the patients was carried on satisfactorily.

Following is a table of the leprosy units and dates of their opening.

TABLE No. 88

Name of Unit	Date of Opening
1. Abu Zaabal Leprosy Colony	2- 6-1933
2. Cairo leprosy hospital	25- 2-1929
3. Zagazig leprosy clinic	5- 4-1930
4. Souhag " "	28- 4-1930
5. Tanta " "	22- 2-1931
6. Minia " "	10- 6-1931
7. Alexandria " "	17- 1-1938
8. Mansoura " "	10-10-1938
9. Shebin el Kom " "	12-10-1938
10. Qena " "	4- 2-1939

Necessary credits for opening a new unit in Assiut have been approved this year.

Abu Zaabal Leprosy Colony :

Abu Zaabal leprosy colony is the biggest leprosy unit and the only foundation of its kind in Egypt. The aim of creating this colony is to isolate lepers, provide them with all necessities of normal life and instruct them in the different agricultural and industrial professions and thus create a self supporting community.

The number of patients isolated in the colony at the end of this year was 350. Although the buildings of the colony were intended to accommodate 100 patients only, great efforts were made to accept that number (350) who continually applied for admission by providing wooden wards and some tents for that purpose.

Number of new patients admitted this year	80
Number of patients repeatedly admitted	108
Number of patients discharged this year	166
Number of deaths	22

It is well known that manual work, besides occupying the leisure time of the lepers and so leaves them no opportunity for brooding over their affliction and seclusion, has a direct effect on their general health and increases their resistance to disease and thus enables them to pursue their original occupations and lead a normal life. Manual work or "occupational therapy" as it is technically known is now a fundamental part of the general treatment of lepers.

Great attention was paid this year to organising the patients' industrial and agricultural activities so as to satisfy the requirements of the colony and Cairo hospital. The patients who were trained locally to act as nursing staff have succeeded in their work specially in dressing the patients' wounds and ulcers. It is proposed to give them an elementary course in nursing in order to increase their knowledge about the work they do.

New works introduced in the Colony this Year :

1. 25 acres of land around the pumping station overlooking Ismailia canal, 2.5 kilometres from the colony, have been annexed to the colony to form a site for a small colony for healthy children of isolated lepers who have nobody to look after them. Thirty patients are now living there in tents. 10 acres of land are already levelled and cultivated.

2. Large areas of land amounting to 5.5 acres around the colony and the staff quarters have been levelled. Many new parks and roads with trees on both sides have been constructed. These gave the colony the appearance of a town or a modern village.

3. More cattle have been provided to meet the ever increasing agricultural needs of the colony.

4. 30 acres of land are now under cultivation producing vegetable and fruit supplies for the colony, the Cairo hospital and staff and also forage for the animals.

As no surplus crops from the colony farm can be disposed of in the local market and in order to avoid wastage, cultivation is now so arranged as to ensure the supply of vegetables in just adequate quantities to meet the daily needs throughout the year.

Products of the Cultivated Land this year:

47,000	kilog.	Fresh vegetables and salads.
2,000	„	Melon and watermelon.
2,000	„	Onions and garlic.
3,000	„	Dry seeds (beans, peas, peanuts, etc.).
300	„	Barley.
200	„	Clover seeds.
2,000	„	Forage (grass and straw).

5. A total of 8,000 kilograms of milk were supplied by the four *gamooses* bought last year to form the nucleus of a dairy ; or an average of 5.5 kilos daily by each *gamoose*.

6. Shoemaking and tailoring workshops which are manned by lepers produced the shoes and clothes required by patients of both the colony and Cairo leprosy hospital.

1,500 pairs of slippers were produced by the former and 36,000 garments by the latter. The average daily number of workers was 10 in the former and 4 in the latter.

Amongst products of other workshops were casting of 6,300 cement slabs for pavements, the disinfection of 1,500 garments and the tinning of the colony's copper utensils, besides attending to the patients' mail.

7. A few shows were arranged on special occasions for the entertainment of the lepers in which the patients as well as the staff and certain professional actors from outside took part. Ritual ceremonies were also observed on the Prophet's birthday.

8. Another radio has been bought for the amusement of the patients tenting near the pumping station who are too far away to be able to listen in to the radio in the colony.

Water and Light :

The colony is supplied by high tension electric current from the electric power station of Abu-Zaabal E.S.R. Workshops. The Ministry of Public Health had financially subscribed in the expansion of that station before the war to avoid the great costs of creating a special station. This high tension current is transformed into low tension current by special transformers installed within the colony.

Water is drawn from Ismailia canal (2.5 kilometres from the colony) by means of pumps for irrigation of the land and gardens. Water for drinking is filtered and then chlorinated before use.

Maintenance of pumping stations, filters and transformers is done by skilled labour in the colony.

Disposal of Sewage :

All sewage of the colony was drained into trenches after passing through impermeable septic tanks. With the increased area of cultivated land, these trenches became saturated and inadequate to drain all the sewage water and too often the tanks overflowed. A small power station was therefore installed to lift the water from a central collection well and after mixing with river water it was used for irrigation. This increased the fertility of the land.

Workshops :

Small workshops equipped with all the necessary tools and machinery were provided in the colony and run by skilled workmen who, at the same time, supervised workshops manned by lepers. These have carried out all the minor building repairs, plastering, whitewashing, sanitary and electric repairs, new wooden constructions, motor car repairs etc. required by the colony.

TABLE No. 89—WATER AND ELECTRIC CURRENT CONSUMED THIS
YEAR IN THE COLONY.

Kilowatt used for lighting	Kilowatt used by pumps	Total	Cubic Meters of fresh water	Water for irrigation by Cubic M.	Drinking water by Cubic M.	Sewage Plan.
70,630	154,900	225,530	743,999	70,400	38,599	16,040

Cairo Leprosy Hospital.

This unit was first opened in February 1929 as an out-patients clinic. In 1930 an in-patient section with an accommodation of 30 beds was provided. Since then new patients continued to increase until 200 patients are now accommodated in the hospital ; besides out-patient annexes in Karamidan, Imbaba and Kaliub. Since 1933, this hospital has temporarily been used for isolation of female lepers only until accommodation in Abu Zaabal colony is provided for isolation of patients of both sexes.

The number of patients who presented themselves to the hospital and its branches this year was 273, among whom 210 were found leprous.

The number of in-patients was 196 and this was the maximum number the present building could hold. The practice of giving patients some work to do adopted in Abu Zaabal is also followed here. It had the best general and psychological effects on the patients. Besides the needle work, the patients undertake all the household duties, *e.g.* cleaning and washing. The more intelligent patients act as attendants for bed ridden-patients. Special interest is taken in the amusement and entertainment of the patients. Shows were arranged on special occasions and confectionary was distributed on feast days. The patients are content and appreciative of the care they receive from the hospital authorities.

Out-Patients Clinics.

These clinics were created in the chief towns of the provinces, for the detection and treatment of lepers. As treatment is given once a week, four branch-clinics were provided in the surrounding districts and attended by the medical officer of the main clinic. This arrangement enables distant lepers seek treatment in these branch-clinics who, otherwise, are unable to attend at the main clinic because of poverty or ill health.

25-bed in-patient departments have been provided in some of these clinics for the accommodation of patients whose condition requires special technical care or immediate isolation. It is intended to introduce this in-patient accommodation in the remaining clinics.

**TABLE No. 90—DETAILS OF THE CLINICS, THEIR BRANCHES AND THE
IN-PATIENT SECTIONS IN OPERATION.**

Name of Unit	In-Patient Section	Branches.
Abu Zaabal leprosy Colony	+	
Cairo leprosy hospital	+	Karamidan, Imbaba and Kalioub.
Zagazig leprosy Clinic	—	Abu Hammad, Shebin el Qanater, Minia el Qamh and Abu Kebir.
Souhag " "	+	Tima, Tahta, Girga and Akhmim.
Tanta " "	+	Zifta, Mahalla, Qellin and Kafri el Zayat.
Minia " "	+	Beni Mazar, Abu Kirkas, Samallut and Mallawy.
Alexandria " "	—	Damanhour, Idko, Rosetta, Disouk and Karmouz.
Shebin el Kom " "	—	Menouf, Ashmoun, Quesna, Benha and Batanon.
Mansoura " "	—	Damietta, Simbellawen, Sherbin and Dikrnis.
Qena " "	+	Luxor, Kous, Dishna and Naga Hamadi.

Statistics of Patients :

The number of patients who presented themselves for examination at all the leprosy units this year was 1,372. Of these 672 were found leprous and the remaining 700 suffered from other diseases and were referred to the special hospitals.

**TABLE No. 91—DISTRIBUTION OF PATIENTS EXAMINED IN THE DIFFERENT
UNITS THIS YEAR.**

Name of Unit	No. of Patients examined	No. of Positives	No. Negatives
Abu Zaabal leprosy colony... ..	81	80	1
Cairo leprosy hospital	270	192	78
Zagazig leprosy clinic	34	34	—
Souhag " "	128	52	76
Tanta " "	226	84	142
Minia " "	327	28	299
Alexandria " "	107	62	45
Mansoura " "	111	69	42
Shebin el Kom,, " "	54	51	3
Qena " "	34	20	14
TOTAL	1,372	672	700

**TABLE No. 92—SHOWING NUMBER OF NEW PATIENTS DISCOVERED IN THE
CLINICS AND BRANCHES**

Unit	Branches	No. of New Patients
Abu Zaabal leprosy colony	—	80
Cairo leprosy hospital	In patients... ..	25
	Karamidan	133
	Imbaba	18
	Kalioub	16
		192
Zagazig leprosy clinic	Main clinic	17
	Abu Hammad	—
	Shebin el Qanater	12
	Minia el Qamh	4
	Abu Kebir	1
		34
Souhag leprosy clinic	Main clinic	19
	Tima	19
	Girga	9
	Tahta	2
	Akhmim	3
		52
Tanta leprosy clinic	Main clinic	55
	Mahalla el Kobra	13
	Zifta	7
	Qellin	2
	Kafr el Zayat	7
		84
Minia leprosy clinic	Mai clinic	10
	Beni Mazar	3
	Abu Kirkas	2
	Samallut	4
	Mallawi	9
		23
Alexandria leprosy clinic	Main clinic... ..	22
	Rosetta	7
	Idko	3
	Damanhour	6
	Disouk	19
	Karmouz	5
		62
Mausoura leprosy clinic	Main clinic	50
	Damietta	8
	Simbellawen	2
	Dikernis	5
	Sherbin	4
		69
Shebin el Kom leprosy clinic	Main clinic	10
	Menouf	14
	Ashmoun	6
	Quesna and Benha	15
	Batanon	6
		51
Qena leprosy clinic	Main clinic	7
	Luxor	8
	Dishna	4
	Naga Hamadi	1
	K us	—
		20

**TABLE No. 93.— NUMBER OF NEW PATIENTS, THOSE FOUND LEPROUS
AMONGST THEM AND THEIR RATE PER CENT SINCE LEPROSY CONTROL WAS STARTED UNTIL END OF 1944**

Year	No. of New Patients	No. of Lepers	Percentage
1929	394	208	53
1930	1,015	433	42
1931	1,472	588	40
1932	1,287	485	38
1933	1,639	744	45
1934	1,273	618	49
1935	1,083	584	54
1936	1,031	726	70
1937	1,759	888	50
1938	2,171	1,097	50
1939	2,198	1,009	48
1940	2,298	995	43
1941	1,387	728	53
1942	1,586	825	52
1943	1,488	771	52
1944	1,372	672	44
	23,458	11,422	40

The number of lepers recorded by all the leprosy units since leprosy control was started in 1929 until the end of this year was 11,422 of which 2,810 were recorded in more than one clinic leaving 8,612 lepers proper on record. These are distributed as follows :—

TABLE No. 94

Unit	No. of Patients Registered	No. of Repeated	Net No.
Abu Zaabal leprosy colony	1,078	901	177
Cairo leprosy hospital	3,170	442	2,728
Zagazig leprosy clinic	896	177	719
Souhag	1,487	119	1,368
Tanta	1,639	298	1,341
Minia	1,012	97	915
Alexandria	384	115	269
Mansoura	746	321	425
Shebin el Kom	653	282	371
Qena	357	58	299
TOTAL	11,422	2,810	8,612

**TABLE No. 95.— NUMBER OF PATIENTS ISOLATED IN THE DIFFERENT
UNITS UNTIL THE END OF DECEMBER 1944**

Unit	No. of Patients Isolated
Abu Zaabal leprosy colony	350
Cairo leprosy hospital	196
Minia leprosy clinic	36
Tanta	25
Souhag	6
Qena	8
TOTAL	621

Leprosy Control Law.

Leprosy is an infectious disease caused by a certain bacillus the nature of which has not so far been ascertained despite the many efforts spent in this direction since its discovery and, therefore, no specific drug could be found for its cure. Hence segregation remained the only means of protection. Naturally a thorough and systematic segregation of all lepers would lead to the eradication of the disease. A project law has therefore been prepared and put into legal form prior to submission to Parliament for approval. This law provides for the registration and segregation of all lepers. Lists are now being prepared of villages of all recorded lepers subject to carrying a general examination of the population for detecting leprosy persons with a view to their segregation on the law coming into force.

Treatment :

Besides treatment of leprosy and its complications, lepers are also treated for other diseases from which they may be suffering, *e.g.* parasitic diseases, syphilis, skin and other medical diseases. Except major operations which are done in the colony, all minor operations are carried out by unit M.Os. in the out-patient leprosy clinics.

Lepers in residence in the colony and Cairo hospital receive more care as they are all the time under medical supervision. A dentist and an ophthalmologist visit Abu Zaabal colony and Cairo hospital once a week for the treatment of the lepers and performing such operations as may be necessary.

Hydnocarpus oil and leprol (ethyl ester of shalmouggra oil) were used in the treatment of leprosy this year. The oil is given intramuscularly once a week in initial doses of 0.5 cc. to be increased by 0.5 cc. weekly until a maximum dose of 5 cc. is reached. This is then maintained throughout. Owing however to shortage of this oil and import difficulties arising from war-time conditions and in order to maintain treatment, the maximum dose was reduced to 3 cc. and later to 2 cc. given in conjunction with leprol injections which were in stock.

The number of injections of hydnocarpus oil given this year was 77,639 weighing 182 kilograms of oil ; 13,752 ampoules of leprol weighing about 20 kilograms of ethyl ester of shalmouggra oil were also used.

Perforating ulcers are among the common complications of the disease that cause the patient much discomfort since they take a very long time to cure and disable many of the patients. Hence much attention is paid to the treatment of these ulcers. Where necessary, surgical treatment or suitable disinfectants are prescribed for each case.

A total of 180,500 dressings were applied this year in all the units.

TABLE NO. 96—ANNUAL STATISTICS OF LEPERS

Name of Unit	Statistics of patients			General Notes on Lepers										Transmission of							
	No. N.P.	No. Neg.	No. Pos.	✓	+	Md.	Bach.	Egypt.	Forg.	Mohd.	Opt.	O. Belg.	D. inf.	Qd. inf.	Fog. inf.	Fam. inf.	F.	M.	Par.	Hos.	
Abu Zaabal Leprosy Colony ...	81	1	80	80	—	20	60	80	—	71	9	—	56	24	5	19	3	—	1	—	
Cairo Leprosy Hospital ...	270	78	192	145	47	93	99	191	1	173	18	1	147	45	15	20	6	8	—	—	
Zagazig Leprosy Clinic ...	34	—	34	24	10	20	14	34	—	34	—	—	30	4	—	4	1	—	—	—	
Suhag " " ...	128	76	52	37	15	32	20	52	—	38	14	—	40	12	—	12	2	1	—	—	
Tanta " " ...	226	142	84	67	17	26	58	84	—	84	—	—	62	22	3	19	4	—	—	—	
Minia " " ...	327	269	28	24	4	15	13	27	1	24	4	—	27	1	—	1	—	—	—	—	
Alexandria " " ...	107	45	62	45	17	23	39	62	—	59	3	—	55	7	—	7	—	2	—	—	
Mansoura " " ...	111	42	69	49	20	28	41	69	—	69	—	—	60	9	—	9	3	—	—	—	
Shebin el-Kom Leprosy Clinic ...	54	3	51	38	13	28	23	51	—	50	1	—	42	9	—	9	1	—	—	—	
Qena " " ...	34	14	20	17	3	9	11	20	—	16	4	—	17	3	—	3	1	—	—	—	
Total ...	1372	700	672	526	146	294	378	670	2	618	53	1	536	136	23	113	21	11	1	—	

Name of Unit	Duration of Disease							Laboratory Findings				
	1 year	2 years	3-5 years	6-10 years	11-15 years	16-20 years	20 and more	Neg. B.	Pos. B.	Nose	Skin	N. and S.
Abu Zaabal Leprosy Colony ...	9	6	20	28	8	—	—	37	43	2	2	—
Cairo Leprosy Hospital ...	82	28	51	25	4	1	1	74	118	8	27	—
Zagazig Leprosy Clinic ...	3	6	24	1	—	—	—	11	23	—	—	—
Suhag " " " " " " " "	10	10	26	4	2	—	—	16	36	8	4	—
Tanta " " " " " " " "	35	21	18	8	2	—	—	40	44	16	1	—
Minia " " " " " " " "	2	11	10	4	1	—	—	21	7	—	3	—
Alexandria " " " " " " " "	15	8	17	16	5	1	—	32	30	14	3	—
Mansoura " " " " " " " "	10	24	28	6	1	—	—	3	66	51	—	—
Shebin el Kom Leprosy Clinic ...	17	9	19	2	2	—	—	—	51	21	7	—
Qena " " " " " " " "	5	5	9	1	—	—	—	8	12	4	4	—
Total ...	188	128	231	95	25	4	1	242	430	124	51	22

Name of Unit	C. Gov.		Alex. G.		Dam. G.		Canal G.		Suez Gov.		Behera		Gharbia		Menoufia		Dakahlia		Sharkia		Kaliubi	
	B.	R.	B.	R.	B.	R.	B.	R.	B.	R.	B.	R.	B.	R.	B.	R.	B.	R.	B.	R.	B.	R.
Abu Zaabal Leprosy Col. ...	—	4	—	2	1	1	—	—	—	—	2	2	11	11	9	6	10	10	10	9	3	—
Cairo Leprosy Hospital ...	7	57	—	2	—	—	—	—	—	—	8	6	17	17	24	11	14	11	11	9	21	—
Zagazig Leprosy Clinic ...	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	3	3	21	22	9	—	—
Suhag " " " " " " " "	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta " " " " " " " "	—	—	—	—	—	—	—	—	—	—	1	1	65	69	8	10	6	6	1	—	—	—
Minia " " " " " " " "	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Alexandria " " " " " " " "	—	—	6	26	—	—	—	—	—	—	12	13	25	23	4	—	3	—	—	—	—	—
Mansoura " " " " " " " "	—	—	—	—	3	3	—	—	—	—	—	—	17	18	—	—	47	47	1	—	—	—
h. el Kom " " " " " " " "	—	—	—	—	—	—	—	—	—	—	—	—	—	—	43	43	1	1	—	—	7	—
Qena " " " " " " " "	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total ...	7	61	6	30	4	4	—	—	—	—	22	22	135	138	91	68	84	79	44	40	40	3

B=Birth. R=Residence.

PART V.—RESEARCHES AND LABORATORY EXAMINATIONS

Chapter XVIII.—SUMMARY OF THE WORK OF THE PUBLIC HEALTH LABORATORIES

1.—*Bacteriological Section :*

The total number of specimens examined bacteriologically in the Central, Provincial and Branch Laboratories, during the year 1944, was 475,564.

2.—*Clinical Pathological Section :*

2,217 specimens were examined during the year under review in this Section.

3.—*Chemical Section :*

The total number of samples examined chemically in the Central Laboratories, Assiut and Tanta Chemical Laboratories, during the year 1944, was 68,626.

4.—*Water Section :*

(a) *Bacteriological Service :*

The total number of samples of water, aerated water, ice and syrup examined by this Section, during the year 1944, was 5,806.

(b) *Chemical Service :*

During the year, some 582 samples of water have been subjected to chemical analysis

5.—*Antirabic Institute and Hospital :*

During the year 1944, 7,039 patients attended the Institute. Out of these 6,859 were fully treated.

6.—*Serum and Vaccine Institute :*

The following vaccines and sera have been prepared during the year 1944 :-

(1) T.A.B.	510,970	ccs.
(2) Anti-plague vaccine	457,320	„
(3) Cholera vaccine	90,220	„
(4) Gonococcus vaccine	34,140	„
(5) Typhus vaccine	20,000	„
(6) Diphtheria prophylactic (Formol Toxoid)	30,047	boxes, each box for one per- son.
(7) Calf lymph vaccine	32,387,900	doses.
(8) Diphtheria antitoxin... ..	1,150	amp. 10 cc. containing 12,000 I.U.
(9) Anti-Tetanus serum... ..	1200	amp. 2 cc. 3,000 Units.
(10) Anti-Scorpion serum	7068	amp. 2.2 cc.

Chapter XIX.— SUMMARY OF THE WORK OF FOUAD I INSTITUTE AND HOSPITAL FOR TROPICAL DISEASES

I.— BIOCHEMICAL DEPARTMENT

Since Penicillin is widely used in therapeutic purposes, the biochemistry department intended to prepare this substance, and try its use in the hospital annexed to the Institute. In fact, the department faced many difficulties in this respect due to lack of the necessary chemicals, because we were not able to order chemicals since the declaration of the war. We were able, however, to borrow some of the chemicals, from the other Government chemical laboratories, and began to prepare penicillin. We found that the presence of impurities, especially arsenic, in the chemicals used interfered with the yield of crude penicillin. It became, therefore, necessary to purify these substances, either by recrystallisation several times, if they were solid, or by distillation and filtration, if they were in liquid form. It was also found that pH 5.4 was the most suitable and gave the best results. It became possible then to prepare penicillin the concentration of which reached 128 in some cultures and 64 in others. It was possible to prepare 10 litres at one time, which is the largest quantity, the available glass-ware in the laboratory can hold. It was consequently suggested that in order to prepare penicillin on a large scale the apparatus and chemicals required should be imported. The crude penicillin was then tried on patients suffering from ulcers, and the results obtained are included in the hospital report.

An attempt was made to separate the active principle in the form of a powder. The Flourey method was adopted and we were able to isolate a small quantity of purified penicillin.

The department took part in an investigation of a localised epidemic of acute Hookworm disease in the village of Kafr Tahanoub near Shibeen el Kanater.

Particular stress has been laid on the investigation of the plasma protein in order to find out the true relation between hypoproteinaemia and oedema. Vitamin B₁ in the blood was also estimated to ascertain if there is a deficiency of this Vitamin in severe ancylostomiasis especially in oedematous cases. Vitamin A and C were also estimated. Cholesterol estimation and complete investigations of the kidney functions were carried out before and after treatment.

The results of the various investigations show clearly that the serum protein values are normal. In some cases there is an increase of the blood globulin with a reversal of the albumin-globulin ratio, but the amount of albumin was not reduced. The increase in serum globulin is most probably due to the concomitant schistosomiasis (Prof. Khali Bey and Hassan, 1932). Vitamin B₁ in the blood was estimated by the thiochrome method.

In order to obtain accurate average figures more cases of ancylostoma anaemia attending the outpatient department were also investigated for vitamin B₁ in addition to the series of cases of Kafr Tahanoub. The total number of cases examined was 47 and the average value of blood vitamin B₁ was found to be 6 gamma per cent.

In a group of six normal persons the average value was 10 per cent. In the three cases suffering from oedema in the series of Kafr Tahanoub the average figure for Vitamin B₁ was found to be as low as 4 gamma per cent. There appears to be a considerable variation in the normal range of blood vitamin B₁ but a mean figure of 7 gamma per cent is accepted by most authors as normal. According to Sinclair a figure below 4.5 gamma per cent indicates a Vitamin B₁ deficiency. According to our investigations there is no doubt that a mild degree of deficiency is present in severe cases of ancylostomiasis.

In attempting to answer the question of avitaminosis in Ancylostomiasis we have investigated several cases for vitamin A and C deficiency. We used to give 300 mgm. vitamin C as a test dose at 6 a.m. The urine was collected between 7 a.m. and 1 p.m. and the amount of Vitamin C estimated. In normal persons the vitamin C excretion in the

6 hours period is 5 mgm. per cent (Conder and Neiderberger). We have estimated 14 cases of the Tahanoub series and found definite evidence of deficiency in 9 cases. The average figure was found to be 1.5 mgm per cent. This deficiency may partly be due to diminished absorption because of the associated gastro-enteritis.

The estimation of indican in the blood and urine of patients suffering from pellagra has been varied out in the department. The method adopted was that of Monias and Shapiro which briefly consists in the oxidation of indican into indolignon by ferri chloride solution in concentrated hydrochloric acid. The colour formed is extracted with chloroform and compared with a standard. Renal function tests (urea clearance, etc.) were also carried out.

We notice that all patients were infected with parasites except two. Indican was always detected in the urine of all of them whether they were infected with parasites or not, and the approximate amount excreted daily varied from 20 mgm. to more than 60 mgm.

In the majority of patients indican did not exist in the blood. In these cases the urea clearance was above 65 per cent of normal average. In a few patients with urea clearance between 43-65 per cent, indican was found either in traces less than 0.2 mgm. per cent serum or was absent altogether. In one patient only the indican content of the blood reached 0.35 mgm per cent in serum. In this case the urea clearance value was 42 per cent. In all patients, it was observed that blood urea values were within normal limits.

The majority of persons who were taken as normals were infected with various parasites. In these, indican was not always detected in the urine and this limits the probability that indicanuria in pellagrins may be the result of parasitic infection. Moreover indicanuria existed in pellagrins who were free from parasites.

SUMMARY AND CONCLUSION

(1) Urine and blood of some Egyptian pellagrins were examined for indican qualitatively and quantitatively.

(2) Indicanuria was a constant finding in pellagra cases examined by us. Indican when found in the blood was only in slight traces. It was raised in one patient only.

(3) Nephro-hormone may be secreted in excess in pellagrins because constant indicanuria existed, while indican in the blood was not raised. Estimation of serum calcium, blood urea, and blood sugar curves were done in cases of septic sore.

The results are published in the Journal of the Egyptian Medical Association, August 1944.

Nutritive Value of Foenegreek :

Foenegreek contains a mucilage, which is formed mainly of polysaccharides which is converted in the body to fructose and glucose. The seeds contain also 22 per cent proteins, 6 per cent of fixed oils, and 5 per cent choline. They also contain an alkaloid related to nicotinic acid and is called trigonelline. This is the form in which nicotinic acid is mainly excreted in the urine. The seeds contain 5.7 mgm nicotinic acid per 100 grams, 13.2 mgm. per cent available iron, and some phosphorus. An aqueous extract was prepared in the Institute for trial on pellagrins. The extract was made so that each 100 cc., contains the following: Protein 1.8% Choline 0.35% Available iron 1.1 mg.% fixed oils 0.4%. nicotinic acid 0.45 mg.% trigonelline 10 mg.%

Preparation of Patients :

Two patients were admitted to the hospital, they were put under observation and given no drugs for three days. Their diet was deficient in meat.

The stools of both patients contained *Ascaris*, *Ancylostoma* and *Bilharzia mansoni*. The urine contained ova of *Bilharzia haematobium*.

Rash in the first patient was found on the neck, hands, and feet. After giving him 100 cc. of the extract thrice daily for five days, the rash on the neck disappeared. The rash on hands, feet, chest and face disappeared after eleven days from the beginning of the treatment. The general condition of the patients was improved and a marked rise of the haemoglobin was observed.

Effect of Para-amino-Benzoic Acid on the Toxicity of Antimony Compounds :

According to some authors, it was stated that Para-amino benzoic acid has a detoxicating effect when given with pentavalent arsenic compounds as carbarsone, tryparsamide and other quinquevalent phenyl arsenates.

It was stated also that this compound has got the same effect on the quinquevalent phenyl stibonates.

According to their experiments, they could give rats multiples of the lethal dose of either of these compounds without fatal effect or any toxic symptoms so that there was no need for analysis of the organs.

Bearing the above mentioned facts into consideration, we tried to follow the same experiments on white rats to know the effect of this compound on some trivalent aromatic antimony compounds, to show if it has the same effect without reducing its curative power or not, and to show also if it is of any use for clinical purposes.

A number of rats nearly equal in weight were chosen and divided into two groups. The members of the first group were given the dose of P.A.B.A. and then a lethal dose of stibophen.

The members of the second group were given a lethal dose of stibophen without previous administration of P.A.B.A. The results of these two experiments indicated that P.A.B.A. has no detoxicating effect on stibophen which is a trivalent antimony compound.

Then two other groups were chosen and given the therapeutic doses. The members of the first group were given the dose with previous administration of P.A.B.A. After twenty-four hours from the last injection, the rats were killed and the amount of antimony in the liver and kidney of the members of the two groups was estimated and here was no significant differences between the two results.

The same experiments were carried out by giving P.A.B.A. twenty-four hours before giving the stibophen to ensure saturation with this compound but there was no difference between the two groups.

This work shows that P.A.B.A. has no detoxicating effect on the trivalent antimony compounds.

OTHER INVESTIGATIONS :

Several samples are sent to the Laboratory either through the Ministry or through the medical stores in order to test them chemically and biologically.

(a) The Ministry sent both leaves and stem of *Acacia*, which is said to be used in curing malaria, in order to be investigated on scientific bases. This plant was found to contain neither quinine nor alkaloids. We did not find anything concerning this plant in the references on plants used in medicine. A full report was sent to the ministry concerning this problem.

(b) Picrosine in the treatment of malaria : the part carried out by the department in this subject was to analyse the drug chemically, to find out its chemical constitution. It was found that it gave the characteristic reactions of picric acid. In addition, the urine of the patients who were given this drug was examined for picric acid, to find the rate of excretion of this acid. This work is included in the report of the hospital. No clinical or parasitological effect can be claimed for this drug.

5.—*Sputum examined for Bilharzia Ova :*

15 samples were examined and all gave negative results.

6.—*Examination of Urethral Discharge for gonococci :*

17 samples were examined, 7 of which were positive.

7.—*Films examined for Leishmania :*

2 Positive cases.

8.—*Miscellaneous :*

(a) One nasal swab examined for leprosy : the result was negative.

(b) Three samples of blood were cultured : all were sterile.

(c) One swab from throat was examined for fusiform bacilli and spirochaetes (vincent's Angina) : the result was positive.

(d) Pus from two cases of empyema : both positive for pneumococci.

During the months of May, June, July and, August most of the work of the Bacteriology Section was directed to investigate the cases of chronic ulcers which occurred in an epidemic form at that time. Specimens from the ulcers were taken from cases in Port Said, Mansoura, Mahalla el Kobra, Zifta, Menouf and Cairo.

These investigations were published in the August number of the Journal of the Royal Egyptian Medical Association, 1944.

III.—CLINICAL REPORT.

Treatment of Bilharziasis by the use of Stibophen

This work was published in the Journal of the Egyptian Medical Association in 1944. These are the results :—

(1) 100 cases of Bilharziasis were treated in the Institute, of these 55 were cured, two cases of the last group returned after one month and were found to have been relapsed.

(2) In order to test the efficiency of the Stibophen it was used on a large scale in Ezbet El Wabour near Helwan. This village was particularly chosen because the snails in its canals and streams were eradicated by the use of "copper sulphate". The treatment was very effective ; 200 of the inhabitants who completed their course were completely cured. Three cases, however, continued to pass living eggs after they were given 16 injections of Stibophen.

(3) The complications of treatment were nausea, vomiting, dizziness, rheumatic pains, fever, bronchitis, and oedema of face in some cases.

(4) Some cases of Bilharzia suffering from heart disease were also treated, no particular complications happened.

(5) Cases of Bilharziasis suffering from pulmonary tuberculosis, bronchiectasis, asthma were also treated by Stibopen. Their condition did not get worse except in cases of asthma where the paroxysms increased in severity and expectoration became more profuse ; the paroxysms however were better after finishing the course of treatment.

(6) A case of Bilharziasis suffering from myxoedema was given treatment without any untoward effect

(7) In a case of purpura we had to stop treatment because injection usually caused purpuric eruption around the track of the needle.

(8) The pyrocatechol test is useful, we can judge the slow excretor and so the dosage can be arranged according to the rate of excretion.

(9) Stibophen is very useful for compulsory treatment of Bilharziasis. Its advantage in the treatment is that it can be given by nurses in the villages, the only disadvantage however is the high relapse rate especially in children.

(10) The relapse rate in 166 cases examined was 52 per cent. The relapse rate in children under 10 years of age was 80 per cent in male and 59 per cent in female. The relapse rate in those over 30 years was 12.5 per cent in the male and 0 per cent in the female. The high relapse rate in children is due to the rapid excretion of the drug.

It is supposed that the trivalent antimony causes temporary exhibition of the ovaries, this causes transient disappearance of the ova. So it is advisable to give a longer course of treatment with antimony.

(11) It is advisable to give the treatment with antimony twice yearly.

Desert, Septic, or Veldt Sore in Egypt

Published in the Journal of the Royal Egyptian Medical Association, August 1944.

SUMMARY

(1) Several outbreaks of cutaneous ulcers occurred in different localities in Egypt during the last two years. These ulcers are similar to what is called septic, desert or veldt sores. A certain proportion of these ulcers has been observed to become very septic and assume a phagedenic character. The fusiform bacillus was found in four cases of this latter type.

(2) The clinical, bacteriological and pathological aspects of this condition were studied and the results reported in the text.

(3) *C. diphtheriae* was found in 7 out of 32 cases, i.e., approximately 21%. This percentage although comparatively small, yet it is believed that this organism together with the pyogenic organisms, which were very frequently met with, play an important part in the causation and chronicity of this type of ulcer. This view was taken because the majority of the cases examined and found negative for *C. diphtheriae* were treated with the formalin swab method before bacteriological examination was undertaken. It was very difficult to obtain early cases for examination. Actually we have isolated the diphtheria bacillus from the majority of early cases which we have met with.

(4) Various concomitant organisms were also isolated from the ulcers and the results tabulated in the text.

(5) An ulcer was produced in the guinea-pig inoculating *C. diphtheriae* in the flank and a comparatively small amount of antitoxin intraperitoneally. The ulcer produced was punched out in appearance, covered with a diphtheritic pseudo-membrane, and contained yellow pus. It was very similar to some of the ulcers seen in human beings.

(6) A typical fuso-spirochaetal ulcer was reproduced in the Egyptian hedgehog (*Erinaceus auritus*); employing the technique of E. C. Smith. The material used in this experiment was obtained from the case in which spirochaetes and fusiform bacilli were present.

(7) Attempts to produce ulcers in experimental animals with the other organisms, were not successful.

(8) The high incidence of syphilis among ulcer cases is very significant. We believe that it is one of the causes which delay healing. The same may be said of deficiency diseases such as pellagra which is prevalent among poor Egyptian patients.

(9) It is believed that malnutrition renders the individuals more vulnerable to ulceration. The diet of the great majority of the patients suffering from ulcers is chiefly carbohydrate deficient in protein and vitamins specially A, nicotinic acid and riboflavin. Vitamin A was found to be either absent from the serum of the ulcer patients altogether or its level far below the normal.

(10) The levels of blood serum-calcium and the blood urea were found to be within the normal limits. Estimation of blood sugar revealed low levels and flat curves in some of the cases.

(11) The rational treatment of ulcers must be based on a thorough investigation of each case. Concomitant diseases such as syphilis, parasitic anaemia, pellagra and other nutritional deficiencies specially avitaminosis A should be treated at the same time. Cutaneous diphtheria should also receive the appropriate treatment with antitoxin.

(12) The application of sulphanilamide powder has been found to be a very effective treatment. Twenty-three cases were treated with this method. Dramatic results were observed after a few applications of the powder. The fever and the constitutional symptoms in very septic cases subsided remarkably quickly.

Action of Antimony on the Adrenaline of the Suprarenal Gland

Published in the Journal of the Royal Egyptian Medical Association August 1944.

SUMMARY.

The animal experiments showed that following the injection of antimony, there was a definite increase in the adrenaline content of the suprarenal glands.

The Value of Tyrosine Index in Malaria and other Endemic Diseases in Egypt

Published in the Journal of the Royal Egyptian Medical Association August 1944.

SUMMARY.

(1) The tyrosine serum index in pure cases of malaria is not always increased.

(2) Other parasitic diseases increase the tyrosine index especially *S. mansoni* infection. The index was also definitely increased in cases of hypertension and pellagra.

(3) It is very difficult to find pure cases of malaria in Egypt as the great majority of the rural population are very often infected with parasitic diseases and therefore tyrosine cannot be relied upon in the diagnosis of malaria.

Studies on the Carotene and the Vitamin A

Published in the Journal of the Royal Egyptian Medical Association August 1944.

SUMMARY.

(1) The estimation of carotene and vitamin A content of the human serum was carried in a group of normal people and in groups of patients suffering from various pathological conditions. The average carotene serum value in normal people on a carotene rich diet was 0.17 mg.%, while the average value in normals on carotene poor diet was 0.10 mg.%. The various factors affecting the plasma carotene level have been discussed. There is sufficient evidence that the plasma carotene values are dependent on the dietary intake, the nutritional state of the patients and the degree of the utilisation of food. Low plasma carotene values have been found in cases of pulmonary tuberculosis, pellagra, cirrhosis of the liver and in ancylostomiasis. Relatively high values are found in cases of diabetes and in cases of jaundice.

(2) The plasma vitamin A level showed marked variation but the average figure in a group of 120 cases was 0.055 mg.%.

(3) Plasma vitamin A average values are reduced in jaundice, cirrhosis of liver, pulmonary T.B., ancylostoma anaemia and in pellagra. The plasma vitamin A level is no index of the liver store of the vitamin, although a high plasma level usually indicates normal or high stores. A low plasma level on the other hand, may be associated with low or normal liver content of vitamin A. In cirrhosis, for example, a low blood vitamin A level is always associated with a low vitamin A store. On the other hand, in acute infections the liver store increases, in spite of marked vitamin A deficiency in the level are not known and require further study.

(4) Night blindness or diminished dark adaptation is common in catarrhal jaundice, cirrhosis of the liver, less common in pellagra and ancylostomiasis. All the cases of night blindness were associated with very low blood vitamin A values. It is recommended that vitamin A as a prophylactic should be given to patients suffering from these diseases. The dark adaptation test if used as a routine will reveal early cases of vitamin A deficiency.

(5) The carotene and vitamin A content were estimated in normal livers and in pathological livers. The average carotene content of normal livers is 0.7 mg. %/o. There is, however, a wide range of variation. The carotene content of cirrhotic livers and of livers from cases of chronic infection is markedly diminished. The average vitamin A content of normal livers is 3.7 mg. %/o. A marked diminution in the vitamin A content of cirrhotic livers is a constant finding; the average figure is 0.14 mg. %/o. The various factors accounting for the diminution of the hepatic reserves are discussed. The vitamin A content of the liver is also diminished in chronic infections but is normal in acute infections. Foetal livers store considerable amount of vitamin A especially in the premature infants.

Avitaminosis B¹ in Ancylostoma Anaemia

Published in the Journal of the Royal Egyptian Medical Association August 1944

SUMMARY.

(1) There is no absolute parallelism between the degree of the anaemia and the amount of vitamin B¹ in the blood, but there appears to be a close relation between the level of vitamin B¹ and the severity of the anaemia. The high figures of vitamin B¹ are associated with high haemoglobin indices. The reverse is also true. This indicates that there is a relative deficiency in cases of ancylostoma anaemia.

(2) The oedema was present in the three cases which showed the lowest figures of vitamin B¹ in the blood i.e., 5, 5 and 4 gamma %/o. This finding supports the view of MacKerzie which has been already mentioned, that lack of vitamin B¹ plays a role in the causation of oedema of hookworm anaemia. Westenburg also in 1941, while investigating cases of nutritional oedema, observed that the critical level of vitamin B¹ in the blood was $5\frac{1}{2}$ gamma %/o; a figure below which oedema appears.

An Investigation of a Localised Epidemic of Acute Hookworm Disease

Published in the Journal of the Royal Egyptian Medical Association, August 1944

SUMMARY.

(1) A localised epidemic of acute hookworm disease occurring in an Egyptian village has been described. The epidemic was due to exposure of the infected men to massive infection with hookworm larvae during the act of evacuating the contents of a septic tank.

(2) Thirty-five cases were affected and four of them died from the severity of the infection.

(3) All the cases suffered severely from itching, urticaria, dyspnoea and cough. Four cases developed pneumonia, thirty cases asthma, three cases fever, five cases diarrhoea and five cases oedema.

(4) Vitamin B¹ has been estimated and the results suggest the existence of a deficiency especially in oedematous cases. There was also an evidence of vitamin A and C deficiencies.

(5) Plasma protein values in the blood were not disturbed. The blood cholesterol was below normal.

On Anaemia in Bilharzial Cirrhosis with Splenomegaly

Published in the Journal of the Royal Egyptian Medical Association, August 1944

SUMMARY.

(1) Twenty-five cases of Bilharzial cirrhosis of liver with splenomegaly were selected free from parasitic infections and submitted to a prolonged haematological study. The bone marrow was examined in all of them by sternal puncture.

The following results were obtained :—

- (1) Anaemia is not an essential feature of Billharzial cirrhosis of liver associated with splenomegaly, though it is found in the majority of cases due to concomitant disorders.
- (2) The degree of anaemia in this disease is not proportionate to the size of the spleen or the stage of the disease but rather dependent on the heaviness of the associated parasitic infections (specially ancylostomiasis) and on the level of the gastric acidity.
- (3) The anaemia present is mostly normocytic hypochromic in nature. All cases responded completely to full therapeutic doses of iron together with antibilharzial treatment. This is contrary to the statements of previous workers on this subject who stated that iron could only improve but not cure the anaemia.
- (4) Leucopenia was present in 60% of the cases and was found to have a definite relation to the degree of splenic enlargements. No relative increase in the lymphocytes or monocytes in the blood was noted contrary to what was stated by the previous observers.
- (5) The bone marrow showed a leuco-erythroblastic relation in almost all the cases exhibiting enlarged spleens.
- (6) The erythroplastic reaction was proportionate to the degree of anaemia present and was mainly in the form of normoblasts. There was a slight degree of macronormoblastic reaction in splenectomised cases.
- (7) Increased leucopoiesis was observed in all the cases even in those having peripheral leucopenia and involved mainly the neutrophil granulocytes.
- (8) It was found that tartar emetic treatment induced an intensive eosinophilic reaction in the bone marrow and a slight inhibition of erythropoiesis. This reaction manifested itself in the peripheral blood by a temporary increase in the percentage of eosinophils together with a slight increase in the degree of anaemia.
- (9) A definite macrocytosis was present in all cases in which splenectomy was performed. This macrocytosis appears to be a permanent change in these cases.

Preliminary Report on the Treatment of Amoebic Dysentery with Sulfoguanil

Published in the Journal of the Royal Egyptian Medical Association, August 1944.

SUMMARY :

- (1) Nineteen cases of acute amoebic dysentery were treated with sulfoguanil with promising results.
- (2) Five of the cases received very small doses (3 grams daily) as compared with the doses recommended for bacillary dysentery. The improvement in symptoms and the disappearance of *E. histolytica* from the stools took place after three to seven days from the start of the treatment. One case, however, relapsed ten days after the disappearance of the amoebae from the stools.
- (3) Prompt relief of symptoms and disappearance of *E. histolytica* from the stools occurred in five patients who received fifteen to twenty tablets daily for 4 to 8 days with the exception of one case who continued to pass cysts although had improved clinically.
- (4) Five other cases of acute amoebic dysentery were treated with moderate doses of sulfoguanil, i.e. 5-10 grams daily for five days, but it was found that the response to the treatment was variable. Two or more courses were often needed before the amoebae disappeared completely from the stools.
- (5) Four cases were treated with large doses, i.e. 17.5 g ams daily for 3 to 5 days with satisfactory results in each case. This showed that in order to achieve a rapid cure of symptoms and disappearance of the amoebae a high concentration of the drug in the stools is required as in bacillary dysentery.

(6) It was found difficult to estimate the relapse rate after the sulfoguanil treatment. The patients rarely return for periodic re-examinations. Two cases, however, have returned one month after treatment, suffering from acute dysenteric symptoms and with active forms of *E. histolytica* in their stools.

(7) Sulphathiazol was tried in one case but no response to this treatment took place

(8) A case of *Balantidium coli* dysentery has been described and treated with sulfoguanil, but apart from the disappearance of the ciliates from the stools no claim can be made as regards a permanent result. Cases of *Balantidium coli* infection as observed by Dr. Halawani in Iraq usually defy the great majority of the known methods of treatment. They may disappear from the stools for a few weeks in a patient to appear on a later date.

(9) It appears from a previous experience in Iraq and from the results of the cases mentioned above that sulfoguanil possesses a beneficial effect in the treatment of acute amoebic dysentery. As it is less toxic than emetine, this method of treatment may prove useful in cases in which prompt relief of acute symptoms is required.

(10) Further trials of sulfoguanil in the treatment of amoebic dysentery are of course required in order to assess the true value of the drug as an amoebicide.

(11) The haematological examinations carried out during the course of treatment have revealed that sulfoguanil has no significant effect on the blood picture.

A Report on Yellow Fever has been presented to H.E. the Minister of Public Health

Published in the Journal of the Royal Egyptian Medical Association, August 1944.

IV.—PROTOZOLOGY DEPARTMENT

1.—Detection of Protozoa in the Stools of Suspected Amoebic Dysentery Patients :

Number of specimens examined only one time=600, contains the following Protozoa:-

<i>E. histolytica</i> :										
Vegetative	...	...	...	...	...	...	...	...	...	92
Cysts...	...	...	...	...	...	...	...	...	...	38
										} 130 (21.7%)
<i>E. coli</i>	...	...	...	...	...	...	...	...	...	123 (20.5%)
<i>E. nana</i>	...	...	...	...	...	...	...	...	...	5 (0.8%)
<i>I. butchlii</i>	...	...	...	...	...	...	...	...	...	24 (4.0%)
<i>G. Lambliia</i>	...	...	...	...	...	...	...	...	...	46 (7.7%)
<i>Trichomonas</i>	...	...	...	...	...	...	...	...	...	45 (7.5%)
<i>Chilomastix mesnli</i>	...	...	...	...	...	...	...	...	...	17 (2.8%)
<i>Coccidia (I. hominis)</i>	...	...	...	...	...	...	...	...	...	1 (0.2%)
Number of negative specimens	...	...	...	...	...	...	...	...	...	306 (51.0%)
Number of specimens examined more than one time	...	...	...	...	...	...	...	...	...	500
Total number of examined specimens	...	...	...	...	...	...	...	...	...	600+500=1,100

2.—Comparative Efficiency of Two Successful Technics for the Microscopic Diagnosis of Protozoan Cysts in Faeces:—

Technic 1: Direct faecal film, unstained and iodine stained.

Technic 2: Zinc sulphate centrifugal floatation followed by loop removal (Faust and his co-workers).

Method : 2 cc. of 1:5 emulsion of the suspected stools in water were placed in a Wassermann tube. This was washed two or three times with tap water and centrifuging in every 10 min. Then some zinc sulphate solution (33.1%) were placed over the sediment and the tube was thoroughly shaken. Zinc sulphate solution was then added to about half a centimetre before the top of the tube. This solution was then centrifuged for half a minute. A drop of the supernatant solution was removed by a loop from the surface, placed on a clean slide, and examined microscopically after staining it with iodine.

TABLE No. 97.—COMPARATIVE RESULTS FOR THE DIAGNOSIS OF PROTOZOAN CYSTS FROM 100 FAECAL SPECIMENS BY TECHNIQUES 1 AND 2.

Species	Total number of infections found by techniques 1 and 2	Number (percentage) found by respective techniques	
		1	2
<i>E. histolytica</i>	14	9 (64.3%)	14 (100%)
<i>E. Coli</i>	42	27 (64.3%)	42 (100%)
<i>E. nana</i>	17	14 (82.4%)	17 (100%)
<i>I. butchlii</i>	9	8 (88.9%)	9 (100%)
<i>G. Lambli</i>	4	4 (100.0%)	4 (100%)
<i>Ch. mesnli</i>	5	3 (60.0%)	5 (100%)
All protozoa	91	65 (71.4%)	91 (100%)

3.—Cultivation of *Entamoeba histolytica* in hydatid fluid :

It has been shown for the first time that hydatid fluid, obtained from camels, is a suitable medium for the cultivation of *E. histolytica*. The pH of the fluid has been found to indicate a slightly alkaline reaction which has proven to be a favourable initial reaction for the growth of *E. histolytica*. It has been found also that the fluid contains vitamins (vitamin B¹, nicotinic acid and vitamin C) and it is believed that *E. histolytica* requires vitamins for their growth. These vitamins will be quantitatively estimated. The following simple method was followed for the cultivation of *E. histolytica* in hydatid fluid :—

About 5 cc. of the hydatid fluid were aspirated from the camel's hydatid cysts and placed in a sterile ordinary test tube. The tube was then warmed to the body temperature in a water bath or in an incubator at 37°C. A very small amount of sterile solid rice-starch was added to the fluid which was then inoculated with a loopful (4 mm. in diameter) of the suspected stool. The tube was incubated at 37°C immediately after inoculation. The culture was examined on the second day (after 18–24 hours incubation) and the results recorded after direct microscopic examination of a sample removed from the bottom of the tube by a sterile capillary pipette. It was found that nearly all the cases which were positive in faecal smears gave copious growth in hydatid fluid. A certain percentage (15.21%) of the negative cases (by direct faecal smears) of suspected amoebic dysentery were also found positive in culture.

(This discovery was published in the J. Roy. Egypt. Med. Ass. August 1944. Other papers on the vitamin content of hydatid fluid will be published later).

4.—A Case of Coccidiosis :

Oocysts of coccidia (about 30 micron x 10 micron) were found in the stools of a girl 10 years old. Her stools were examined for one month at different intervals and the oocysts were constantly found.

Some of the infected stools were emulsified with some water and left at room temperature and was daily microscopically examined. During one week the cytoplasm was divided into two sporoblasts each containing four sporozoites. It was concluded that that girl was infected with *Isospora hominis*. (This case will be published later).

HAEMATOLOGICAL SECTION

The Haematological Section examines the blood of the patients attending the hospital both in the outpatient and inpatient. Complete blood pictures including haemoglobin estimations, red and white corpuscular counts, differential counts, estimation of the icterus index of the blood, diameter and volume index of the corpuscles, fragility, platelet count, coagulation and bleeding times. The blood also is being examined for blood parasites such as malaria and relapsing fever.

Table showing the number of cases examined at the Haematological Section.

	Cases
Haemoglobin estimations	6,568
Red corpuscular count	876
White cell count	280
Complete blood pictures	876
Fragility	95
Icterus index	352
Volume index	66
Diameter index	67
Platelet count	65
Bleeding time	80
Coagulation time	80
Sedimentation rate	25
Sternal punctures	51
Malaria	2,250
Filaria... ..	74

Among the cases diagnosed through examination of the blood are :-

- (1) Three cases of leukaemia.
- (2) Five cases hodgkin's disease.
- (3) one case of leuko-erythroplastic anaemia after splenectomy (this case was most probably one of acholuric jaundice).
- (4) A case of pernicious anaemia with subacute combined degeneration.

The following is a description of some of these cases :

1.—Cases of Leukaemia :

(1) A female patient aged 43 complained of general weakness, malaise, fatigue, lassitude and swelling of the abdomen. She had attacks of vomiting and diarrhoea.

Duration of illness was about 18 months before examination.

On examination: there was marked pallor, slight oedema of ankles, and marked abdominal swelling. Heart exhibited systolic murmur over the base. B.P. 110/60. Chest, lungs were free. The bones of the sternum were very tender. Abdomen, liver was moderately enlarged with firm edge, and the spleen hugely enlarged (to the right iliac fossa) hard, and very tender. No other palpable masses in abdomen, no ascites or tender spots, were detected. Urine and stools were free of parasites, Blood picture was as follows: Hb. 50 %, R.B.Cs. 2,625,000, W.B.Cs. 330,000, Eosinophiles 3 % Lymphocytes 9 % Large mononuclears 4 % Neutrophiles 54 % Myelocytes 22 % Premyelocytes 12 % and Myeloblasts 6 %

Diagnosis: chronic myeloid leukaemia.

(2) Male patient aged 10 years complained of sore throat, diarrhoea and general weakness since 3 months. There was no history of previous disease of importance. The temperature was 38°C. There was marked emaciation and pallor. The heart and lungs

were free. The liver and spleen were moderately enlarged. There was stomatitis with ulcerations over the tonsils, pharynx and gums. There was also enlarged septic lymphatic glands on both sides of the neck. Marked tenderness over the sternum was easily detected. The urine was normal, and contained no parasitic ova. The stools contained *Giardia lamblia* cysts. The blood picture was as follows: Hb. 65%, R.B.Cs. 3,800,000, W.B.Cs. 8,800, Eosinophiles nil, Lymphocytes 14 %, Large mononuclears nil, Neutrophiles 4%, Myelocytes 4 %, Myeloblasts 78%, Platelets 20,000.

Diagnosis: acute leukaemia.

2.—Cases of *Hodgkin's Disease*:

The diagnosis in these cases was dependent mostly on clinical examination. No abnormal blood pictures were met with except in one case with leucocytosis 13,500 and eosinophiles 15 %. The patient had no parasitic infection.

3.—*Leuco-erythroblastic Anaemia after Splenectomy*:

A male patient aged 18 years complained of general weakness, abdominal colic and ulceration of legs. Splenectomy was performed 8 months before examination. There was no parasitic infestation or history of treatment from parasites. The blood picture was as follows: Hb. 75%, R.B.Cs. 3,950,000 and W.B.Cs. 20,000. There were more than 15,000 normoblasts in each cubic millimetre of blood. The fragility of the red blood corpuscles started in 0.48% saline and was complete in 0.42%. The icterus index was 15 units. The average corpuscles diameter was 8.4 microns. Probably this patient was suffering from familial acholuric jaundice and the splenectomy was performed for this reason. His past and family histories were not available. It is well known, however, that such a normoblastic crisis as that met with in this case might take place after splenectomy.

4.—*Leuco-erythroblastic Anaemia with Osteosclerosis*:

This patient was a male aged 40 years. He complained of dyspnoea, and fullness in the left upper quadrant of the abdomen. His temperature was 37°C, pulse 84 and respiration 40. The cardiac sounds were apparently normal but the apex was shifted to the left. The breath sounds were absent over the base of the left lung. There was also dullness on percussion over the same area. The spleen was enormously enlarged and hard. The liver was palpable but not tender. There was enlarged lymphatic glands in both groins. The urine and stools were normal. The blood picture was as follows: Hb. 75%, R.B.Cs. 4,680,000, W.B.Cs. 41,000, Eosinophiles 3%, Myelocytes 8%, Neutrophiles 81%, Lymphocytes 15 %, Mononuclears 2%, Normoblasts 2%, Bleeding time 1½ minute, Coagulation time 2½ minutes, W.R. +++++, and blood urea 17mgms.%.

X-Ray to long bones.—The marrow cavity is very narrow due to encroachment of the bone over the marrow cavity.

Blood Pictures in Splenectomised Cases:

It has been observed that the cases for which splenectomy has been performed within 8 months to 8 years display the following blood pictures:—

(1) In all cases there was leucocytosis between 11,600 and 29,000. There was nothing to account for this in these patients' clinical condition.

(2) There was marked eosinophilia (average 11%). Most of the cases had parasites in urine or stools or both, which would explain this eosinophilia. But in one case this parasitic infestation was absent and there was no history of previous infection.

Blood Picture in Cases of Pellagra:

In most of the cases of pellagra examined in the Institute the co-existing anaemia was caused by parasitic infestation either in the urine or stools. In all the cases the anaemia was hypochromic. Pernicious anaemia was never met with in these pellagra cases. Moreover, the anaemia in question does not improve on nicotinic acid alone or yeast alone, but does respond to iron treatment only.

HELMINTHOLOGICAL SECTION

The Effect of the Flooding Method of Sewage Disposal on the Viability of the Eggs of Ascaris Lumbricoides.

Dr. I. S. Hilmy, Assistant Professor of Parasitology, Faculty of Medicine, Cairo, and the chief of the Helminthological Department, Fouad I Institute for Research and Hospital for Tropical Diseases carried on this research and had come to the following, results :—

1. Drying beds prepared between December 16 and March 9 contained viable *Ascaris* eggs. Storage of the manure prepared by the flooding method during that period contained still viable *Ascaris* eggs after 10 days. After 15 days storage the manure was either free from eggs or contained only dead *Ascaris* eggs.

2. Drying beds prepared during the three remaining seasons, i.e. from March 10 to June 11 and June 12 to September 15 and September 16 to December 15 contained no *Ascaris* eggs at all or, if any were present, they were not viable.

3. All specimens prepared by the piling method during December to March contained viable *Ascaris* eggs after 25 days of storage. After 30 days of storage no or only dead eggs were present.

(This research was published in the Journal of the Royal Egyptian Medical Association, Vol. 28, No. 5, May 1945, pp. 209-214.)

OUTPATIENT CLINIC

The total number of patients examined at the outpatient clinic during the year 1944 was 7,743 divided as follows :—

January 615, February and March 1,296, April 429, May 759, June-July 1,509, August 593, September 510, October 809, November 527 and December 696.

All these patients were subjected to thorough clinical examination together with complete examinations of their urines and stools for helminthic ova. Further examinations such as haematological, serological, complete examination of urine, rectal sigmoidoscopic examination or X-rays were done as the condition of the patient required.

Patients found to be infected with parasites were treated in the outpatient. The number treated and the results of treatment are shown in the following tables.

Patients suffering from other diseases were either treated in the inpatient or were transferred to other hospitals giving the details of the investigations which were carried out and the possible diagnosis. The patients transferred to different hospitals during the year 1944, were as follows :—

1.—Diseases of the Heart and Blood Vessels :

Mitral stenosis	14
Aortic regurgitation	13
Mitral stenosis and regurgitation	28
Mitral stenosis and aortic regurgitation	9
Heart failure	37
Arteriosclerosis	2
Hypertension	14
Angina pectoris	one patient

2.—Diseases of the Lungs and Respiratory Organs :

Acute bronchitis	10
Chronic bronchitis	16
Emphysema and chronic bronchitis	34
Pulmonary tuberculosis	35
Lobar pneumonia	13
Lung abscess	2
Bronchiectasis	1
Pleural effusion	7
Pleurisy	9

A Report on the Cases of Malaria treated at the Fouad I Institute Research and Hospital for Tropical Diseases, during the Year 1944.

During 1944, 540 cases of malaria were treated at the Institute; of these 197 were malignant, 318 were benign tertian and 25 were mixed cases. The great majority of the cases were from Upper Egypt. The following table shows the monthly admissions of these cases :—

TABLE No. 98

Month	Malignant tertian malaria	Benign tertian malaria	Mixed infections
January	55	19	1
February	74	32	5
March	14	20	6
April	10	17	1
May	16	71	5
June	3	42	3
July	3	31	—
August	1	45	1
September	6	22	—
October	15	19	3
November			
December			
TOTAL	197	318	25

The relapse rate.—All the cases that attended regularly at the Research Institute were given full courses of atabrin and plasmoquine. They were told to return for re-examination if any recurrence or relapse would take place. The percentage of persons who attended, as they were told, did not exceed 10%. The relapse rate was generally high. Some cases relapsed 9 times during one year. The relapse rate was higher in cases of benign tertian malaria and in mixed infections than in malignant malaria.

Some of the manifestations associated with malaria may actually mask its clinical symptoms and render its diagnosis, without the aid of the laboratory, exceedingly difficult if not impossible.

The following special features and complications presented by some of our cases are of such interest from a clinical point of view as to justify recording them here :—

A.—Pulmonary manifestations :

Asthmatic bronchitis	10 cases
Pneumonia, broncho-pneumonia and pneumonitis	10 „
Acute bronchitis	16 „
Pleurisy	1 case.

B.—Gastro-intestinal :

Dysentery	2 cases
Jaundice	3 „
Hepatitis	2 „
Acute appendicitis	1 Cases

C.—Renal :

Renal colic	3 cases
Acute nephritis or nephrosis	4 „
Oedema	15 „

D.—Nervous manifestations :

Herpes zoster	...	...	...	...	...	...	...	...	...	...	...	1 case
Epidemic encephalitis	...	...	...	...	...	...	...	...	...	...	...	2 cases
Epileptic	...	...	...	...	...	...	...	...	...	...	...	1 case
Tetanic	...	...	...	...	...	...	...	...	...	...	...	1 „
Mienier's syndrome	...	...	...	...	...	...	...	...	...	...	...	1 „
E. Suprarenal deficiency	...	...	...	...	...	...	...	...	...	...	...	1 case

Pneumonic manifestations :

The incidence was higher in children than in any other age group *i.e.* 60%. Nine cases were suffering from malignant tertian malaria, while one case only had benign tertian infection. The seasonal incidence was in late autumn and early winter. All the cases occurred in the undernourished class of patients coming from Upper Egypt. The pneumonic manifestations were the presenting symptoms that made the patient attend for treatment. In a few cases it was accidentally discovered.

Generally speaking the objective signs were more prominent than the subjective symptoms did indicate. In some cases on the other hand dyspnoea, cough and chest pains were not marked enough, but nevertheless clinical examination revealed marked dullness of a part of the chest, tubular breathing, and crepitations. In four cases the signs were rather suggestive of pneumonitis with persistent localised crepitations which cleared up without passing into the stage of actual pneumonia.

Seven cases were examined by the fluorescent screen just on admission and after completion of treatment. All these cases showed localised opacities that are commonly seen in cases of pneumonia or pneumonitis. In five cases the opacity cleared up after completing the course of treatment of malaria (usually 8 days). On the other hand the clinical signs of consolidation have been observed to persist for a period of 3 weeks. The pneumonitis was more common in the bases of the lungs.

The common blood picture during the pneumonic stage was marked anaemia accompanied by normal or subnormal leucocytic count. There was relative increase in the neutrophilia with a shift to the left, slight monocytosis and normal eosinophilic count. No specific organism was found in the sputum.

Description of a case :

A child of 7 years of age complained of dyspnoea and cough, and gave a history of malaria one week before admission, clinical examination revealed signs of left basal pneumonitis with tubular breathing and bronchophony. The patient was also suffering from general anasarca ; a picture reminiscent of beriberi. The heart was normal. The temperature of the patient was 36.5, and the pulse 112. Gametocytes of benign tertian and malignant tertian malaria were present in the blood. Blood picture : H.B. 36% R.B.Cs. 1,650,000, W.B.Cs. 9,600, E : 3%, N : 76%, L : 16%, M : 5%, diameter index, 6.6, and I.I. 6 units.

The urine contained moderate quantity of albumin and pus. The stools were negative for parasites. The plasma total proteins was 8.0 grams %. The globulin were 5.0 grams % and albumin 3 grams %. The vitamin B¹ of the blood was 4%. The sputum was negative for the Tubercle bacilli. X-ray examination revealed opacity in the left base of a limited extent. There was no hilar gland or infiltration.

Progress.—The patient was given atebirin 1/2 tablet daily for 4 days. He attended 3 days after stopping the treatment. The dyspnoea and cough had already diminished, but some crepitations were still persistent. X-ray examination showed complete disappearance of the shadow. One month later screening showed normal lung fields.

Discussion :

Pneumonia as a complication of malignant malaria or as an initial sign has been described by many authors (Castellani, Archibald and Byam). The aetiological cause of the disease is still debated. It is considered by the consensus of opinion that lobar pneumonia or broncho-pneumonia of bacterial origin often complicate malaria due to the low resistance

of the patient. The clinical and radiological features of some of the cases suggest, however, that the lung affection is due to congestion by the malarial parasites and the crowding of the pulmonary vessels especially those of malignant tertian. The condition seems to be one of pneumonitis rather than pneumonia. Moreover, the disappearance of the lung opacity after the administration of antimalarial drugs as shown by X-ray examination, suggests that the condition is of malarial origin. Nevertheless the possibility of a spontaneous cure cannot be excluded. Tropical eosinophilia such as Loeffler's syndrome and allergic shadows were excluded by the absence of other manifestations of allergy, and by the normal eosinophilic count. Shadows due to epituberculosis are excluded by the longer time they take to disappear, by the presence of the hilar flare or glands and by the presence of other tuberculous manifestations. The possibility of the cases met with being due to a virus or a typical pneumonia could not be excluded because they were not unlike those recently described in the literature. However, the longer course of a typical pneumonia may be the only point of difference.

Two cases in the present series were suffering from a condition similar to virus pneumonia. They did not clear up after antimalarial treatment. Applebaum and Shiger (1944) classified the various pulmonary manifestations and found that 4.5% of the cases were affected either with bronchitis or pneumonitis. They suggested that the pneumonitis is either of malarial origin or in the cases, which do not respond to atebrian, are due to virus pneumonia.

Cases with asthmatic bronchitis.—Asthma was a presenting symptom in 10 cases of malaria of benign or malignant type. It commonly occurred in the chronic relapsing cases in young adults. The clinical features were typical of an ordinary bronchial asthma. The symptoms improved after antimalarial therapy but the condition did not subside altogether. The cases could not be followed up because the patients did not attend after the treatment. Eosinophilia was present when looked for but was not marked. Urticaria and other allergic manifestations were not present.

Asthma as a manifestation of malaria has been referred to by Tallocco in children and Honnard described cases of asthma that were cured after the treatment of the co-existing malaria. This is probably due to the foreign protein liberated by the repeated destruction of the red blood corpuscles and liberation of malarial pigment in a sensitised patient.

Nervous manifestations.—A case of malaria simulating acute epidemic cephalitis. A man aged 40 years gave a history of repeated attacks of malaria for eight months prior to his admission. He complained of tremors in the hand with irregular jerky movements accompanied by muscular weakness. These symptoms followed gradually the first attack of malaria, but were aggravated after each recurrence. Examination of the nervous system demonstrated the following features: cranial nerves were of normal function. There were tremors in the right hand increased on voluntary movement. These tremors were coarse and of rolling pill character. There was some weakness in the right upper limb. Jerks were quite normal. There was rigidity in the muscular movement of the face (mask face), and general rigidity in the body.

There was no evidence of sensory or cerebral disfunction or loss of coordination. The pyramidal system was apparently intact and the motor functions were quite normal. The muscular tone was normal. The heart and the lungs were apparently normal. The spleen and liver were both slightly enlarged. The haemoglobin was 60%, R.B.Cs. 4,000,000, W.B.Cs. 8,800, E: 8%, N: 60%, L: 22%, M: 10%. The blood film was positive for benign tertian gametocytes and malignant tertian crescents. The stools positive for *Ancylostoma* eggs. The Wassermann reaction was negative in both blood and cerebro-spinal fluid.

Cases of malaria exhibiting intention or cerebral tremors are described in the literature. Von Economo in his book on epidemic encephalitis referred to the fact that cases of malaria may show a picture of epidemic encephalitis. In the above described case the lesion may have affected the pallidal system or other basal ganglia. It may be due to a thrombosis or petechial haemorrhages in the arteries supplying the pallidum.

The following is a description of a case of malignant tertian malaria associated with symptoms of Addison's disease: A man 45 years of age came to the hospital seeking medical

advice because the colour of his face changed from brown to extreme black. This discolouration occurred 1½ months before admission. He gave a history of repeated attacks of malaria one month before his present complaint. The patient also complained of asthenia and marked loss of power. The face was diffusely black. The pigmentation also affected the mouth, tongue and chest. The heart was normal. Examination of the nervous system revealed no abnormality. The B.P. 100/70. X-ray examination of chest revealed no evidence of tuberculosis. The blood picture was as follows: Hb.: 70%, R.B.Cs. 3,500,000, W.B.Cs.: 5,200, E: 24%, N: 30%, L: 35%, M: 9%, and B: 1%. Blood films were positive for malignant malaria after adrenaline provocation. The water dilution and concentration tests showed marked disturbance of kidney function. The urine was normal apart from a trace of albumin.

Blood sodium was 330 mg.‰. The blood protein was as follows: total 8.0 mg. albumin 5 and globulin 3. NaCl in urine was 18.0 mg.‰ in 24 hours. X-ray examination of the urinary system reveals no evidence of calcified tuberculous focus.

Comment: The clinical picture of this case is similar to Addison's disease from various points of view such as the low blood pressure, the marked asthenia, the diffuse-pigmentation, hypoglycaemia and the increase of NaCl excretion in the urine. As no tuberculous focus was discovered, the finding of malarial infection of the malignant type in this case, might support the hypothesis that malaria was the cause of the suprarenal deficiency.

Acute nephritis associated with malaria: A male adult patient gave a history of a malarial attack was also met with in our series, 10 days before admission to the hospital. The presenting symptoms were urticaria and pain in the loins dating five days after the onset of malaria. Nephritis was suspected. The urine examination revealed the presence of albumin in excess, numerous epithelial and granular casts and excess of red blood corpuscles. The blood pressure was 160/110, the blood film showed benign tertian gametocytes; after quinine administration the urticaria improved. The case did not attend, however, for further observation.

Oedema in malaria cases was present in 12 cases. They occurred in malignant and benign tertian forms. It was more or less related to the severity of the anemia and to the nutritional state. Plasma protein estimations in the few cases, which were examined, did not suggest the presence of hypoproteinaemia although the albumin globulin ratio was inverted. Vitamin B¹ estimation suggested moderate deficiency. A figure of 4 gamma % represented the average finding. Vitamin B¹ deficiency can be explained in the chronic relapsing cases, by the increased needs of the body due to the repeated attacks of pyrexia. Moreover, the presence of a condition of marked anaemia may be a contributory factor as described by us in cases of ancylostoma anaemia. Moreover the diet of the poor people in Upper Egypt was known to be deficient in Vitamin B¹. Four of the cases suffering from oedema were due to a condition of nephrosis as suggested by the urinary finding and normal blood pressure. Three of these cases occurred with malignant malaria and one with benign tertian.

Herpes Zoster has also been seen associated with malaria in a man aged 45 years attending the hospital. The patient was suffering from pain in the chest two days before admission. He gave a history of malaria eight days before. On examination, he presented a picture of herpes zoster with distribution on the chest. The blood film showed benign tertian gametocytes. The blood picture was within normal apart from slight anaemia.

Herpes labialis is common in malaria but herpes zoster has not been previously reported. The present condition is possibly due to the fact that the malarial infection has diminished the resistance of the posterior nerve root becoming susceptible to a virus infection rendering them more vulnerable to the virus of herpes zoster.

Malaria Research Station, Fayed.

SUMMARY OF ANNUAL REPORT, 1944.

The area belonging to this unit extends from Km. 29 (N.) to Km. 67 (S.) on the Suez Canal Road, in between the Bitter Lake Coast (E.) and the Sweat Water Canal (W.).

Villages in the area are: Fayed, Fanara, Kasfareet and Shandour.

Two sub-units follow this unit: one is at Fanara, the other is at Geniefa.

The following has been performed during the year 1944:—

A.—Anti-Anophelines Larvae Measures:

(1) *Paris-Green Dusting*.—All canals and irrigation ditches in the area were periodically dusted with Paris Green mixture weekly.

(2) *Malariol*.—All swamps and drains were oiled weekly.

(3) *Clearing Measures*:

(a) All canals, swamps and ditches belonging to the government were cleared continuously from the weeds and vegetations by gangs belonging to this unit. Special care was given to the Main Malaria Drain which runs along the Suez Canal Road and in which all the drains collect.

(b) Canals and ditches not belonging to the government were cleared by their owners. This process was always under supervision of men of this unit. 178 Malaria notices were issued to people delaying this clearance. Four actions were taken against those who did not clear their ditches despite the notices.

(4) *Sand collects at the openings of drains*, at the bitter lake coast. This was daily looked after and special men removed the accumulated sand daily.

(5) *A large number of small pits and ditches*, suitable for Anophelines breeding were filled in completely.

(6) *Oil was put in latrines weekly* in places crowded with population and near barracks of the Allied Forces, to combat Culicinae.

(7) *A new ditch dug*.—This unit asked the British Overseas Airways Corporation, Kasfareet Airport to dig a new ditch between the Main Drain and the Bitter Lake instead of the one they blocked opposite their bathing beach. This they performed.

(8) *Filling in of a ditch*.—An unused ditch running along the Suez Canal Road used to collect some water every now and then, and in which mosquitoes bred very well. The Suez Canal Company was asked to fill it in, and this was done.

B.—Blood Examination:

During 1944, this unit has examined blood films from 14,422 of the inhabitants. Of these 775 samples were positive for malaria with a percentage of 5.37.

Benign tertian malaria ...	587	—	4.07	per cent
Malignant tertian malaria ...	181	—	1.25	„
Mixed infection ...	7	—	0.05	„
	775		5.37	„

C.—*Treatment :*

All positive cases for malaria were given the necessary treatment. Drugs issued were:

1,860	Quinine	5 gr.	tablet	
130	"	2 "	"	
90	"	2 "	"	(with chocolate)
9,498	Atebrin	tablet.		
1,416	Plasmoquin Co.	1 cgm.	tablet.	
162	"	"	$\frac{1}{2}$ "	"
969	Aspirin	tablet.		

D.—*Catching Station for Adult Anophelines :*

17 specimens were caught:	—	10	<i>An. pharoensis.</i>
	—	7	" <i>multicolor.</i>

E.—*Breeding Places for Larvae :*

134 places were spotted	—	66	<i>An. pharoensis.</i>
	—	57	" <i>multicolor.</i>
	—	6	" <i>mauritanus.</i>
	—	5	" <i>sergenti.</i>

F.—*Supervision of Prevention of Cultivation of Rice, Samar and Deneba.*

Resumé of Work done by the Khanka Malaria Research Station, 1944

The area in which we combat malaria is so wide that it has been divided into four main sections:—

(1) The first section includes the villages of Abu Zaabal, Kafr Ebyan, Abu Zaabal prison, Abu Zaabal quarries, Abu Zaabal locoshops and houses belonging to it and the Leprosy Colony.

(2) The second section includes the villages of Khanka, Gebel el Asfar Farm, El Alag and El Minaya.

(3) The third section includes: Sendewa, El Manayel, Kafr Hamza, Sariakous and El Minayar.

(4) The fourth includes: El Marg, El Khusous, El Berka and Kafr el Shourafa.

21,855 specimens have been examined for malaria during this year; of these 2,107 were positive for malaria: 1,590 positive for benign tertian, 515 for malignant malaria and 2 for mixed infection. The incidence of malaria during this year is the least during the last ten years. The following table shows the different sources of the specimens examined:—

Patients attending the O.P.	...	...	...	...	...	5,130
Specimens brought from the villages	...	...	...	...	...	10,263
"	"	"	Lunatic Asylum	...	...	118
"	"	"	Gebel El Asfar Farm	...	...	4,088
"	"	"	Abu Zaabal Prison	...	...	1,499
"	"	"	Loco Shops	...	...	269
"	"	"	Leprosy Colony	...	...	271
Other specimens	...	...	...	...	...	217
Total	...	...	...	...	...	21,855

All breeding places have been examined very carefully at least once every six days and the places in which we found larvae of mosquitoes have been dusted with Paris Green or sprayed carefully with malarial; and all the drains have been cleared from the weeds. Consequently the incidence of malaria during this year decreased a great deal as compared with previous years. Even in the villages which cultivated rice, the incidence of malaria decreased; this is due to the new method of irrigation "alternate irrigating and drying the fields" which decreased the breeding of *Anopheles* mosquitoes to a minimum.

The following table shows the incidence of malaria according to different ages:—

TABLE No. 99.

Ages.	Sp. examined	Benign Tert.	Malignant	Mix. infection
0 - 1 year	475	30	6	—
1 - 10 years	8,821	311	86	—
10-20 "	4,547	308	95	—
20-30 "	3,842	464	155	1
30-40 "	2,542	270	97	—
40-50 "	1,183	144	49	1
More than 50 years ...	445	63	27	—
TOTAL	21,855	1,590	515	2

The highest percentage of malaria has been noticed in patients of more than 50 years of age and the youngest patient was 4 months old.

Malaria in Gebel el Asjar Farm.—Several labourers are found in this farm to clear all the drains of the weeds and to spray all breeding places with malariol. One trained labourer is also found there permanently to take blood specimens from those who complain of symptoms of malaria at night and send them to the station to be examined. He also collects the adult mosquitoes which he finds in the houses of the farmers. He collected 20,468 *Culex* mosquitoes, 132 *Aopheles* mosquitoes during the whole year. Many pits and small swamps have been filled by our labourers working at the farm. Owing to the great care that has been paid to the farm during this year the percentage of malaria in the farm has decreased to 5.8 per cent while it was 13.5 per cent last year.

Malaria in the Lunatic Assylum.—118 specimens taken from patients and (tanurgis) have been examined for malaria; of these 38 proved to be positive for benign tert. and 9 for malignant malaria. These specimens were taken from the patients who actually complained of symptoms of malaria and not as a survey of all the patients.

Malaria in Abu Zaabal Prison.—1,499 specimens were examined for malaria and 128 proved to be positive. This number of patients is considered to be very small as compared with the past.

Malaria in Abu Zaabal Loco-Shops.—A group of labourers from the shops helped our labourers in the control measures taken in this area. They dug some new drains, cleared the others of the weeds and filled many pits.

From the workmen who live there, 269 specimens were taken and examined for malaria and 2 only were positive for benign tert. and one for malignant malaria.

Malaria in Leprosy Colony.—Of 271 specimens taken, only one proved to be positive for malaria.

Cases of Filaria.—139 specimens taken at night from Khanka were examined for micro-filaria; 18 were positive.

Similarly, 129 specimens were taken from El-Maryel and 15 were positive. We have been unable to take specimens from all other villages in the area owing to some obstacles that we could not overcome.

The following quantities were given to the patients in the treatment of malaria during the whole year:—

24,998	tablets of Quinine 5 gr.
2,601	" " " 2 gr.
3,110	" " " chocolate-coated.
4,313	" " Plasmoquine simple.
525	" " Atebrine.
5,242	" " Mepacrine.

Chapter XX.-SUMMARY OF THE WORK OF THE MEMORIAL OPHTHALMIC LABORATORY, GIZA

Another full year's work has been completed, and the Laboratory continues to serve especially as a centre for clinical, pathological and bacteriological research in ophthalmic diseases. It has also carried out the regular pathological work required by the many ophthalmic hospitals throughout the country and in addition participated in the post-graduate training of medical officers for the Ophthalmic Section. The work of the Laboratory may, therefore, be briefly summarised under the following headings:

1.—*Post-Graduate Training.*—

Clinical, surgical, pathological and bacteriological instruction has again been provided for candidates in the Diploma of Ophthalmic Medicine and Surgery.

2.—*Pathological Section.*—

The pathological section of the Laboratory is responsible for the routine reports upon all specimens submitted from Ophthalmic Hospitals. During the year, many specimens of unusual interest were met with.

3.—*Clinical Section.*—

The Laboratory has no routine out-patient department, so that the cases examined are only those which are recommended for such special investigation as cannot be obtained in the regular hospital clinics. Many cases of interest were again seen during the year.

4.—*Research Section.*—

The problems connected with trachoma and the acute ophthalmias were those to which special consideration was given during the past year. The treatment of the latter by means of sulphonamides was thoroughly investigated and constitutes the subject of special papers prepared by the staff of the Laboratory. Both for this work and for the other subjects of research, the reader is referred to the special Report published by the Laboratory.

Appendix I

SUMMARY OF THE REPORT OF THE UNIVERSITIES HOSPITALS ADMINISTRATION

Introduction

On May 1st, 1934, Kasr el-Ainy Hospital came under the direction of Fouad I University and ceased to be affiliated to the Ministry of Public Health. Ten years later, i.e. on May 1, 1944, it came once more under this Ministry as a branch of the University Hospitals Administration which formerly consisted of the Kasr-el-Ainy hospital only, but later were incorporated with the Fouad I Hospital, Kasr-el-Ainy hospital and the Children hospital in Cairo and Farouk I University hospitals in Alexandria consisting of the Government hospital, Shatby hospital and Queen Nazli Children hospital.

A brief statement on each hospital follows :—

Fouad I University Hospitals

FOUAD I HOSPITAL.

This hospital, which is one of the largest in the world, is situated on Rodah Island, Cairo, within an area of 53 feddans. It was first planned in 1925 and the foundation stone was laid by late King Fouad on December 16, 1928.

Work began in the out-patient departments in 1934 and in the in-patient departments in December 1936.

His Majesty King Farouk I graciously inaugurated the hospital on April 23, 1941.

So far, the cost is in the neighbourhood of one million pounds at pre-war prices. It rivals the best hospitals in the world as regards organization and equipment. When the other new branches are completed, it will accommodate more than 2,000 beds.

The buildings house thirty in-patient sections each with accommodation for 50 patients. These are designed for the treatment of medical, neurological, dermatological, venereal, urological and tropical diseases, in addition to gynaecological sections. There is a special wing for operations consisting of 12 operation theatres each fitted with two operation tables. There are, besides, five operation rooms distributed among the outpatient departments and X ray and dental clinics. There is also a special department for X ray examination and treatment. Radium treatment is applied where medical and surgical treatments have failed.

In addition, there is a school for dentistry with an out-patient department which are considered among the best equipped modern clinics of their kind.

There are two large dispensaries, one for the in-patients and another for the out-patients. There is also a section for reception and another for first aid where emergency cases such as cases of poisoning receive instant aid. Many a life was saved by the prompt treatment afforded by this section.

The following table shows the distribution of the hospital accommodation during the years 1937-1944 :—

TABLE NO. 100

Section	1937	1938	1939	1940	1941	1942	1943	1944
Medical Diseases	450	600	450	450	450	450	450	450
Neurological Diseases ...	—	—	75	75	75	75	75	75
Tropical Diseases	—	—	—	75	75	75	75	75
Chest Diseases	—	—	75	75	75	75	75	75
Casualty cases	50	50	50	50	50	50	50	50
Dermatological Diseases	—	75	75	75	75	75	75	75
Venereal	—	75	75	75	75	75	75	75
Radiology	43	44	44	44	44	43	43	43
Erysipelas	—	—	—	—	48	48	48	48
Gynaecological Diseases	—	—	—	—	—	—	150	150
Urological	—	—	—	—	—	—	75	75
Penicillin	—	—	—	—	—	—	—	25
TOTAL	543	844	844	919	967	966	1191	1,216

In-Patients Treatment :

The number of in-patients under treatment during 1944 was 19,533, of which 7,314 or 37.9 % were females as against 11,955 in-patients in 1937, i.e. 7,578 more patients or 63 % of their number in 1937. The distribution of patients according to departments was as follows :—

7,574 in medical, 4,679 casualty, 1,050 dermatological, 1,055 venereal, 415 X-ray, 531 erysipelas, 973 urological and 1,462 gynaecological departments.

July and August marked the most congested months of the year, registering 2,038 and 2,058 patients respectively. January was the least with only 1,213.

14,050 patients were discharged improved. Of this number, 1,319 were children and 4,842 females.

3,178 patients were transferred to the out-patient department and 1,278 to other hospitals for further treatment.

Of 1,027 deaths occurring during the year, 265 were females and 111 children. This gives a death rate of 5.3 %.

The following table gives details of patients treated in the Fouad I Hospital during the period 1937-1944 :—

TABLE NO. 101

Year	Discharged improved	Transferred to		Deaths	General Total	% Deaths	Beds in Hospital
		Out pat.	Other Hosp				
1937	8,285	2,113	705	741	11,844	6.2	543
1938	10,494	2,332	678	904	14,408	6.2	844
1939	9,446	3,556	770	905	14,677	6.4	844
1940	9,888	3,973	819	926	15,606	5.2	919
1941	9,606	4,390	891	1,018	15,905	6.4	967
1942	10,976	3,690	1,045	1,091	16,802	5.6	966
1943	12,863	3,323	1,197	893	18,276	4.9	1,191
1944	14,050	3,178	1,278	1,027	19,533	5.3	1,216

It is worthy of mention that 6,266 patients from amongst those under treatment in the medical diseases department were discharged as improved, 1,608 were transferred to the out-patient department and 476 to other hospitals for further treatment and 744 patients died.

The number of patients treated in the casualty section was 4,579 or 23% of all the patients. 138 deaths were recorded or 3% of the patients treated there in. Of the cases treated, 1,096 suffered from scorpion sting, of which 97 cases were fatal, all children under 12 years of age; 1,676 suffered from food poisoning with 8 fatal cases; 347 cases suffered from petrol poisoning, mostly children. Seven of these were fatal.

Of 523 suspected fever cases, 236 were removed to the fever hospital for treatment.

279 patients were placed under observation for mental diseases, 236 of whom were referred to the Mental Hospital.

1,097 patients were treated in the urological section which was opened in July 1943. 28 of these died.

Of 1,114 patients treated for skin diseases, 263 were females, 12 deaths were recorded. Of 1,137 patients treated for venereal diseases, 5 died, one a female child and four adult males.

In the gynaecological section, with an accommodation of 150 beds, 1,462 patients were treated with 16 deaths.

Besides, 524 patients were treated in the X-ray section with 25 deaths, and 564 cases were treated for erysipelas with 55 deaths.

The Out-Patient Department:

In 1934, work started in the new out-patient department hitherto accommodated in the old Kasr-el Ainy building. Together with the Radiological and Dental Sections, it occupies a special wing situated apart from the main in-patient building. This wing is a masterpiece of construction and accommodates clinics for all branches of treatment, which are equipped with latest apparatus and appliances. It also accommodates the school for dentistry and the out-patient dental clinic.

The number of patients who attended the out-patient department during 1944 was 1,389,360 composed of 338,933 new patients and 1,050,427 old patients or an average of 4,500 patients daily.

The following table gives the number of out-patients distributed according to the different clinics:—

TABLE NO 102

Clinic	New Patients	Old Patients	Total
Medical	104,278	194,706	298,984
Neurological	6,018	19,620	25,638
Tropical	5,349	16,715	22,064
Chest (T.B.)	3,461	14,540	18,001
Surgical	52,895	164,448	217,343
Urological	2,217	4,580	6,797
Orthopaedic	4,190	11,048	15,238
Gynaecological	18,658	72,240	90,898
Obstetrical	3,185	7,513	10,698
Ophthalmological	36,608	154,310	190,918
Ear, Nose and Throat	19,623	94,027	113,650
Dermatology	47,460	158,904	206,364
Venereal	6,425	90,636	97,061
Dental	28,571	47,140	75,711
TOTAL	338,933	1,050,427	1,389,360

Of the total number of new patients, 167,443 were adult females and 17,354 females under 12 years of age or 54% of the total new patients. Of the total number of old patients 565,405 were adult females and 37,099 female children under 12 years or 57% of the total old patients. The predominance of females was less marked amongst new cases than amongst old cases in medical, ophthalmic, ear, nose and throat diseases sections. The predominance of female patients was marked in the medical and neurological diseases sections. Males predominated in the surgical, orthopaedic, tropical and dental departments.

The medical sections were the most congested with 21.5% of the total patients. The surgical section comes next with 15.6% followed by the dermatological section with 14.9% and the ophthalmic department with 13.7%. The urological section was the least with only 5% of the patients. This may be explained by the fact that these diseases are treated in the in-patient departments. This equally applies to the obstetric, orthopaedic, chest and neurological sections where the ratio did not exceed 2% of the number of out-patients.

The number of patients attending the dental out-patient clinic was 75,711. It consists of 28,571 new and 47,140 old cases. Tooth extraction was done to 30,628 cases, conservatives to 8,451, and prosthetics to 8,435. There were 18,197 cases of other diseases. The ratio of females was 46%.

KASR-EL-AINY HOSPITAL

This is the mansion which was formerly built by Ahmed Ibn el Ainy the eldest son of Sultan Kash Kidam in 1466-1467 and named after him. It passed through many vicissitudes. It was used as residence of the Ottoman rulers and later converted into a military hospital during the French occupation.

Al Gabarti, the well known Egyptian historian mentioned that this mansion was repaired on Greek style by Mohamed Aly Pasha el Kebir in 1812 and used as a hostel for some time until in 1825 it was used as a cadet school. When it was proposed to transfer the Military hospital and school of medicine from Abou Zaabal to Cairo, Dr. Clot Bey gave weighty reasons in support of choosing this mansion for the purpose. It is a spacious building, overlooking the River Nile and is accessible to patients being situated in the centre of the City. Since then, it has been used as a civil hospital. In 1938, the midwifery school was opened and ever since, the hospital and school of medicine, continued to expand year after year.

To do history justice, it must be mentioned that medical education in Egypt is much indebted firstly to the great reformer, Mohamed Aly Pasha, Head of the Mohamed Aly Dynasty and secondly to Dr. Clot Bey.

Before 1924, the strength of this hospital was 650 beds. During its early days the annual number of in-patients under treatment did not exceed a few hundreds. The population was not yet hospital minded. As the biggest government hospital in the country, several modifications and additions of the buildings had to be carried out to meet the ever increasing number of patients seeking treatment. The present strength of the hospital is 1,200 or twice its strength when first opened. The in-patients number 22,000.

These new constructions necessitated the provision of two operation theatres fitted with the most up-to-date apparatus and equipment. As regards the high standard of efficiency, the Kasr-el-Ainy Hospital rivals any of the largest hospitals abroad.

It is worth mentioning that despite the opening of the Fouad I Hospital in 1937 and the transfer to it in that year of the medical diseases and X-ray sections, the skin and venereal diseases sections in 1938, the erysipelas section in 1941 and the creation of a new gynaecological section with 150 beds, the strength of the Kasr-el-Ainy Hospital was maintained undiminished by increasing the accommodation in the remaining sections to meet the ever increasing number of admissions. For example, before 1937, the surgical diseases section had an accommodation of 500 beds. Following the transfer of the medical diseases section to Fouad I Hospital this number was increased to 741 beds. Thus while the number of in-patients was 21,378 in 1937, their number was 22,121 in 1944.

Treatment is now carried out in the following sections: general surgery, orthopaedic, nose, ear and throat, gynaecological and obstetrical departments and ophthalmic sections. It is proposed to further transfer some of these sections to the Fouad I hospital.

Of 21,416 in-patients under treatment in Kasr-el-Ainy Hospital in 1944, 12,822 were discharged on completion of their treatment, 7,065 were referred to out-patient departments and 106 transferred to other hospitals for further treatment. 1,423 deaths were recorded during the year. Of this number 535 were females. This gives a death rate of 6.6 per cent of the patients under treatment. Many of these deaths are brought to hospital in a dying condition as a result of accidents and no sooner they are admitted than they expire. Deaths occur in the surgical sections were 1,271 or 90 per cent of total deaths,

Of the total number of in patients, 7,990 were females or 37 per cent. The death-rate for females was also 37 per cent of total deaths.

Of 14,659 patients treated in the surgical sections, 8,143 were discharged on completion of their treatment, 5,245 were transferred to the out-patient department or other hospitals for further treatment, and 1,271 died.

Of 948 patients treated in the orthopaedic section, 229 were discharged on completion of treatment, 696 were referred to the out-patient department and 23 died.

1,537 patients were treated in the ophthalmic section, of whom 1,160 improved, 373 were referred to the out-patient department and 4 died.

Of 1,123 patients treated for ear, nose and throat diseases, 407 completed treatment, 673 were referred to out-patient department and 43 died.

Of 443 gynaecological cases treated, 373 were cured, 63 were referred to the out-patient department and 7 died.

Of 2,399 pregnant admitted, 2,200 left the hospital after confinement, 121 were referred to the out-patient department or other hospitals for further treatment and 78 died.

It is interesting to note that surgical patients as well as the beds reserved for them represent 70 per cent of their total number. During the year, 5,309 or 37 per cent of the surgical cases were casualties and 9,350 were ordinary cases. The death-rate amongst casualty cases was 13.5 per cent. This is not considered unduly high in view of the grave and hopeless condition of the casualties on admission.

Cars had the greatest toll with 1,038 casualties, 118 being fatal. Burns come next with 879 casualties, 31 or 3.5 per cent being fatal. Tram accidents were 550 with 95 or 18 per cent deaths. Falls from heights, ladders etc. were responsible for 1,109 cases with 73 deaths. Quarrels were responsible for 491 casualties with 11 deaths. 124 casualties with one death occurred amongst workmen during the performance of their work.

Other casualties were 3,875 males with 816 infants and 1,434 females with 460 infants. Infant casualties were due either to cars, trams, falls or scalds.

FOUAD I CHILDREN HOSPITAL

Formerly there was no proper hospital for children. There was only a moderate out-patient clinic for the treatment of children accommodated at Kasr-el-Ainy Hospital. Sometime afterwards, the child welfare society established and maintained a children hospital of its own at Munira. Later on when it was suggested to provide a special hospital for children, it was agreed to annex this hospital to the University hospitals. It began with a few beds in the in-patient department for the treatment of medical diseases, but since then it has undergone several modifications and expansions.

In 1935, it had an accommodation of 63 beds all reserved for medical diseases. These had been increased to 118. In 1939, a surgery department with 30 beds and an ear, nose and throat department with 9 beds were provided. A dental department with four beds was also provided.

In 1944, the number of beds in this hospital was 161, and treatment is now available not only for medical diseases, but also for ear, nose and throat as well as dental diseases. It is hoped that treatment for all diseases will be provided in the not too distant future.

The number of patients in 1944 was 2,607 as against 1,165 in 1935 or more than twice their number. Of 2,117 medical diseases cases treated during the year, 1,447 were discharged as improved, 107 transferred to the out-patient department for further treatment and 563 or 26 per cent died.

Of 468 surgical cases, 348 were cured, 93 were transferred to the out-patient department and 27 or 5.8% died. The general death-rate was 22 per cent.

The following table shows the number of children treated in the Children Hospital during the last ten years:-

TABLE No. 103

Year	Cured or improved	Referred to O. P.	Deaths	General total	Percentage of death	No. of beds
					o/o	
1935	844	19	302	1,165	27	63
1936	889	11	346	1,246	27	63
1937	1,019	25	375	1,419	26	63
1938	1,108	56	358	1,522	23	114
1939	1,158	235	360	1,753	20	121
1940	1,249	176	355	1,780	20	145
1941	1,645	62	523	2,230	23	150
1942	1,712	95	511	2,318	22	161
1943	1,842	92	557	2,491	22	161
1944	1,813	203	591	2,607	22	161

The highest death-rate was amongst children of premature birth or born with congenital deformities. Next come diseases of the alimentary canal : dyspepsia, intestinal diseases, dysentay, with a death-rate of 43 per cent. Then come diseases of nutrition : atrophy, rickets, pellagra, etc.

The out-Patient Treatment

A special wing in the hospital is reserved for the out-patient department, which includes clinics for all branches of treatment.

The total number of new and old patients seeking treatment during this year was 623,529 as against 263,140 in 1935 or more than twice their number. The male children were almost equal to the females among the old and new patients.

During the year, the medical section was the most crowded with 402,296 patients followed by the skin diseases section with 97,524 patients and ophthalmic sections with, 43,404 patients.

Again July and August were the most crowded with 66,710 and 65,549 patients respectively. These are the two months during which infantile diseases are most common, e.g. enteritis, ophthalmias and skin diseases. January and February had the least number of patients namely 37,835 and 38,798 respectively.

The following table gives the number of patients treated in the out-patient department during the past ten years:-

TABLE No. 104

Years	New Patients	Old Patients	General Total
1935	10,112	163,028	263,140
1936	130,912	221,413	358,325
1937	137,854	222,771	300,625
1938	145,136	239,286	384,422
1939	153,416	219,619	373,035
1940	186,716	224,494	411,210
1941	211,141	246,829	457,970
1942	202,906	238,324	441,230
1943	216,545	205,009	421,554
1944	276,770	346,759	623,529

Intestinal diseases were the most common among children with a total of 83,126 new and old patients. Of this number, 63,407 suffered from dyspepsia and diarrhoea. Diseases of the respiratory system come next with 42,535 patients, of whom 34,297 suffered from bronchitis; then nutrition diseases with 29,894 patients of whom 14,685 suffered from rickets and 9,180 from anaemia.

A total of 20,668 children suffered from infectious diseases amongst whom 5,141 had whooping cough, 1,420 measles, 572 mumps, 360 diphtheria and 11,223 other diseases.

A total of 26,844 patients (13,832 new and 13,012 old) were treated in the radiological section. Those suffering from dental diseases were 2,228 children (1,101 new and 1,127 old) not including dental cases treated in the out-patient department of Fouad I Hospital.

Farouk I University Hospitals, Alexandria

The number of beds during the year was 522 as against 818 in the previous years, i.e. a decrease of 296 beds or 36 per cent. This substantial decrease in hospital accommodation was necessitated to provide accommodation for the Faculty of Medicine which formed part of the newly established Farouk I University.

The modern building constructed in 1931 to accommodate medical diseases cases of both sexes, skin and ophthalmic cases was evacuated and ceded to the Faculty of Medicine together with the isolation section, the orthopaedic section, the ear, nose and throat and dental sections. This diminution in hospital accommodation affected all the sections, not excluding the children section. The patients were distributed among the other sections except medical diseases patients who were accommodated in Queen Nazly Children Hospital. This great shortage of accommodation was first felt in 1943 following the opening of the Faculty of Medicine.

The following table gives the number of in-patients and beds during the last ten years:—

TABLE N. 105

Year	In-Patients cured or improved	Deaths	General Total	Death rate %	Beds	
					Main Hosp.	Shatby Hosp.
1935	18,231	1,176	19,409	6	769	80
1936	20,494	1,236	21,300	5.7	758	80
1937	23,141	1,261	24,402	5.1	818	80
1938	20,700	1,383	22,253	6.2	818	80
1939	19,906	1,405	21,341	7	818	80
1940	15,077	1,309	16,386	8	818	80
1941	15,407	1,306	16,823	7.8	818	80
1942	16,895	1,663	18,558	9	818	80
1943	14,905	1,501	16,486	9	522	113
1944	16,154	1,598	17,752	9	522	113

It will be observed from this table that since 1940, the number of in-patients had steadily diminished. This is attributable to the World War on one hand and the creation of the Faculty of Medicine on the other. During war years, many of the inhabitants evacuated Alexandria and took refuge in other provinces to escape air raids. And there was no alternative than to still curtail the number of beds to give room to the new Faculty of Medicine.

SHATBY HOSPITAL

This is in reality an annex to the Main Hospital where patients are transferred to relieve congestion. Cases which require prolonged treatment are also accommodated therein. This hospital contains 7 sections with a total of 113 beds. Until 1942, the number of beds did not exceed 80. The increase in its strength during 1943 and 1944 was intended to meet the congestion in the main hospital.

Until 1932, the Shatby Hospital was under municipal control. Since then, it was transferred to this Ministry and annexed to the Government hospital.

This is an independent hospital in all respects except the admission of patients all of whom must be admitted through the main hospital, including casualty cases.

Out-Patient Department.

This is divided into three sections; the first is an independent one and is reserved for the treatment of medical diseases, general surgery, skin, ear, nose and throat diseases as well as children diseases. Children medical diseases are, however, treated in the Queen Nazli Children Hospital; the second section is reserved for the treatment of a clyostoma, and the third is for the treatment of ophthalmias.

The following table gives the number of out-patients treated since 1935. This does not include ophthalmia and a clyostoma patients as these are treated independently of the out-patient department.

TABLE No. 106

Year	New Patients	Old Patients	General Total
1935	191,959	514,417	706,376
1936	194,713	404,731	599,445
1937	203,895	259,962	460,857
1938	225,788	309,097	534,885
1939	231,251	302,661	533,912
1940	196,051	293,388	489,439
1941	181,220	288,628	469,848
1942	185,999	325,777	511,776
1943	206,519	280,482	487,001
1944	178,551	464,477	643,028

The endemic diseases out-patient clinic is situated to the South of the main hospital. An average of 60 new patients attend this clinic daily. The following is a statement of patients treated during the period from 1936-1943 :—

TABLE No. 107

Year	New Patients	Old Patients	General Total
1936	15,582	65,206	80,788
1937	14,865	43,318	58,213
1938	16,750	41,463	58,213
1939	16,600	50,434	67,034
1940	11,572	35,973	47,545
1941	11,402	53,700	65,103
1942	15,005	71,674	86,679
1943	18,929	84,771	103,700

The ophthalmic out-patient clinic occupies an independent section in the out-patient department. The following is a statement of patients treated during late years.

TABLE No. 108

Year	New Patients	Old Patients	General Total
1938	31,975	172,491	204,466
1939	35,202	177,320	212,522
1940	33,798	160,806	194,604
1941	30,289	139,813	170,102
1942	29,465	154,442	183,907
1943	26,904	133,310	160,214
1944	29,979	215,627	245,606

QUEEN NAZLI CHILDREN HOSPITAL

This hospital is situated within the Eastern Harbour. It remained under supervision and control of the Municipal Health Authorities until January 1944, when it was handed over to Farouk I University to be annexed to the University Hospitals. The in-patient department is divided into two sections. The first has 33 beds and is reserved for the treatment of children particularly those suffering from medical diseases. Foundlings are also accommodated there until taken over by wet nurses. The second section is reserved for the accommodation of infirms and destitutes. It is proposed to accommodate these elsewhere and their place occupied by patients. It is suggested to gradually provide other sections for surgical, skin, ear, nose and throat diseases and X-ray treatment on the same lines as the Children Hospital in Munira, Cairo, thus it will render the greatest service to a locality which badly needs such a treatment centre.

Out-Patient Department:

This is confined to the treatment of medical diseases in children. An average of 400 children attend treatment daily. It is hoped this department will in the not too distant future, be ready for the treatment of other children diseases.

Appendix II. MEDICAL PERMITS

**TABLE No. 109.—SHOWING THE NUMBER OF PRACTITIONERS OF THE MEDICAL AND ALLIED PROFESSIONS
AT THE END OF THE YEAR 1944 AS COMPARED WITH THAT OF THE YEAR 1943**

Profession	At the end of 1943	At the end of 1944
Medical Practitioners	3,968	4,032
Veterinary Surgeons	481	490
Dental Surgeons	502	516
Dentists without diplomas*	126	121
Pharmacists	1,037	1,052
Asst. Pharmacists*	335	333
Midwives	716	751

* No permits are now issued to persons of these two categories.

**TABLE No. 110.—SHOWING THE NUMBER OF PERSONS AUTHORISED TO PRACTISE THEIR PROFESSIONS
IN EGYPT DURING THE LAST FIVE YEARS**

Profession	1940	1941	1942	1943	1944
Medical Practitioners	113	139	158	115	100
Veterinary Surgeons... ..	38	8	29	28	14
Dental Surgeons	11	13	13	10	17
Pharmacists	46	45	45	43	25
Midwives	44	45	43	25	35
Dayas } Green Permits	288	197	193	276	77
} White Permits	2	2	1	3	2
Barbers	5	9	3	11	5

**TABLE No. 111.— SHOWING THE NATIONALITIES OF PERSONS AUTHORISED TO PRACTISE
MEDICAL PROFESSIONS DURING 1944**

Profession	Egyptians	Italians	Pales- tinians	Greeks	Russians	Total
Medical Practitioners	98	1	1	—	—	100
Veterinary Surgeons	14	—	—	—	—	14
Dental Surgeons	15	—	—	2	—	17
Pharmacists	24	—	—	—	1	25
Midwives	35	—	—	—	—	35

**TABLE No.112.—SHOWING THE ORIGIN OF MEDICAL DIPLOMAS WHOSE HOLDERS
WERE AUTHORISED TO PRACTISE MEDICAL PROFESSIONS DURING 1944**

Profession	Cairo	andria	France	Lebanon	Germany	Switzer- land	Total
Medicine	82	10	1	3	3	1	100
Veterinary Surgery	14	—	—	—	—	—	14
Dental Surgery	12	—	1	4	—	—	17
Pharmacy	23	—	—	2	—	—	25
Midwifery	35	—	—	—	—	—	35

**TABLE No. 113.—SHOWING THE ORIGIN OF MEDICAL DIPLOMAS OF EGYPTIAN
PRACTITIONERS WHO WERE AUTHORISED TO PRACTISE MEDICAL PROFESSIONS DURING 1944**

Profession	Faculty of Medi- cine, Cairo	Faculty of Medi- cine, Alexandria	French Universities	German Universities	Lebanon University	Total
Medicine	81	10	1	3	3	98
Veterinary	14	—	—	—	—	14
Dentistry	12	—	—	—	3	15
Pharmacy	23	—	—	—	1	24
Midwifery	35	—	—	—	—	35

**TABLE No. 114.—SHOWING THE RESULT OF THE STATE EXAMINATION HELD DURING 1944 FOR MEDICAL
PRACTITIONERS, PHARMACISTS AND DENTAL SURGEONS HOLDING FOREIGN DIPLOMAS FOR THE
PURPOSE OF OBTAINING PERMITS TO PRACTISE THEIR PROFESSIONS IN EGYPT**

Examination	Number	Egyptians		Foreigners		Total	
		Succeeded	Failed	Succeeded	Failed	Succeeded	Failed
Medicine	24	3	15	1	5	4	20
Pharmacy	5	1	3	1	—	2	3
Dentistry	15	2	12	—	1	2	13

Appendix III

REPORT ON THE WORK OF THE CENTRAL, GOVERNORATE AND PROVINCIAL MEDICAL COMMISSIONS

The Central Medical Commission.

During the year 1944, the Central Medical Commission issued 22,900 medical certificates with a decrease of 1,780 certificates as compared with the figures of 1943. This decrease is due to the extension of the attributions of Medical Commissions in Governorates and Provinces to cover the granting and approval of sick-leaves up till 60 days and the invaliding out of service of temporary and hors cadre employees and daily paid staff without further reference to the Central Medical Commission for final sanction.

Out of the total number of 22,900, 12,327 were examined for admission into Government Service and for joining educational missions abroad, 7,137 were pensionable and temporary officials and 18 candidates for missions abroad and the remaining 5,172 were hors cadre employees.

The ratio of pensionable and temporary officials rejected in the three sessions of examination was 35.2 per cent of the number examined for admission into Government Service. In other words, the ratio of those who succeeded amounted to 64.8 per cent. The ratio of hors cadre employees was 48.1 per cent of the number examined for admission into Government Service, the ratio of those who succeeded was 51.9 per cent.

Out of the number of the pensionable and temporary candidates for admission into Government Service, 24.1 per cent failed in vision, myopia being the main reason for failure in most cases. The ratio of those rejected or found unfit for service on account of defects in the urinary system was 5.8 per cent, the main reason being albumen or traces. The ratio of those rejected or found unfit for service on account of heart diseases was 1.4 per cent, incompetency being responsible in most cases. The ratio of those rejected or found unfit for service on account of other diseases such as varicocoeles, hydroceles, apparent poor constitutions or diseases of the respiratory system, etc. was 3.9 per cent.

The number of patients who were examined for sick-leave was 8,001, of whom 5,395 were pensionable and temporary officials, and 2,606 were hors cadre employees.

The number of patients who were suffering from medical diseases and granted sick leave by the Central Medical Commission, or by Cairo District Medical Officers and approved by the Central Medical Commission, was 3,055 pensionable and temporary officials, and 840 hors cadre employees.

The number of patients suffering from surgical and ophthalmic diseases was 1,286 pensionable and temporary officials and 700 hors cadre employees.

The percentages of the most prevalent diseases was as follows:—

TABLE No. 115

Disease	Pensionable and Temporary Officials		Hors Cadre Employees	
	Number	Percentage to the Total	Number	Percentage to the Total
		%		%
Nose and Larynx	265	6.1	72	4.6
Bronchi and Lungs	286	6.5	99	6.4
Heart and Blood Circulatory System	388	8.9	57	3.7
Stomach and Intestines	208	6.7	57	3.7
Liver	148	3.4	42	2.7
Kidney and Cystitis	202	4.6	43	3.8
Neurasthenia and Mental Diseases	159	3.6	18	1.1
Nervous System	97	2.2	26	1.7
Anaemia and General Debility	526	12.1	89	5.7
T.B.	225	5.1	118	7.6
Syphilis	—	—	2	1.3
Rheumatism	302	6.9	94	6.1
Fevers	212	4.8	56	3.6
Other Medical Diseases	87	2.0	67	4.3
Eye Diseases	170	3.9	52	3.3
Ear and Dental Diseases	119	2.7	33	2.1
Appendicitis	24	0.5	10	—0.6
Urinary System and Stones	21	0.5	5	—0.3
Various Surgical Operations	650	14.9	410	26.6
Fractures	139	3.1	143	9.2
Minor Surgical Operations (fistula, piles, hernia and hydroceles)	160	3.6%	47	2.6%

The number of sick officials and employees who were granted sick leave (1-10 days), by Cairo District Medical Officers or by Markaz and Sanitary Outpost Medical Officers in all the Provinces and Governorates during the year 1944 was 38,965, of whom 29,487 or 76.1 per cent suffered from medical diseases, 7,202 or 18.4 per cent suffered from Surgical diseases and 2,276 or 5.5 per cent suffered from ophthalmic diseases. The number of days of sick leave granted to pensionable and temporary officials only was 114,161.

The number of patients who were granted sick leave from 1-10 days by the Central Medical Commission or by Cairo District Medical Officers and approved by the Central Medical Commission was 1,427 pensionable and temporary officials and 674 hors cadre employees.

The number of patients who were examined by the Central Medical Commission and were not granted sick leave was 326 pensionable and temporary officials, and 171 hors cadre employees.

The number of patients who were examined by the Provincial and Governorate Medical Commissions and were not granted sick leave was 896 pensionable and temporary officials and 947 hors cadre employees.

The number of patients who were granted sick leave from 11 days to 30 days and upwards by the Central Medical Commission and by Cairo District Medical Officers was 2,914 pensionable and temporary officials and 866 hors cadre employees.

The number of those who were granted sick leave over the above-mentioned periods till they were placed on pension by the Central Medical Commission was 16 pensionable and temporary officials. The number of hors cadre employees who were pronounced medically unfit for further service was 191.

The number of patients who were also examined by the Central Medical Commission with a view to deciding their fitness for further service and were found fit was 19 pensionable and temporary officials and 49 hors cadre employees.

Medical Examination of Private and Passenger Pilots:

The number of applicants for licence "A" for private pilots who presented themselves for examination before the Central Medical Commission during the year 1944 was 111, of whom 87 were found fit (77 succeeded in the first session, 10 in the second). The failures were 24 (21 failed in the first session and 3 in the second).

Nine applicants for passenger pilot licence "B" were examined by the Central Medical Commission during the year 1944, and all passed in the first session.

During the year 1944, 92 private pilots attended before the Central Medical Commission for the renewal of their licences, of whom 84 were found fit (80 succeeded in the first session and 4 in the second).

Eighty were examined for the renewal of passenger pilot licences, of whom 76 were found fit (73 succeeded in the first session and 3 in the second). The failures were 4 (3 failed in the first session and 1 in the second).

Provincial and Governorate Medical Commissions:

40,736 medical certificates were issued by the Provincial and Governorate Medical Commissions during the year 1944 with an increase of 4,593 certificates over those of last year.

TABLE No. 116.—ANNUAL REPORT ON THE WORK OF THE CENTRAL, PROVINCIAL AND GOVERNMENT MEDICAL COMMISSIONS DURING THE YEAR 1944

Total	Diseases										Causes of Rejection of Candidates applying for Entry to Service																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
	Defective Vision		Urinary System		Respiratory System		Circulatory System		Nervous System		Digestive System		Other Diseases		Total																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
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5,854	1,229	400	522	1,714	270	2,083	2,489	10	1	7	—	5,061	2,414	331	172	32	307	20	50	39	407	428	19	811	437	22,000	1,718	1,014	417	412	20	30	103	67	2	—	—	2,489																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
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P.B.—P = Pensionable, T = Temporary, H.C. = Hors Cadre.

TABLE No. 111. — SHOWING CLASSIFICATION OF DISEASES CONTRACTED BY OFFICIALS AND EMPLOYEES FOR WHICH SICK LEAVES HAVE BEEN GRANTED BY THE CENTRAL, PROVINCIAL AND GOVERNORATE MEDICAL COMMISSIONS AND BY THE DISTRICT M.O.S. IN CAIRO AND APPROVED BY THE C.M.C. DURING THE YEAR 1944.

DISEASES

	Medical Diseases															Surgical and Ophthalmic Diseases															Total	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total	H. C.	P. & T.	H. C.	P. & T.	H. C.	P. & T.	H. C.	P. & T.	H. C.	P. & T.	H. C.	P. & T.	H. C.	P. & T.		Total
Central Medical Commission Cairo.	Nose	Bronchi and Lungs	Heart and Circ. System	Stomach and Intestines	Liver	Kidney and Cystic	Nervousness	Mental Diseases	Anaemia and General Debility	Nervous System and Cereb.	T. B.	Syphilis	Rheumatism	Fevers	Other Medical Diseases	Total <td>H. C.<td>P. & T.<td>H. C.<td>P. & T.<td>H. C.<td>P. & T.<td>H. C.<td>P. & T.<td>H. C.<td>P. & T.<td>H. C.<td>P. & T.<td>H. C.<td>P. & T.<td>Total</td></td></td></td></td></td></td></td></td></td></td></td></td></td></td>	H. C. <td>P. & T.<td>H. C.<td>P. & T.<td>H. C.<td>P. & T.<td>H. C.<td>P. & T.<td>H. C.<td>P. & T.<td>H. C.<td>P. & T.<td>H. C.<td>P. & T.<td>Total</td></td></td></td></td></td></td></td></td></td></td></td></td></td>	P. & T. <td>H. C.<td>P. & T.<td>H. C.<td>P. & T.<td>H. C.<td>P. & T.<td>H. C.<td>P. & T.<td>H. C.<td>P. & T.<td>H. C.<td>P. & T.<td>Total</td></td></td></td></td></td></td></td></td></td></td></td></td>	H. C. <td>P. & T.<td>H. C.<td>P. & T.<td>H. C.<td>P. & T.<td>H. C.<td>P. & T.<td>H. C.<td>P. & T.<td>H. C.<td>P. & T.<td>Total</td></td></td></td></td></td></td></td></td></td></td></td>	P. & T. <td>H. C.<td>P. & T.<td>H. C.<td>P. & T.<td>H. C.<td>P. & T.<td>H. C.<td>P. & T.<td>H. C.<td>P. & T.<td>Total</td></td></td></td></td></td></td></td></td></td></td>	H. C. <td>P. & T.<td>H. C.<td>P. & T.<td>H. C.<td>P. & T.<td>H. C.<td>P. & T.<td>H. C.<td>P. & T.<td>Total</td></td></td></td></td></td></td></td></td></td>	P. & T. <td>H. C.<td>P. & T.<td>H. C.<td>P. & T.<td>H. C.<td>P. & T.<td>H. C.<td>P. & T.<td>Total</td></td></td></td></td></td></td></td></td>	H. C. <td>P. & T.<td>H. C.<td>P. & T.<td>H. C.<td>P. & T.<td>H. C.<td>P. & T.<td>Total</td></td></td></td></td></td></td></td>	P. & T. <td>H. C.<td>P. & T.<td>H. C.<td>P. & T.<td>H. C.<td>P. & T.<td>Total</td></td></td></td></td></td></td>	H. C. <td>P. & T.<td>H. C.<td>P. & T.<td>H. C.<td>P. & T.<td>Total</td></td></td></td></td></td>	P. & T. <td>H. C.<td>P. & T.<td>H. C.<td>P. & T.<td>Total</td></td></td></td></td>	H. C. <td>P. & T.<td>H. C.<td>P. & T.<td>Total</td></td></td></td>	P. & T. <td>H. C.<td>P. & T.<td>Total</td></td></td>	H. C. <td>P. & T.<td>Total</td></td>	P. & T. <td>Total</td>	Total	
	72	286	67	67	42	202	49	110	97	626	223	118	302	212	87	810	170	40	24	34	14	44	76	24	630	410	10	24	52	170	1,266	
Other Governments and Provincial Commissions.	138	614	208	211	178	278	193	68	43	681	108	7	490	419	260	243	3,464	225	42	43	74	80	84	163	111	768	2,074	249	791	89	35	1,816
	462	920	236	263	326	480	241	70	131	1,121	280	7	792	623	347	310	7,637	325	91	66	67	94	108	116	142	1,408	2,184	388	944	168	24	3,227
Total	600	1,534	506	580	752	1,000	434	181	228	1,747	508	14	1,282	1,042	547	1,120	11,101	545	133	111	174	262	382	415	548	6,586	4,258	835	1,735	257	59	5,043

P.R. = Probable. T. = Temporary. H.C. = Here Cause.

Appendix IV

REPORT ON THE WORK OF THE CENTRAL STORES

The Central Stores, this year, as in previous years, have obtained the most modern scientific apparatus, surgical instruments and drugs.

The Stores continue to supply all the units of the Ministry with their requirements of these articles and take the necessary steps to provide the Ministry's hospitals and other treatment centres with rations.

The Central Stores, in performing their duties, adhere to a policy of economy and act according to time and circumstances without prejudicing the smooth running of the work in the units.

The Stores, assisted by technical experts, modify specifications of articles required by general adjudications, choosing standard samples consistent with present circumstances.

The stores, in addition, furnished the following new establishments with the necessary equipment.

1. Equipment of three new in-patient sections in chest diseases dispensaries.
2. Necessary furniture for the equipment of five travelling child welfare centres transferred from provincial councils to this Ministry.
3. Necessary furniture for the enlargement of the Vaccine and Serum Institute at Agouza.
4. Equipment of a Bacteriological Laboratory at Damanshour.
5. Equipment of a new health office in Cairo.
6. Equipment of two new chest diseases dispensaries.
7. Completion of equipment of the village settlement at Marg.
8. Equipment of special sections in general hospitals.
9. Equipment of five new dental clinics.
10. Necessary furniture for the conversion of Mahmoudia out-patient clinic to a district hospital.
11. Completion of equipment of Zawameh district hospital.
12. Equipment of a new central hospital at Mansalout.
13. Necessary furniture for the enlargement of nursing schools.
14. Necessary furniture for two village ophthalmic treatment centres.
15. Equipment of two ophthalmic branches at Zawiet el Naoura and Etsa hospitals.
16. Equipment of three new health offices in provinces.
17. Equipment of a new skin and venereal diseases clinic in Cairo.
18. Equipment of two new clinics of skin and venereal diseases in provinces.
19. Equipment of a new bath house for scabies.
20. Equipment of three new child welfare centres.
21. Necessary furniture for the equipment of three travelling child welfare centres.
22. Equipment of a new travelling Leprosy out-patient clinic.
23. Equipment of a dairy at the Leprosy Colony.
24. Equipment of two new ancylostoma branches in district hospitals.

The work of the Central Stores is briefly shown in the following figures:—

TABLE No. 118

Kind of Work	Number
Receipt vouchers	8,149
Issue vouchers	47,938
Claims	1,998
Correspondence outward	176,924
Correspondence inward and forms	142,217
Postal parcels despatched	11,535
Postal parcels received	2,986
Railway parcels despatched	63,212
Railway parcels received	23,133
Workshop labour (articles repaired)	77,865
Workshop labour (articles newly made)	132,225

NEW UNITS FROM JANUARY 1ST. TO 31ST. DEC. 1944.

1. A district Hospital at Manfalout.
2. Two permanent ophthalmic hospitals at Sennouris and Manfalout.
3. Two ophthalmic branches at Etsa and Zawyet-el-Naoura hospitals.
4. Two Ancylostoma branches at Girga and Beni-Suef Hospitals.
5. Two clinics for skin and venereal diseases at Giza & Deirout.
6. A clinic for piles at Boulac Health Group.
7. An antemortal examination bureau.
8. A chest diseases dispensary at Port-Said with in-patient section.
9. A chest diseases dispensary at Aswan.
10. A village sanatorium at Giza.
11. Three child welfare centres at Gamalia, Sennouris and Ismailia.
12. A bath-house for scabies at Guezirit-Badran, Cairo.
13. Three dental sections at Damanhour, Sebin-el-Kom and Beni-Seuf hospitals
14. A section for bone surgery at el-Malek Hospital.
15. A children section at Port-Said hospital.
16. A section for ear, nose and throat at Damanhour hospital.
17. A section for gynaecology at Minia hospital.

TABLE No. 119.—CONTRACTS AND ORDERS IN 1944

Kind of Work	Number
General adjudications	270
Local offers	59
Contracts	58
Local orders	519
Foreign orders	22
Forms 50 C.G.	3,599
Questions submitted to the contract board	715
Contract board meetings	89
Tenders submitted in general adjudications	1,250
Agreements	4
Miscellaneous orders	25
Tenders submitted in local adjudications	483

Appendix V.

DETAILS OF 1944-1945 BUDGET GRANTS AND EXPENDITURE.

TABLE No. 129. —DETAILS OF BUDGET GRANTS AND EXPENDITURE.

	Budget Grants		Actual Expend.	
	1943	1944	1943	1944
	L.E.	L.E.	L.E.	L.E.
TITLE I				
Salaries, Wages and Allowances	931,434	1,004,378	901,547	1,071,608
TITLE II				
General Expenditures	1,633,600	1,501,500*	1,632,133	1,476,012
TITLE III				
New Works	477,100	264,720	335,912	132,603
TOTAL	3,042,134	2,862,598	2,869,592	2,680,223

* An additional credit of L.E. 185,000 was granted by Law No. 30-1945 to meet increased expenditures under title II.

TABLE. NO. 122—DETAILS OF BUDGET GRANTS AND EXPENDITURE.

	Fouad I University Hosp.		Farouk I University Hosp.	
	Budget Grants	Actual Expenses	Budget Grants	Actual Expenses
TITLE I				
Salaries, Wages & Allowances	113,890	101,393	34,530	25,876
TITLE II				
General Expenditures	321,900	347,978+	60,600†	73,712+
TITLE III				
New Works	14,000	2,353	4,500	1,034
TOTAL	449,790	451,724	99,630	100,622

* An Additional credit of L.E. 70000 was granted by law 31-1945 to meet increased expenditures under title II of Fouad Ist Univeristy Hospitals' Budget.

+ An additional credit of L.E. 23000 was granted by law 31-1945 to meet increased expenditure under title II of Farouk Ist University Hospitals' Budget,

† Details of 1943 Budget for these hospitals were not given as these formed part of the Ministry of Education.

TABLE NO. 123.— UNIVERSITIES HOSPITALS ADMINISTRATION.

	Fouad I Hospitals	Farouk I Hospitals	Total
<i>Technical Posts:</i>			
Permanent	93	18	111
Temporary	239	80	319
<i>Adm. and Clerical Posts:</i>			
Permanent	40	11	51
Temporary	8	—	8
Hors Cadre Personnel	1,342	290	1,632
TOTAL ...	1,722	399	2121

Appendix VI.
SUMMARY OF A REPORT ON THE STATE OF
PUBLIC HEALTH IN ALEXANDRIA

Population during 1944	752,400
Number of births	39,722
Number of deaths	23,186
Number of infantile deaths	8,615
Number of deaths from infectious diseases	3,186

DEATHS FROM INFECTIOUS DISEASES DURING 1944

Typhus Exanthem	114
Cerebro-Spinal Fever	24
Typhoid and Paratyphoid	141
Scarlet Fever... ..	—
Diphtheria	138
Measles	35
Whooping Cough	4
Mumps	—
Malaria	24
Erysipelas	19
Tetanus	20
Pulmonary Tuberculosis	738
Chicken-Pox	84
Influenza	19
Puerperal Fever	16
Dysentery Am.	131
Acute Pneumonia—	1,581
Leprosy	7
Acute Poliomyelitis	3
Small Pox	168

TOTAL	3,186
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Appendix VII

REPORT OF THE WORK OF CAIRO CITY HEALTH INSPECTORATE.

Population:

The estimated mid-year population of Cairo in 1944 was 1,457,100.

Births:

The total number of births (excluding still-births) registered during the year was 85,700, with an excess of 9,357 over the previous year, which gives a birth-rate of 58.8 per thousand of population.

Table No. 124 shows the number of births distributed on the various Qisms and their rates per thousand of population.

Still-Births:

The number of still-births registered during the same period amounted to 1,727 making a rate of 20.01 per thousand births.

Deaths

The total number of deaths registered during the year was 54,214 of which 1,480 occurred amongst non-residents. This leaves 52,734 for Cairo proper, with a decrease of 451 than the previous year, which gives a death-rate of 36.19 per thousand of population as compared with 37.4 in 1943; 36.2 in 1942; 28.5 in 1941; 26.9 in 1940; 25.9 in 1939 and 29.1 in the last 5 years (1938-1942). See Table No. 124.

Infantile Deaths:

The total number of deaths of children under one year of age was 18,412 with an excess of 418 over the previous year giving a rate of 214.8 per thousand live births as against 235.7 in 1943; 247.6 in 1942; 197.1 in 1941; 196.3 in 1940; 190.0 in 1939 and 207.7 in the previous 5 years (1938-1942). See Table No. 124 which shows the distribution of these deaths in the various districts.

Causes of Infantile Deaths:

Enteritis is still responsible for the largest number of deaths. Out of 18,412 deaths 10,210 were due to enteritis i.e. 55.5 per cent of the total deaths of infants. Marasmus comes next accounting for 5,268 or 28.6 per cent. There were also 1,176 deaths from general diseases (6.4 per cent), 1,008 or 5.4 per cent from chest diseases and 750 or 4.1% from infectious diseases.

Death Inquiries:

The total number of uncertified deaths which required investigation was 27,877 i.e. 52.8 of the total deaths of Cairo.

Out of this total, 8,441 deaths were examined by the District M.O.s. which makes 30.3 per cent of the total uncertified deaths; 18,512 i.e. 66.4 per cent by the District *Mowalidas* and the remainder by the *Dayas* and village sanitary barbers.

Infectious Diseases:

The total number of cases of infectious diseases notified during the year was 20,287 after excluding 1,870 cases from outside Cairo. The total number of deaths was 6,974.

This is to be compared with 27,771 cases in 1943; 20,956 in 1942; 16,612 in 1941; 14,632 in 1940; 11,517 in 1939 and 12,342 cases in 1938.

The death-rate of infectious diseases during the year was 13·2 per cent of the total number of deaths, as compared with 15·8 per cent in 1943; 13·9 in 1942; 11·5 in 1941; 10·3 in 1940; 7·5 in 1939 and 8·4 per cent in 1938.

See Table No.125 which shows the number of cases and deaths of the most prevalent diseases distributed in the various districts of Cairo.

Influenza :

The total number of cases notified during the year was 1,823 with 23 deaths making a case rate of 1·2 and a death-rate of .015 per thousand of population as compared with 2,240 cases and 20 deaths and a rate of 1·6 and .014 in 1943; 2,002 cases, 41 deaths and a rate of 1·4, and 0·003 in 1942; 1,358 cases, 28 deaths and a rate of 0·97, and 0·02 in 1941; 1,851 cases, 30 deaths and a rate of 1·3, and 0·02 in 1940; 1,927 cases, 36 deaths and a rate of 0·697, 0·01 in 1939, and 1498 cases, 36 deaths with a rate of 1·127, and 0·037 per thousand of population in 1938.

Tuberculosis :

The total number of cases notified during the year was 2,849 with 1,727 deaths making a case-rate of 1·9 and a death-rate of 1·2 per thousand of population.

Child Bearing Mortality :

The total number of deaths attributed to this cause was 115 making a rate of 1·3 per thousand of births as compared with 1·4 in 1943; 1·92 in 1942; 2·5 in 1941; and 2·1 in 1940.

Out of this total 35 deaths were notified as puerperal fever making a death-rate of 0·4 per thousand births as against 0·51 in 1943, 0·55 in 1942; 0·9 in 1941 and 0·8 in 1940.

The number of mothers who died within a fortnight of confinement excluding puerperal fever was 80 as against 53 in 1943, 90 in 1942, 104 in 1941 and 117 in 1940. The following is the distribution of these deaths according to causes : 20 eclampsia, 13 haemorrhage, 9 heart failure, 10 rupture of uterus, 8 placenta praevia, 4 septic emia, 6 difficult labour, 2 peritonitis as a result of abortion, 2 nephritis after pregnancy, 1 Caesarean case and 5 infectious diseases.

Disinfection Service :

The total number of rooms disinfected during the year was 81,990, of which 67,257 were carried out by Abbassia disinfection station and 14,733 by Fom el Khalig station.

TABLE No. 124.—THE POPULATION AND VITAL STATISTICS OF CAIRO AND ITS QUARTERS IN 1944
WITH AVERAGE FIGURES FOR PREVIOUS YEARS

Districts	Population	Number of Deaths	Death-rate per 1000 of Population	Number of Births	Birth-rate per 1000 of Population	Number of Infantile deaths (0-1) year	Infantile Mortality rate per 1000 Births
Ezbekia	59,100	1,658	28.1	2,526	42.7	462	182.9
Abdine	92,400	2,393	26.0	3,515	38.0	758	215.6
Sayeda I	72,700	3,256	44.8	5,402	74.3	1,137	210.5
Sayeda II	69,300	2,171	31.3	3,535	51.0	813	230.0
Khalifa	82,400	3,408	41.4	4,592	55.7	1,153	253.0
Darb-el-Ahmar	90,800	3,255	35.8	5,343	58.8	1,210	226.5
Mousky	29,000	781	26.9	1,359	46.9	263	193.5
Bab-el-Sharia	98,800	3,503	35.5	5,751	58.2	1,261	219.3
Gamalia	84,600	3,267	33.6	5,192	61.4	1,267	244.0
Abbassia	130,600	4,240	32.6	7,747	59.3	1,362	175.8
Shoubra	98,900	3,570	36.1	6,946	70.2	1,248	179.7
Rod-el-Farag	134,000	4,151	30.8	7,450	55.3	1,351	181.3
Boulac I	85,100	4,050	47.6	6,837	80.3	1,488	217.6
Boulac II	56,000	1,989	35.5	3,176	56.7	751	236.5
Old Cairo	74,600	3,406	45.7	4,760	63.8	1,252	263.0
Heliopolis	57,900	1,512	26.6	2,387	41.2	451	188.9
Zeitoun	45,400	2,051	45.2	3,226	71.1	744	236.0
Helwan	53,800	2,173	40.4	2,883	53.7	734	254.1
Sharabia	41,100	1,865	45.4	3,066	74.6	707	230.6
TOTAL FOR CAIRO	1,457,100	52,734	36.2	85,790	58.8	18,412	214.8
1943	1,423,300	53,185	37.4	76,343	53.6	17,994	235.7
1942-1938	6,854,500	199,482	29.1	304,361	44.4	63,225	207.7
1937-1933	6,062,000	168,89	25.7	275,703	42.0	54,083	196.2
1932-1928	5,637,500	158,376	27.8	248,677	43.7	53,413	214.8
1927-1923	4,147,400	144,306	34.8	214,740	51.8	49,354	229.8

TABLE No. 125.—DISTRICT DISTRIBUTION OF THE PRINCIPAL INFECTIOUS DISEASES IN 1944

District	Population	Small-pox		Relapsing fever		Cerebro spinal fever		Typhus fever		Typhoid fever		Scarlet fever		Diphtheria		Measles		Totals	
		Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths
Ezbekia	59,100	67	1	—	—	1	10	51	10	159	26	—	—	50	13	5	36	306	86
Abdine	92,400	121	9	—	—	4	2	81	2	181	15	—	—	70	19	24	7	484	75
Sayed I	72,700	117	128	5	3	5	3	101	3	12	2	—	—	81	13	92	92	517	177
Sayed II	69,30	12	—	4	4	4	2	66	2	184	7	—	—	85	17	44	26	511	57
Khalifa	82,400	114	4	5	2	5	12	74	12	157	21	—	—	83	29	70	52	53	120
Darb-el-Ahmar	90,800	14	5	12	5	77	30	77	30	106	21	—	—	106	32	62	31	593	124
Mousky	29,000	41	1	4	2	23	5	23	5	61	4	—	—	26	8	25	14	184	34
Bab-el-Sharia	98,800	13	10	4	4	84	16	84	16	189	1	—	—	92	15	90	64	642	127
Gamalia	84,600	138	5	4	4	101	1	101	1	132	10	—	—	86	23	30	13	495	72
Abbassia	120,600	263	16	6	6	177	37	177	37	465	61	—	—	143	57	112	14	1,168	191
Shoubra	58,800	145	8	4	3	155	52	155	52	180	31	—	—	129	36	142	7	750	207
Rod-el-Farag	154,600	122	6	4	—	117	26	117	26	195	2	—	—	129	38	74	24	641	119
Boulac I	85,00	124	16	2	1	137	44	137	44	88	24	—	—	80	34	54	4	485	123
Boulac II	56,000	51	1	—	—	65	8	65	8	47	4	—	—	53	1	76	76	293	90
Old Cairo	74,600	169	10	3	—	195	69	195	69	115	21	—	—	57	17	167	16	75	277
Helopolis	57,900	150	4	7	5	49	15	49	15	179	32	—	—	60	21	45	14	532	91
Zeitoun	45,400	9	13	3	—	42	4	42	4	101	8	—	—	4	13	125	46	311	84
Helwan	53,800	93	5	4	1	65	9	65	9	56	5	—	—	23	5	4	1	256	26
Sharabia	41,100	39	2	5	2	76	9	76	9	93	4	—	—	48	9	63	10	324	41
TOTAL FOR CAIRO	1,457,100	2,288	129	—	44	92	420	1,784	420	2,889	368	7	—	1,435	400	1,366	761	9,861	2,123

TABLE No. 126.—DISTRICT DISTRIBUTION OF UNCERTIFIED DEATHS IN CAIRO CITY, 1944

District	Total Deaths	Uncertified Deaths					Rate of Uncertified Deaths to Total Deaths %
		No. of deaths investigated by K.M.C.O.	No. of deaths investigated by Kamel Mounidas	No. investigated by Sanitary Barbers	No. Investigated by Sanitary Dayas	Total	
Ezbekia	1,658	197	436	—	—	633	38.1
Abdine	2,398	545	1,265	—	—	1,810	75.4
Sayed I	3,156	743	99	—	—	1,732	53.3
Sayed II	2,171	378	872	—	—	1,250	57.6
Khalifa	3,403	943	1,651	—	—	2,594	76.1
Darb el-Ahmar	3,255	629	826	—	—	1,455	44.7
Mousky	781	146	26	—	—	432	55.3
Bab-el-Sharia	3,513	441	1,627	—	—	2,068	59.3
Gamalia	3,267	327	134	—	—	1,161	35.8
Abbassia	4,240	75	445	—	—	520	12.2
Shoubra	3,570	132	1,032	—	—	1,164	32.6
Rod el-Farag	4,151	15	21	—	—	43	1.5
Boulac I	4,070	1,03	2,505	—	—	3,308	81.6
Boulac II	1,980	441	1,138	—	—	1,579	79.3
Old Cairo	3,406	810	1,62	209	17	2,718	79.8
Heliopolis	1,542	353	334	—	—	687	44.5
Zeitoun	2,051	344	1,017	—	—	1,391	67.8
Helwan	2,173	461	471	605	41	1,578	72.6
Sharabia	1,865	215	1,091	45	7	1,358	72.7
TOTAL FOR CAIRO	52,731	8,441	18,512	859	65	27,817	52.8

TABLE No. 127.—ZYMOTIC DISEASES CASE AND DEATH RATES IN CAIRO DISTRICTS IN 1944

Districts	Population	Number of Cases recorded	Case rates per 1000 of Population	Number of Deaths	Death rates per 1000 of Population	Case Mortality rates per cent.
Mousky	29,000	184	6.345	34	1.172	18.4
Bab-el-Sharia	98,800	612	6.198	127	1.274	19.5
Ezbekia	59,100	385	6.53	86	1.455	22.2
Abdine	92,400	484	5.233	75	.81	15.5
Sayed I	72,700	517	7.111	177	2.434	34.2
Sayed II	69,300	511	7.360	57	.591	11.1
Khalifa	82,400	503	6.104	120	1.456	23.8
Helwan	53,800	256	4.758	26	.483	10.1
Darb el-Ahmar	90,800	593	6.531	124	1.365	20.9
Gamalia	84,600	495	5.863	73	.83	14.7
Shoubra	98,500	759	7.53	207	2.093	27.6
Rod el-Farag	134,000	641	4.762	119	0.884	18.5
Boulac I	85,100	485	5.699	123	1.445	24.9
Boulac II	56,000	291	5.232	90	1.607	31.1
Old Cairo	74,600	715	9.584	277	3.713	38.7
Abbassia	130,600	1,168	8.913	191	1.462	16.3
Heliopolis	57,500	532	9.28	91	1.571	17.1
Zeitoun	45,400	381	8.392	84	1.850	22.1
Sharabia	41,100	324	7.883	41	1.020	12.9
TOTAL FOR CAIRO	1,457,100	9,861	6.767	2,122	1.456	21.5

TABLE No. 128.—SMALL-POX CASE AND DEATH RATES IN CAIRO DISTRICTS IN 1944

District	Population	Number of Cases recorded	Case rates per 1000 of Population	Number of Deaths	Death rates per 1000 of Population	Case mortality rates per cent.
Ezbekia	59,100	67	1.134	1	.017	1.5
Abdine	92,400	121	1.310	9	.097	7.4
Sayeda I	72,00	117	1.60	12	.164	10.2
Sayeda II	69,00	128	1.847	1	.017	.7
Khalifa	82,400	114	1.33	4	.049	3.5
Darb-el-Ahmar ...	9,800	148	1.630	5	.055	3.3
Mousky	29,000	41	1.44	1	.034	2.4
Bab-el-Sharia ...	98,800	183	1.852	10	.111	5.4
Gamalia	84,600	138	1.63	5	.059	3.6
Abbassia	130,600	263	2.04	16	.122	6.03
Shoubra	58,00	145	1.466	8	.060	5.5
Rod-el-Farag ...	134,60	122	.906	6	.043	4.8
Boulac I	85,100	124	1.457	16	.188	12.8
Boulac II	56,000	51	.911	1	.018	1.9
Old Cairo	74,600	169	2.26	11	.134	6.0
Heliopolis	5,00	130	2.591	4	.070	2.6
Zeitoun	45,400	69	1.520	12	.132	18.8
Helwan	53,800	99	1.80	5	.055	5.0
Sharabia	41,100	39	.949	2	.048	3.2
TOTAL FOR CAIRO	1,451,100	2,283	1.570	129	0.087	5.5

TABLE No. 129.—TYPHUS CASE AND DEATH RATES IN CAIRO DISTRICTS IN 1944

District	Population	Number of Cases recorded	Case rates per 1000 of Population	Number of Deaths	Death rates per 1000 of Population	Case mortality rates per Cent.
Ezbekia	59,100	51	.863	10	.167	19.6
Abdine	92,400	81	.877	23	.248	28.3
Sayeda I	72,700	101	1.389	31	.416	3.69
Sayeda II	69,300	66	.952	2	.028	3.30
Khalifa	82,400	74	.898	12	.145	16.2
Darb-el-Ahmar ...	90,800	77	.848	30	.330	30.89
Mousky	29,000	23	.793	5	.177	21.7
Bab-el-Sharia ...	98,800	81	.850	16	.161	19.04
Gamalia	84,600	101	1.194	18	.214	17.8
Abbassia	130,600	177	1.35	37	.283	20.8
Shoubra	58,900	159	1.688	52	.525	3.37
Rod-el-Farag ...	134,600	117	.869	26	.193	22.2
Boulac I	85,100	137	1.60	44	.517	32.1
Boulac II	56,000	65	1.161	8	.142	12.3
Old Cairo	74,600	199	2.668	69	.924	34.1
Heliopolis	57,900	89	1.537	15	.197	16.8
Zeitoun	45,400	42	.925	4	.088	9.52
Helwan	53,800	65	1.203	9	.167	13.8
Sharabia	41,00	76	1.849	9	.216	11.8
TOTAL FOR CAIRO	1,451,100	1,784	1.224	420	.219	23.4

TABLE No. 130.—TYPHOID CASE AND DEATH RATES IN CAIRO DISTRICTS IN 1944

District	Population	Number of Cases recorded	Case rates per 1000 of Population	Number of Deaths	Death-rates per 1000 of Population	case mortality rates per cent
Ezbekia	59,100	159	2.690	26	.439	16.3
Abdine	92,400	181	1.959	15	.162	8.2
Sayed I	72,700	121	1.664	26	.357	21.6
Sayed II	69,300	184	2.655	7	.11	3.8
Khalifa	82,400	157	1.905	21	.253	13.4
Darb-el-Ahmar ...	90,800	186	2.048	21	.221	11.3
Mousky	29,000	61	2.103	4	.138	6.6
Bab-el-Sharia ...	98,800	189	1.913	18	.182	9.5
Gamalia	84,600	132	1.560	10	.118	7.5
Abbassia	130,600	465	3.560	61	.453	13.1
Shoubra	98,900	189	1.890	31	.314	17.2
Rod-el-Farag ...	131,600	195	1.449	25	.185	12.8
Boulac I	85,100	88	1.034	24	.282	27.2
Boulac II	56,000	47	.839	4	.055	8.5
Old Cairo	74,600	115	1.542	21	.28	17.3
Heliopolis	57,900	179	3.092	32	.421	17.9
Zeitoun	45,400	101	2.25	8	.176	7.9
Helwan	53,800	56	1.041	5	.095	8.8
Sharabia	41,100	93	2.293	9	.218	9.6
TOTAL FOR CAIRO	1,457,100	2,889	1.983	368	.252	12.9

TABLE No. 131.—CEREBRO-SPINAL FEVER CASE AND DEATH RATES IN CAIRO DISTRICTS IN 1944

District	Population	Number of Cases recorded	Case rates per 1000 of Population	Number of Deaths	Death-rates per 1000 of Population	case mortality rates per cent.
Ezbekia	59,100	1	.017	—	—	—
Abdine	92,400	4	.043	2	.022	50.0
Sayed I	72,700	5	.069	3	.041	60.0
Sayed II	69,300	4	.07	4	.072	100.0
Khalifa	82,400	5	.061	2	.024	40.0
Darb-el-Ahmar ...	90,800	12	.132	5	.055	41.7
Mousky	29,000	4	.138	2	.069	50.0
Bab-el-Sharia ...	98,800	4	.040	4	.040	100.0
Gamalia	84,600	9	.106	4	.047	44.4
Abbassia	130,600	6	.046	6	.046	100.0
Shoubra	98,900	4	.040	3	.030	75.0
Rod-el-Farag ...	134,600	4	.030	—	—	—
Boulac I	85,100	2	.024	1	.012	50.0
Boulac II	56,000	1	.018	—	—	—
Old Cairo	74,600	8	.107	—	—	—
Heliopolis	57,900	7	.121	5	.086	71.4
Zeitoun	45,400	3	.066	—	—	—
Helwan	53,800	4	.074	1	.019	25.0
Sharabia	41,100	5	.122	2	.049	40.0
TOTAL FOR CAIRO	1,457,100	92	.063	44	.030	47.8

TABLE NO. 132.—SCARLET FEVER CASE AND DEATH RATES IN CAIRO DISTRICTS IN 1944

District	Population	Number of Cases recorded	Case rates per 1000 of Population	Number of Deaths	Death rates per 1000 of Population	Case mortality rates per cent
Ezbekia	59,100	—	—	—	—	—
Abdine	92,400	3	·022	—	—	—
Sayeda I	72,700	—	—	—	—	—
Sayeda II	69,300	—	—	—	—	—
Khalifa	82,400	—	—	—	—	—
Darb-el-Ahmar	30,800	—	—	—	—	—
Mousky	29,000	—	—	—	—	—
Bab-el-Sharia ...	98,800	—	—	—	—	—
Gamalia	84,600	—	—	—	—	—
Abbassia	130,600	2	·015	—	—	—
Shoubra	98,900	—	—	—	—	—
Rod-el-Farag ...	134,600	—	—	—	—	—
Boulac I	85,100	—	—	—	—	—
Boulac II	56,000	—	—	—	—	—
Old Cairo	74,600	—	—	—	—	—
Heliopolis	57,900	2	·035	—	—	—
Zeitoun	45,400	—	—	—	—	—
Helwan	53,800	—	—	—	—	—
Sharabia	41,100	—	—	—	—	—
TOTAL FOR CAIRO	1,457,100	7	·004	—	—	—

TABLE NO. 133.—DIPHTHERIA CASE AND DEATH RATES IN CAIRO DISTRICTS IN 1944

Districts	Population	Number of Cases recorded	Case rates per 1000 of Population	Number of Deaths	Death rates per 1000 of population	Case mortality rates per cent
Ezbekia	59,100	50	·846	13	·219	26
Abdine	92,400	70	·758	19	·205	27·1
Sayeda I	72,700	81	1·114	13	·178	16·4
Sayeda II	69,300	85	1·227	17	·245	20·0
Khalifa	82,400	83	1·007	29	·351	34·9
Darb-el-Ahmar	90,800	108	1·189	32	·352	29·6
Mousky	29,000	26	·897	8	·275	30·7
Bab-el-Sharia ...	98,800	92	·931	15	·151	16·3
Gamalia	84,600	86	1·017	23	·271	25·7
Abbassia	130,600	143	1·095	57	·436	39·8
Shoubra	98,900	120	1·213	36	·364	30·0
Rod-el-Farag ...	134,600	129	·958	38	·282	29·4
Boulac I	85,100	80	·940	34	·585	42·5
Boulac II	56,000	53	·946	51	·017	1·8
Old Cairo	74,600	57	·764	17	·227	29·8
Heliopolis	57,900	60	1·036	21	·361	35·0
Zeitoun	45,400	41	·903	13	·286	31·7
Helwan	53,800	23	·428	5	·092	21·7
Sharabia	41,100	48	1·168	9	·218	18·7
TOTAL FOR CAIRO	1,457,100	1,435	·985	400	·279	27·8

TABLE NO. 134.— MEASLES CASE AND DEATH RATES IN CAIRO DISTRICTS IN 1944

District	Population	Number of Cases recorded	Case rates per 1000 of population	Number of Deaths	Death-rates per 1000 of Population	Case mortality rates per cent
Ezbekia	50,100	58	·981	36	·609	62·1
Abdine	92,400	24	·260	7	·076	29·2
Sayeda I.	72,700	92	1·265	92	1·265	100·0
Sayeda II	69,300	44	·635	26	·375	59·1
Khalifa	82,400	70	·850	52	·631	74·3
Darb el Ahmar	90,800	62	·683	31	·341	50·0
Mousky	29,000	29	1·000	14	·483	48·3
Bab el Sharia ...	98,800	90	·911	64	·648	71·1
Gamalia	84,600	30	·355	13	·154	43·3
Abbassia	130,600	112	·858	14	·107	12·5
Shoubra	98,900	142	1·436	77	·779	54·2
Rod el Farag ...	134,600	74	·550	24	·178	32·4
Boulac I.	85,100	54	·635	4	·047	7·4
Boulac II.	56,000	76	1·375	76	1·375	100·0
Old Cairo	74,600	167	2·239	160	2·145	95·8
Heliopolis	57,900	45	·777	14	·242	31·1
Zeitoun	45,400	125	2·753	46	1·013	36·8
Helouan	53,800	9	·167	1	·019	11·1
Sharabia	41,100	63	1·533	10	·243	15·9
TOTAL FOR CAIRO	1,457,100	1,366	937	761	522	55·7

Abbassia Fever Hospital

The number of patients admitted to the Hospital during the last three years (persons accompanying patients included) were:—

1942		15,989
1943		23,251
1944		12,517

The number of patients admitted during the year was 10,727. Of these 1,095 died or 10·2 percent. 1,790 persons accompanied patients.

Table No. 135 gives details of infections diseases isolated during 1944.

The following tables deal with some of the diseases separately.

TABLE No. 135—GOVERNMENT FEVER HOSPITAL, ABBASSIA, 1944

Diseases	1943				1944									
	Cases admitted		Cases admitted		Cases admitted within 3 days		Cases admitted within 4 days		Cases admitted after 7 days		C. sent by Health Offices	Cases by Hospitals	Cases sent by Private Practitioners	Cases admitted at their own request
	Adm.	D.	Adm.	D.	Adm.	D.	Adm.	D.	Adm.	D.				
Typhus	8,468	1,522	669	182	121	31	268	75	280	76	242	103	259	65
Small-pox	1,514	75	1,231	36	323	4	651	24	271	8	551	455	128	147
Plague	1	—	15	2	9	1	5	—	1	1	2	—	12	1
Typhoid	1,112	150	1,073	128	182	21	42	48	479	59	520	150	335	68
Para Typhoid	341	10	398	19	88	3	42	7	178	9	168	52	114	64
Diphtheria	1,171	404	569	79	343	14	176	25	50	40	118	153	195	103
Pneumonia	202	83	437	82	50	7	254	40	133	35	218	90	86	43
Influenza	2,856	6	1,690	1	1,111	—	397	—	182	1	842	513	179	156
Measles	67	8	309	26	158	7	96	9	55	10	77	150	31	51
Scarlet-Fever	3	—	—	—	—	—	—	—	—	—	—	—	—	—
Chicken-Pox	82	—	57	—	24	—	22	—	11	—	28	16	5	8
Cerebro-Spinal Fever	32	13	53	24	13	6	8	7	12	11	5	7	19	2
Whooping Cough	17	1	40	8	7	1	10	1	20	1	6	20	6	8
Tetanus	71	32	33	14	14	10	16	4	3	—	1	14	16	2
Puerperal Fever	40	5	40	10	5	1	12	5	23	4	17	11	7	5
Dysentery	30	2	—	—	—	—	—	—	—	—	—	—	—	—
Erysipelas	286	20	208	13	108	4	75	4	25	5	27	86	72	23
Other Diseases	1,674	147	3,875	476	—	—	—	—	—	—	1,553	876	674	772
TOTAL	18,929	2,419	19,727	1,095	2,556	110	2,534	249	1,723	260	4,375	2,696	2,138	1,518

TABLE NO. 136. AGE AND SEX DISTRIBUTION OF DIPHTHERIA CASES AND DEATHS

Age	Male			Female			Total			Swab from throat		Took 3 inj. one month earlier			No. of carriers
	No. of cases	No. of deaths	Mortality Rate	No. of cases	No. of deaths	Mortality Rate	No. of cases	No. of deaths	Mortality Rate	Positive	Negative	No. of Cases.	No. of Deaths	Mortality Rate	
			%			%			%					%	
Under one year	33	—	—	9	—	—	4	—	—	15	27	—	—	—	—
1—2 years ...	107	15	14	79	11	13.9	186	26	13.9	103	83	1	—	—	—
2—5 „ ...	125	20	15	136	25	18.3	261	45	17.2	148	113	6	—	—	—
5—10 „ ...	15	1	6.6	35	5	14	50	6	12	29	21	4	—	—	—
10—15 „ ...	8	—	—	8	1	12.5	16	1	6.2	9	7	1	—	—	—
15—25 „ ...	6	1	16.6	6	—	—	12	1	8.5	8	4	—	—	—	—
25—35 „ ...	—	—	—	2	—	—	2	—	—	2	—	—	—	—	—
Over 35 years	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
TOTAL ...	294	37	12.5	215	42	15.3	509	79	31.8	314	257	12	—	—	—

TABLE NO. 137—AGE AND SEX DISTRIBUTION OF TYPHUS CASES AND DEATHS

Age	MALE			FEMALE			TOTAL			No. of sample W.		Took 3 inj. one month earlier		
	No. of Cases	No. of Deaths	Mortality Rate	No. of Cases	No. of Deaths	Mortality Rate	No. of Cases	No. of Deaths	Mortality Rate	Pos.	Neg.	No. of Cases	No. of Deaths	Mortality Rate
			%			%			%					%
Less than 1 year	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1-2 ... years	1	—	—	—	—	—	1	—	—	—	1	—	—	—
2-5 ... „	12	3	25	8	1	12.5	20	4	20	15	5	—	—	—
5-10 ... „	10	—	—	12	—	—	22	—	—	16	6	—	—	—
10-15 ... „	33	5	15	19	4	21	52	9	17	39	13	—	—	—
15-25 ... „	164	27	16.5	45	20	44.5	209	47	22.5	154	55	3	—	—
25-35 ... „	165	35	21	31	12	40	196	47	44	152	44	3	—	—
35-45 ... „	71	22	31	31	16	51.5	102	38	37	78	24	2	—	—
45-65 ... „	45	21	47	17	12	70	62	33	53	47	15	—	—	—
More than 65 „	4	3	75	1	1	100	5	4	80	1	4	—	—	—
TOTAL ...	505	116	23	164	66	40	669	182	27.5	502	167	8	—	—

TABLE NO. 138—AGE AND SEX DISTRIBUTION OF PNEUMONIA CASES AND DEATHS

Age	Male			Female			Total			Lobar PN.	Broncho PN.
	No. of Cases	No. of Deaths	Rate per cent	No. of Cases	No. of Deaths	Rate per cent	No. of Cases	No. of Deaths	Rate per cent		
Less than 1 year	13	1	7.6	4	2	50	17	3	17	—	17
1-2 years	10	3	30	8	1	12.5	18	4	22	4	14
2-5 "	27	9	33.3	19	2	10.5	46	11	24	12	31
5-10 "	16	3	18.7	17	4	23.5	33	7	21	20	13
10-15 "	9	—	—	12	4	33.3	21	4	20	8	13
15-25 "	85	9	10.5	10	3	30	95	12	12.7	65	30
25-35 "	90	13	14.4	7	2	28.5	97	15	15.5	67	30
35-45 "	61	12	19.6	5	—	—	66	12	18.1	45	21
45-65 "	32	9	29	5	1	20	37	10	27	20	17
More than 65 "	7	4	57	—	—	—	7	4	57	2	5
TOTAL ...	350	63	18	81	19	22	431	82	18.7	213	196

TABLE NO. 139—AGE AND SEX DISTRIBUTION OF TYPHOID FEVER CASES AND DEATHS

Age	MALE PTS.			FEMALE PTS.			TOTAL			No. of w. samples		Took 2 inj. at least 1 month earlier		
	No. of Cases	No. of Deaths	Mor- tality Rate	No. of Cases	No. of Deaths	Mor- tality Rate	No. of cases	No. of Deaths	Mor- tality rate%	Pos.	Neg.	No. of Cases	No. of Deaths	Mor- tality Rate
			%			%								%
Less than 1 year	1	1	100	—	—	—	1	1	100	1	—	—	—	—
1-2 years	11	4	36	9	4	44.5	20	8	40	16	4	—	—	—
2-5 "	58	8	13.5	57	8	13.5	115	16	13.8	92	23	1	—	—
5-10 "	67	4	6	39	3	8.8	106	7	6.7	91	15	5	—	—
10-15 "	95	5	5.1	75	7	9.3	170	12	7	127	43	8	—	—
15-25 "	23	25	10.8	14	5	4	356	30	8.8	283	73	35	—	—
25-35 "	128	24	19	67	11	16.2	195	35	18	132	63	11	—	—
35-45 "	55	6	11.3	21	2	9.5	76	8	10.6	65	11	4	—	—
45-65 "	16	6	30.7	12	2	17	28	8	28.5	23	5	2	—	—
More than 65 "	6	3	50	—	—	—	6	3	50	5	1	—	—	—
TOTAL ...	669	86	12.8	404	42	10.3	1,073	128	11.8	835	238	66	—	—

TABLE No. 140—AGE AND SEX DISTRIBUTION OF SMALL-POX CASES AND DEATHS

Age	Male			Female			Total			Not Vaccinated in Infancy			Vaccinated one year earlier			Vaccinated 1-3 years earlier		
	No. of Cases	No. of Deaths	Mortality Rate	No. of Cases	No. of Deaths	Mortality Rate	No. of Cases	No. of Deaths	Mortality Rate	No. of Cases	No. of Deaths	Mortality Rate	No. of Cases	No. of Deaths	Mortality Rate	No. of Cases	No. of Deaths	Mortality Rate
			%			%			%			%			%			%
Less than one year	19	5	26.3	11	5	45.5	30	10	33.3	22	10	45.4	—	—	—	—	—	—
1-2 years	7	1	14.2	8	2	25	15	3	20	7	3	42.8	8	—	—	—	—	—
2-5	19	3	15.8	12	1	8.5	31	4	12.9	10	4	40	3	—	—	—	—	—
5-10	15	—	—	21	1	4.8	36	1	2.8	4	1	25	5	—	—	12	—	—
10-15	33	—	—	36	1	2.8	69	1	1.5	3	1	33.3	10	—	—	7	—	—
15-25	516	5	.9	72	1	1.4	588	6	1.1	22	5	22.7	162	—	—	93	1	—
25-35	309	2	.6	61	2	3.3	370	4	1.1	20	4	20	84	—	—	41	—	—
35-45	93	5	5.3	17	2	11.8	110	7	6.3	12	5	41.6	19	—	—	37	2	5.4
45-65	24	—	—	3	—	—	27	—	—	—	—	—	6	—	—	4	—	—
More than 65 years	44	—	—	1	—	—	5	—	—	—	—	—	2	—	—	3	—	—
Total	1,079	21	1.9	242	15	6.3	1,281	36	2.8	100	33	33	299	—	—	197	3	1.5

TABLE No. 141.—AGE AND SEX DISTRIBUTION OF PLAGUE CASES AND DEATHS

AGE	Male			Female			Total			Cultures		Swabs	
	No. of cases	No. of death	rate %	No. of Cases	No. of death	%	No. of Cases	No. of death	%	Pos.	Neg.	Pos.	Neg.
Less than 1 year ...	—	—	—	—	—	—	—	—	—	—	—	—	—
1-15 years ...	—	—	—	—	—	—	—	—	—	—	—	—	—
15-25 "	7	1	14	—	—	—	7	1	14	6	1	5	2
25-35 "	6	1	16	—	—	—	6	1	16	5	1	5	1
35-45 "	2	—	—	—	—	—	2	—	—	2	—	2	—
More than 45 Years ...	—	—	—	—	—	—	—	—	—	—	—	—	—
TOTAL ...	15	2	13	—	—	—	15	2	13	13	2	12	3

TABLE No. 142.— PARA-TYPHOID FEVER

AGE	MALE			FEMALE			TOTAL			Samples of Widal		Took 2 inj. one month earlier		
	No. of Cases	No. of Deaths	Mor- tality Rate %	No. of Cases	No. of Deaths	Mor- tality Rate %	No. of Cases	No. of Deaths	Mor- tality Rate %	Pos.	Neg.	No. of Cases	No. of Deaths	Mor- tality Rate %
Less than 1 year	1	—	—	—	—	—	1	—	—	1	—	—	—	—
1-2 ... years	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2-5 "	12	—	—	5	—	—	17	—	—	17	—	—	—	—
5-10 "	13	1	7.5	9	—	—	22	1	4.8	22	—	3	—	—
10-15 "	47	3	6.25	19	1	5	66	4	6	60	6	6	—	—
15-25 "	128	7	5.5	30	2	6.33	158	9	5.8	146	12	8	—	—
25-35 "	67	3	4.8	19	—	—	86	3	3.5	80	6	8	—	—
35-45 "	26	1	4	12	—	—	38	1	2.8	28	—	2	—	—
45-55 "	1	—	—	7	1	15	8	1	13	8	—	—	—	—
55-65 "	2	—	—	—	—	—	2	—	—	2	—	—	—	—
More than 65 "	—	—	—	—	—	—	—	—	—	—	—	—	—	—
TOTAL ...	297	15	5	101	4	4	398	19	4.9	374	24	27	—	—

TABLE No. 143 — CEREBRO-SPINAL FEVER

AGE	Male			Female			Total			Samples of C.S.F.		Swab from Throat	
	No. of Cases	No. of deaths	%	No. of Cases	No. of deaths	%	No. of Cases	No. of deaths	%	Pos.	Neg.	Pos.	Neg.
Less than 1 year	4	4	100	1	1	100	5	5	100	1	4	—	—
1-2 years	2	2	100	—	—	—	2	2	100	1	1	—	—
2-5 "	5	3	60	—	—	—	5	3	60	2	3	—	2
5-10 "	1	—	—	2	2	100	3	2	66	—	3	—	1
10-15 "	5	2	40	1	1	100	6	3	50	1	5	—	3
15-25 "	4	2	50	—	—	—	4	2	50	1	3	—	2
25-35 "	4	4	100	—	—	—	5	4	80	1	4	—	1
35-45 "	2	2	100	—	—	—	2	2	100	—	2	—	—
45-65 "	1	1	100	—	—	—	1	1	100	—	1	—	—
More than 65 years	—	—	—	—	—	—	—	—	—	—	—	—	—
TOTAL ...	28	20	71	4	4	100	33	24	72.7	7	26	—	3

TABLE No. 144.— AGE AND SEX DISTRIBUTION OF DYSENTERY CASES AND DEATHS

Age	Amoebic								
	Male			Female			Total		
	No. of Cases	No. of Deaths	Mortality Rate	No. of Cases	No. of Deaths	Mortality Rate	No. of Cases	No. of Deaths	Mortality Rate
			%			%			%
Less than 1 year ...	—	—	—	—	—	—	—	—	—
1- 10 years ...	—	—	—	—	—	—	—	—	—
10-15 " ...	3	—	—	—	—	—	3	—	—
15-25 " ...	10	—	—	—	—	—	10	—	—
25-35 " ...	10	—	—	—	—	—	10	—	—
35-45 " ...	6	1	16.5	—	—	—	6	1	16.5
45-65 " ...	2	2	100	—	—	—	2	2	100
More than 65 years	2	2	100	—	—	—	2	2	100
TOTAL ...	33	5	15	—	—	—	3	5	15

N.B.— No Bacillary.

TABLE No. 145. Erysipelas.

Age	Male			Female			Total		
	No. of Cases	No. of Deaths	Mortality Rate	No. of Cases	No. of Deaths	Mortality Rate	No. of Cases	No. of Deaths	Mortality Rate
			%			%			%
Less than 1 year...	6	2	33	3	—	—	9	2	22
1- 2 years ...	1	—	—	2	—	—	3	—	—
2- 5 " ...	2	—	—	6	—	—	8	—	—
5-10 " ...	6	—	—	4	—	—	10	—	—
10-15 " ...	6	—	—	9	—	—	15	—	—
15-25 " ...	29	—	—	18	1	6	47	1	2
2-35 " ...	26	1	4	13	1	7.7	39	2	5
35-45 " ...	17	1	6	19	1	5	36	2	5.7
45-55 " ...	14	—	—	13	3	23	27	3	11
55-65 " ...	7	1	14	2	—	—	9	1	11
More than 65 years	1	—	—	4	2	50	5	2	40
TOTAL ...	115	5	4.3	93	8	8.6	208	13	6

N.B.—All cases were treated with Sulphanilamide only.

Control of Passengers and Pilgrims

Passengers :

During 1944, a total of 15,745 passengers arrived in Cairo from infected countries as compared with 13,740 in 1943. Of these passengers, 10,075 arrived by air, 1,368 arrived by road via Ismailia, 581 via Suez, 3,689 via Kantara and 30 passengers arrived by sea via Alexandria and 2 via Port Said.

In addition, 9,099 passengers arrived from the Sudan via Shellal and were observed for small pox, meningitis or yellow fever.

With the exception of 19 passengers who could not be traced inspite of repeated enquiries, all the returning passengers or 99.9 per cent were observed and found in good health.

Pilgrims :

The number of Egyptian pilgrims returning from the Hedjaz during 1944 (1363 H.) was 2,281 as compared with 5456 in 1943. All returning pilgrims were observed for the regulation period and found in good health except one pilgrim who could not be traced and 10 falling sick and diagnosed as follows :—

Recovered :	1 Typhus	Died: 1 Tuberculosis
	1 Colitis ...	1 Typhus
	1 Malaria	2 Natural causes
		1 Heart failure
		1 Typhoid
		1 Embolism
		7

The personnel of the Tor Lazaret numbering 180 officials and employees were also observed and found in good health.

Sanitary Control of Prostitutes

The total number of registered prostitutes for the year 1944 was 629 as compared with 771 in 1943 — 89 were struck off the register during the year.

The total number of examinations held was 27 307. 119 prostitutes were found suffering from venereal diseases distributed as follows :—

Chronic Gonorrhoea	13
Bartolinitis	1
Secondary Syphilis	93
Soft sore	12
Total	119

The number of arrested women was 2,609 compared with 4,319 in the year 1943. The incidence of disease amongst them was as follows :—

Acute Gonorrhoea	7
Chronic Gonorrhoea	179
Primary Syphilis	10
Secondary Syphilis	213
Soft sore	30
Scabies	3
Venereal warts	2
Total	444

Wassermann Examination of the Blood :

Prostitutes: 95 were found positive out of 629.
 Arrested women: 197 < < < < 500.

Complaints against Prostitutes :

Seven complaints were received and all proved to be false.

Unhealthy, Inconvenient and Dangerous Establishments

Under Law No. 13 of August 28, 1904, and arrêté of the Ministry of Interior of August 29 of the same year, the following establishments were licensed during the year 1944 viz:-

	1st Class	2nd Class	3rd Class
Saha	249	609	241
Zabt	135	137	58
TOTAL	384	746	309
GRAND TOTAL ...	1,529		

The number of unhealthy, inconvenient and dangerous establishments inspected during year 1944 were 18,299, of which 14,948 complied with sanitary conditions which were lacking in the remaining 3,351.

Procès-verbaux of contravention drawn up under that law during 1944 for establishments exploited without licences were 1,922 and those drawn up for lacking conditions were 1,467, making a total of 3,389.

Seven ministerial arrêts were issued for insanitary establishments during the year 1944.

Under Law No. 1 of 1904 substituted by Law No. 38 of 1941, 89 cinemas, theatres and other kinds of public establishments were inspected during the year.

Police Health Office

The police force of Cairo was estimated at 9,807 men.

The following is a short description of the work carried out by this office during the year:—

Medical Work:

Policemen examined for sick-leaves	594
Other police personnel examined for sick-leaves	1,077
Medico-legal reports	35,436
Persons stung by scorpion and received first aid injections	897
Motor-car drivers and cabmen examined for pursuing professions	382
Policemen and guards examined for admission into service	7,989

Sanitary Work :

Inspection of police units 30

Number of personnel vaccinated against small-pox 6696

“ “ “ “ “ typhoid (two injections) 595

It was observed that the most prevalent diseases among non-commissioned officers and policemen were: rheumatism, bronchitis, nephritic colic, and wounds. The number of cases of these diseases were 771, 710, 682 and 648 respectively.

The diseases most prevalent among officers and civilians were : rheumatism, colitis, tonsillitis, and general debility. The number of these diseases were : 260, 78, 75 and 69 respectively. 15 members of the police force were sent to the fever hospital suffering from typhoid and para-typhoid. 651 persons were put under observation for infectious diseases during the year.

Sanitation Section

The activities of the Sanitation Section during the year 1944 are summarised as follows :—

1.—Water:

Samples of water have been regularly taken from the different main water supplies of the City, Giza and Helwan in order to ensure its purity. Samples of water have also been taken from different parts of the City and swimming baths.

2.—Free water taps:

Three free water taps have been erected in Cairo.

3.—Slope water gulleys:

Following complaints received against throwing waste water in streets, three slope water gulleys have been erected in the poor quarters of the City.

4.—Water systems of private buildings:

The Inspectorate approved 10 water systems of private buildings received from Tanzim. These buildings are situated at Helwan.

5.—Quack doctors Squad :

This squad succeeded in pursuing quack doctors, quack dentists and ambulant vendors who sell medicine and drugs without licences.

6.—Complaints:

The number of complaints received and dealt with during 1944 was 2,300 concerning defective sanitary systems in houses, fencing waste lands and cleanliness of streets.

7. Steps were taken to protect Cairo water intakes, by forbidding the deposit of refuse on the bank of the Nile.

8. Steps were taken to control refuse and manure dumps.

9. 3,450 permits were given for evacuation of private cisterns.

Food Inspection Section

Since the creation of the Food Inspection Section in the year 1936, a strict supervision of the town markets was exercised with a view to combating the adulteration or deterioration of foodstuffs and their protection against contamination.

Law forbidding fraud and adulteration :

During 1943, the anti-adulteration Law, as well as ministerial arrêtés and instructions regulating its execution, were issued. In the current year, there was opportunity favouring the comprehensive execution of this Law, after having over-come all the difficulties which had faced this Section.

One of the provisions of the Law is the taking of specimens from three parts, and sometimes from five.

Owing to war time conditions and the scarcity of bottles and other receptacles for packing specimens, the number of specimens decreased during this year, as compared with previous years.

Thus the number of specimens of milk were as follows :-

Year	Samples
1942	19,551
1943	22,890
1944	6,890

This does not mean that the efforts had slackened nor that its activities had diminished. On the contrary, the efforts were doubled, since the procedure of taking specimens from three parts required twice the amount of work.

Trading in British Army food wastes and other deteriorated provisions:

Though filthy and unsound, camp food wastes are in great demand by the poor because of their cheapness. Trading therein was therefore rife during the year despite the great efforts of the health authorities to stamp it out. Arrangements between camp commands and health authorities to stop this practice were futile. Since food wastes represented a menace to public health, food control squads were instructed to raid places where these wastes were sold, prosecute the dealers and confiscate the foodstuffs.

As regards deteriorated provisions, e.g. flour, cereals, preserved food, etc. it was arranged to deliver these to a certain contractor in Cairo who was placed under sanitary supervision. These provisions are utilised in industry or used as fodder. Only the perfectly sound articles are released for human consumption.

Trading in fish:

Owing to the war and the high prices of foodstuffs, the restriction of the sale of meat to a certain number of days per week, fish trade has so flourished that merchants often conceal it in order to speculate in its fluctuating prices. Because of this gain, fish which was deteriorated, putrid, or in course of putrefaction, was sold to the public. Special attention was, therefore, paid to fish markets.

Food Control at Giza:

Since the Food Section of the Ministry has withdrawn the Food Control squads which were attached to Cairo Health Inspectorate, the control of foodstuffs in all the extensively scattered suburbs of Cairo which represent the main source of supplying the City with the necessary foodstuffs has now become the responsibility of the Food Control Section.

Summary:

Herewith is a statement giving the number of samples taken from all foodstuffs, those adulterated and their proportion to total samples, quantity destroyed, procès-verbaux drawn up in respect of same, etc.

Fresh Foodstuffs:

Such as fruits, vegetables, meat, fish, slaughtered fowls, eggs, massl', milk, cream and flour; of these 11815 okes in weight and 22,260 units in number were destroyed.

Preserved Foodstuffs:

Such as conserved sardines, salad, milk, fruits, vegetables, dried fish and preserved meat; of these 77 okes in weight, and 15,940 units in number were destroyed.

Prepared Foodstuffs :

Such as cooked foodstuffs, salad, pickles bread, cheese, olives, sweet-meat, jam, ice creams, cakes etc.; of these 8,822 okes in weight and 8,533 units in number were destroyed.

Dried Foodstuffs :

Nuts, date, cocoa and spices; of these a total of 79.5 okes were destroyed.

Various Liquids :

Such as aerated water, sugar cane juice, syrup, molasses, ice, vinegar, alcoholic drink and colouring matters; of these 15,999.5 litres were destroyed.

Other substances :

Such as unfit receptacles, of which 949 units were destroyed.

NUMBER OF MILK SAMPLES TAKEN DURING 1944 AND THE RATE OF ADULTERATION THEREIN

Number of Samples	Adulterated Samples						Total number of adul't. samples	Number of genuine samples	Percentage of adulteration
	Skimmed Samples		Samples to which water was added		Samples skimmed and to which water was added				
	No. of Samples	Rate of adult.	No. of Samples	Rate of adult.	No. of Samples	Rate of adult.			
6,800	542	7.8 %	157	2.2 %	134	1.9 %	833	6,057	12 %

LIST OF CONTRAVENTIONS DRAWN UP DURING THE YEAR 1944
IN APPLICATION OF THE FOLLOWING ACTS

No. of Procès-Verbaux drawn up under law No. 49 of 1941	No. of Procès-Verbaux drawn up against milk vendors under Arrêté of Ministry of Interior dated 18.5.1925	No. of Procès-Verbaux drawn up under Arrêté of the Ministry of Interior dated 13.1.15 re Itinérant Vendors	No. of Procès-Verbaux drawn up under Arrêté of Cairo Governorate dated 27.3.1911. re Internal Markets
1,214	978	163	97

Number of milk vendors who were licensed	296
„ ambulant vendors who were licensed	426
„ cases of food poisoning	505
„ complaints received by the section and verified	433

TABLE No. 146.—SHOWING NUMBER, QUANTITY AND KIND OF FOODSTUFFS DESTROYED BY AGREEMENT WITH THE OWNERS, AND NUMBER OF SPECIMENS TAKEN BY INSPECTORS OF CAIRO CITY HEALTH INSPECTORATE AND THE RESULTS OF ANALYSIS OF THESE SPECIMENS.

Articles of Food	Foodstuffs destroyed				Samples taken					Percentage of adulteration	Percentage of decomposition	Remarks
	No.	Bottle	Tin	Litre	Oke	No. of Samples	Genuine	Adulterated	Decomposed			
A.—Fresh Foods:												
Fruits and vegetables...	17,605	—	—	—	3,802	—	—	—	—	—	—	—
Fish ...	—	—	—	—	2,263	—	—	—	—	—	—	—
Meat ...	81	—	—	—	235	—	—	—	—	—	—	—
Poultry ...	935	—	—	—	—	—	—	—	—	—	—	—
Salad ...	—	—	—	—	493	—	—	—	—	—	—	—
B.—Cooked or Prepared Foods:												
...	319	—	—	—	1,577	—	—	—	—	—	—	—
C.—Preserved Foods:												
Jam ...	—	—	—	—	—	—	—	—	—	—	—	—
Milk and its products...	—	—	—	—	—	—	—	—	—	—	—	—
Vegetables and fruits...	—	—	—	—	—	—	—	—	—	—	—	—
Meats (preserved or red)...	—	—	4,914	—	—	—	—	—	—	—	—	—
Salted fish and sardine	—	—	9,615	—	—	—	—	—	—	—	—	—
T ma'o juice (ti ec.)	—	—	853	—	—	—	—	—	—	—	—	—
Dried fishes ...	—	—	528	—	—	—	—	—	—	—	—	—
D.—Oils:												
Olive oil	—	—	—	—	—	—	—	—	—	—	—	—
Sesame oil	—	—	—	—	—	—	—	—	—	—	—	—
Linseed oil	—	—	—	—	—	—	—	—	—	—	—	—
Lettuce oil	—	—	—	—	—	—	—	—	—	—	—	—
Safflower oil	—	—	—	—	—	—	—	—	—	—	—	—
Cotton seed oil	—	—	—	—	—	—	—	—	—	—	—	—
Other oils fit for food	—	—	—	—	—	—	—	—	—	—	—	—
						163	146	22	—	13		

Boulac Health Group

Chest Diseases Dispensary :

Number of new patients treated during the year 1944 was 10,745, of whom 919 were T.B. cases. Deaths were 298.

Old patients treated during the year amounted to 6,441 persons distributed as follows:

4,061 T.B. cases.
665 under observation.
484 contacts.
1,231 other chest diseases.

The work done by this section was as follows:—

2,790 home visits	2,397 by nurses	
	393 by doctor	
464 pneumothorax		
2,151 sputum analysis	1,728 new cases (919 were positive)	
	403 old " (109 " " "	
857 × Ray cases	{ 728 new (323 were positive)	
	" { 129 old (all " " "	
906 contacts	{ 463 children } 131 were positive.	
	{ 443 adults }	
349 Left sanatorium	{ 199 sputum positive.	
	{ 150 " negative.	

Their condition was as follows:

191 improved.
56 did not improve.
47 worse.
55 died.

Surgical section :

Number of cases treated in the out-patients clinic during the year 1944 was 30,131 distributed as follows:—

11,871 new cases.
18,260 old cases.

211 cases were admitted to the in-patient department, 5 cases remained from the previous year. These were distributed as follows:—

133 cured.
65 improved.
10 did not improve.
1 died.
7 remaining under treatment.

Minor operations such as openings, epilation, sebaceous cysts, inserting gypsum for cases of small fractures, or dislocation are performed in the out-patient clinic.

Piles are treated every Tuesday afternoon. Cases treated amounted to 565 of whom 445 were new patients and the remaining 120 were old.

Endemic Diseases Section :

Number of cases treated in this section during the year was 8,982. Work was carried out as follows:—

8656 urinary analysis for Schistosomiasis from whom 2,674 were found suffering from this disease.
8,327 stool analysis for Schistosomiasis and Ancylostoma.
2,712 total number of those suffering from Schistosomiasis
1,182 " " " " " Ancylostoma
1,223 " " " " " Ascaris

Number of injections given during the year was 18,963 distributed as follows:-

18,394 tartar emetic.
569 emetine.

Number of doses given during the year was 2,290 distributed as follows:-

1221 carbon tetra chloride.
1037 c'eno odium oil.
32 Mail Fern oil

Treatment of 42 new patients was postponed during the whole year.

Child Welfare Section :

Children treated by this section during the year were 22,700, of whom 2,102 were out-patients. Results of examination were as follows:-

4,606 enteritis.
4,255 pneumonia.
48 infectious diseases.
3,572 skin diseases.
5,528 other diseases.
146 vaccinated against small-pox.
163 inoculated against diphtheria.
649 visits by Mowalidas.
1,631 attended lectures.

Venereal and Skin Diseases :

51,792 patients were treated in this section during the year. Of these, 31,504 were old patients and 20,288 new.

Results of examination of new cases were as follows :-

1,321 gonorrhoea.
813 syphilis.
81 other venereal diseases.
1,804 completed their treatment.
491 did not complete treatment.

Ophthalmic Section :

Number of cases treated in this section during the year amounted to 129,406 distributed as follows :-

6489 treatment postponed.
103998 under treatment.
11919 new patients.
1253 discontinued treatment.
6484 cured.
8936 improved.

Operations done were 1,928 (796 major and 1,132 minor operations).

74 spectacles.
3 under treatment in the in-patients from previous year.
78 treated in the in-patients section distributed as follows:-
68 cured.
5 improved.
4 did not improve.
4 under treatment.

Dental Section :

Number of cases treated in this section during the year was 6228 distributed as follows :

5550 new cases.
678 old

Gynaecology—Obstetrics Section :

24,514 cases were examined during the year, of whom:—
 19,982 new cases.
 3,156 old „
 1,376 Confinemnts.
 5 cases were remaining in the in-patient section from the previous year.
 266 were admitted this year. Results were:—
 212 cured.
 21 improved.
 27 did not improve.
 11 under treatment.

medical Diseases Section :

40,050 cases examined during the year, of whom :
 21,024 new cases.
 19,026 old „
 4 were remaining in the in-patient section from the previous year, and 128 were admitted this year. The results were:—
 32 cured.
 65 improved.
 21 did not improve.
 8 died.
 6 under treatment.

The number of cases treated does not include those suffering from any parasitic disease who are many times this number,

Ear, Nose, and Throat Section :

9,769 cases treated during the year, of whom:—
 8,215 new cases.
 1,554 old „
 1 case was remaining in the in-patient section from the previous year and 106 cases admitted this year. The results were:—
 72 cured.
 24 improved.
 10 did not improve.
 1 died.

In-Patient Section :

18 cases were remaining from last year (1943).
 864 new cases were admitted this year. The results were:—
 581 cured.
 180 improved.
 72 did not improve.
 16 died.
 33 under treatment.

