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GOVERNMENT GENERAL HOSPITAL, MADRAS.

ANNUAL REPORT AND STATISTICS OF THE GOVERNMENT GENERAL HOSPITAL, MADRAS, FOR THE YEAR 1919.

ADMINISTRATION REPORT.

1. (a) **Accommodation.**—The hospital provides accommodation for 500 patients at present, and an additional ward for treatment of venereal cases will be opened shortly. The distribution of beds with the average daily attendance is given in the statement below, the largest number of beds occupied on any one day being 463 on the 18th September 1919 against 480 of the 18th October 1918.

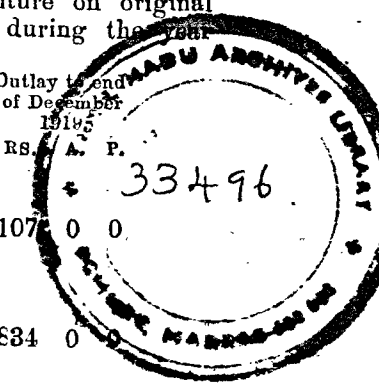
The difference is small in spite of the fact that influenza was not as virulent as in the previous year, the number for the past two years 1916 and 1917 being 379 and 411, respectively.

1	2				3			
	Number of beds available.				Average daily sick of in-patients.			
General Hospital, Madras.	Men.	Women.	Children.	Total.	Men.	Women.	Children.	Total.
Non-Europeans ...	218	64	16	298	238.52	66.75	21.36	326.63
Europeans ...	92	35	12	139	60.22	26.29	8.57	95.08
Common to both Europeans and non-Europeans.				* 63				
Total ...				500	298.74	93.04	29.93	421.71

* Common to male tubercular and non-tubercular patients	...	...	...	20
Do. female do.	...	...	...	18
Female venereal patients	...	...	...	12
Common to both classes and sexes of infectious patients	...	...	...	11
Cells	...	...	...	2
Total	...	...	...	63

(b) **Buildings.**—The following statement shows the expenditure on original works and repairs done to the Government General Hospital, Madras, during the year 1919:—

Name of works.	Amount of estimate.			Outlay to end of December 1919.		
	RS.	A.	P.	RS.	A.	P.
ORIGINAL.						
1. Alterations and improvements to the Venereal section of the General Hospital. (Completed) ...	812	0	0	107	0	0
2. Converting No. 1, Resident Medical officer's quarters into quarters for Matron Superintendent and two nurses. (Completed) ...	1,000	0	0	834	0	0
3. Renewing the hot water pipe for the hot water furnace, General Hospital. (Completed) ...	450	0	0	473	0	0
4. Providing wire-netting partition in the European Officers pantry, General Hospital. (Completed) ...	103	0	0	100	0	0
5. Providing hot water service connexions to the Nurses kitchen in the General Hospital. (Completed) ...	130	0	0	120	0	0
6. Improvements to the General Hospital, Madras. (Completed) ...	1,000	0	0	823	0	0
7. Improvements to the Senior Assistant Surgeons store-room and portion of the compound wall. (In progress) ...	3,190	0	0	1,757	0	0
8. Providing Sun-shades in the Punka puller's room. (Completed) ...	200	0	0	173	0	0
9. Renewing the rotten teak-wood beams in No. 1, Resident Medical Officer's quarters, General Hospital. (Completed) ...	120	0	0	113	0	0



Annual report and Statistics
of the Govt. General

HOSPITAL, Madras

1919



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Name of works.	Amount of estimate.			Outlay to end of December 1919.		
	RS.	A.	P.	RS.	A.	P.
ORIGINAL—cont.						
10. Alterations to the bath rooms and lavatories in Nurses quarters. (Completed)	2,040	0	0	123	0	0
11. Improvements to the cow shed along the Railway line. (In progress)	730	0	0	45	0	0
12. Improvements to carpenter's shed. (Completed)	170	0	0	169	0	0
13. Converting the present poultry shed into a latrine for Venereal wards. (In progress)	220	0	0	1	0	0
14. General Hospital.—Constructing temporary operation room and other improvements to the —. (In progress)	53,900	0	0	22,681	0	0
15. Constructing verandah all round the old Engine house. (In progress)	7,600	0	0	6,642	0	0
16. Electric installation to Venereal ward, General Hospital	1,628	0	0	1,249	0	0
17. Providing an additional light in the Disinfecting Room, General Hospital. (In progress)	74	8	0			
18. Providing a fan in the Resident Medical officer's quarters, General Hospital. (In progress)	243	0	0	172	0	0
19. Shifting an electric fan in the Out-patient Dispensary to the Medical Store-room, General Hospital. (In progress)	32	0	0	20	0	0
20. Providing two energy meters in the Nurses Quarters, General Hospital. (In progress)	160	0	0	160	0	0
Total	73,802	8	0	35,762	0	0

REPAIRS.

21. Special repairs to Indian Female latrine in the first floor, General Hospital. (In progress)	110	0	0	100	0	0
22. Special repairs to rattan chairs in General Hospital. (In progress)	4,810	0	0	2,888	0	0
23. Annual repairs to the General Hospital (interior and exterior). (In progress.)	8,210	0	0	5,124	0	0
24. Special repairs to the Male operation theatre. (Completed)	475	0	0	449	0	0
25. Special repairs to the Clive Ward latrine. (Completed)	990	0	0	21	0	0
26. Special repairs to the Havelock ward latrine. (Completed)	125	0	0	94	0	0
27. Special repairs to General Hospital (In progress)	10,650	0	0	8,583	0	0
28. Re-constructing cross wall in front verandah of Matron Superintendent's quarters. (Completed)	190	0	0	171	0	0
29. Special repairs to the Clive ward latrine. (In progress)	565	0	0	90	0	0
30. Re-arranging the lift from the present position of the European kitchen to a corner of General Hospital. (Completed)	135	0	0	113	0	0
31. Municipal tax on the vacant land acquired for constructing new General Hospital. (In progress)	520	0	0	260	0	0
32. Repairs to Cyclone damages in No. 1, Resident Medical officer's quarters. (Completed)	45	0	0	49	0	0
33. Annual repair to the (out-buildings), General Hospital. (In progress)	2,635	0	0	1,196	0	0
34. Special repairs to Electric installation. (In progress)	1,612	0	0	1,346	0	0
35. Shifting the overhead posts in General Hospital. (In progress)	94	0	0	58	0	0

Name of works.	Amount of estimate.			Outlay to end of December 1919.		
	RS.	A.	P.	RS.	A.	P.
REPAIRS—cont.						
36. Renewal of 15 worn out fans in General Hospital. (In progress)	2,400	0	0	2,190	0	0
37. Annual Punka repair to General Hospital. (In progress)	2,000	0	0	1,154	0	0
38. Provincial Electric repair to General Hospital. (In progress)	7,004	0	0	465	0	0
39. Special repairs to General Hospital. (In progress)	...	...	...	17	0	0
Total	42,590	0	0	23,868	0	0

The annual whitewashing of the buildings and out-houses was commenced in the first week of May 1919 and completed towards the end of December 1919. During this year, the hospital was painted completely by the Public Works Department.

Several minor repairs which required immediate attention were done by the department. Other repairs such as leakage in water pipes and renewal of taps were carried out by the Public Works Department.

2. Total treated.—**(a, Out-patients—**

(1) Number treated	Non-Europeans	...	55,460	
	Europeans	...	4,639	60,099
(2) Average daily sick	Non-Europeans	...	36,348	
	Europeans	...	2,353	38,701

(b) In-patients—

(1) Remaining	Non-Europeans	...	311	
	Europeans	...	83	394
(2) Admissions	Non-Europeans	...	6,240	
	Europeans	...	1,778	8,018

(3) Results—

	Non-Europeans.	Europeans.	Total.
Cured	3,604	1,096	4,700
Relieved	1,318	364	1,682
Otherwise discharged	900	209	1,109
Died	453	100	553

The following statement gives the totals of in-patients (Europeans and non-Europeans) treated during the past ten years; an average for ten years is also shown for comparison with the figures for 1919 :—

Years.	In-patients.				Out-patients.			
	Total treated.		Average daily sick.		Total treated.		Average daily sick.	
	Non-Europeans.	Europeans.	Non-Europeans.	Europeans.	Non-Europeans.	Europeans.	Non-Europeans.	Europeans.
1909	5,629	1,946	305.61	115.03	45,998	6,097	411.16	47.06
1910	5,818	2,038	309.95	113.12	45,876	6,120	407.33	46.72
1911	5,705	2,066	312.65	121.41	41,453	6,107	393.87	40.77
1912	6,270	2,022	327.58	108.54	45,232	5,740	341.75	35.04
1913	5,579	2,057	332.63	123.03	47,006	6,229	349.11	35.24
1914	6,179	2,127	318.99	120.18	55,807	7,047	421.25	38.66
1915	5,740	1,823	291.99	109.33	56,958	5,900	409.77	27.41
1916	6,176	1,743	284.76	94.47	53,177	5,160	427.30	27.57
1917	5,673	1,658	278.70	93.90	55,183	4,690	459.57	25.79
1918	6,491	1,831	311.12	93.25	57,032	4,489	383.60	25.32
1919	6,551	1,861	328.63	95.08	55,460	4,639	363.48	23.53

In-patients.—The number of European and non-European admissions is more than the previous year, more among Europeans than Non-Europeans. The average daily attendance is more during this year on both sides.

The admission is increased to 6,551 during 1919 which is the highest number ever recorded during past ten years.

The daily average admission among Europeans is more than that of the past three years but less than those from 1916 and 1915.

Average daily sick.—From a reading of figures from 1909, it is observed that the non-European average steadily though slightly increased until 1914 from which year it decreased and recorded the smallest number in 1917. The year 1919 gives the highest figure in the record for the past three years. The remarks made about the European admissions apply also to the average daily sick which is below the average of ten years and the smallest average ever recorded.

Out-patients.—The number of non-European admissions decreased during 1919 as compared with 1918, and is over the average of the past ten years, while the European admissions show a slight decrease in 1919, and is below the average of ten years.

The average daily attendance of non-Europeans show an yearly increase. But from 1918, there is a decrease. European average show a tendency for the decrease yearly.

The following statements show the number of European and non-European admissions during each month of the past ten years :—

Non-Europeans.

Number of years.	Remaining for the year.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
1909	290	440	427	464	407	469	444	481	452	459	457	420	419	5,629
1910	209	449	417	418	376	520	491	468	483	441	476	511	450	5,818
1911	262	431	376	439	379	495	507	450	512	442	445	498	469	5,705
1912	292	545	516	553	532	588	591	528	454	423	437	427	444	6,270
1913	305	468	421	414	435	473	399	421	437	394	422	492	498	5,579
1914	293	479	431	504	512	530	487	554	471	479	503	456	480	6,179
1915	266	441	388	439	430	475	536	493	451	480	479	435	437	5,740
1916	249	437	461	471	508	561	469	547	585	493	447	518	452	6,178
1917	229	485	424	539	448	477	427	490	415	458	469	429	453	5,873
1918	267	456	469	487	521	522	516	574	482	491	684	497	529	6,491
1919	311	507	423	464	489	485	467	613	600	550	551	532		6,551

Europeans.

Number of years.	Remaining for the year.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
1909	73	156	142	149	147	166	166	151	172	168	182	169	105	1,946
1910	65	153	141	155	136	157	153	160	207	212	198	167	129	2,033
1911	89	164	163	158	138	181	161	182	192	158	172	159	149	2,066
1912	101	178	157	148	180	169	169	155	174	153	162	148	123	2,022
1913	81	191	134	150	171	168	172	146	160	162	166	172	160	2,057
1914	108	195	153	175	181	178	135	172	191	175	176	137	151	2,127
1915	85	174	135	140	154	136	162	164	169	141	115	137	101	1,823
1916	65	135	125	144	119	158	113	171	149	130	145	120		1,743
1917	79	165	135	150	123	145	120	159	148	136	117	123	97	1,638
1918	71	128	120	125	155	148	118	155	117	172	250	139	132	1,831
1919	83	162	121	115	125	120	127	148	176	183	196	156	149	1,861

3. Mortality.—The following table shows the number of deaths during 1918 and 1919 for each disease together with the percentage :—

Diseases.	Non-Europeans.				Europeans.			
	1918.		1919.		1918.		1919.	
	Deaths.	Percentage of deaths to total treated.	Deaths.	Percentage of deaths to total treated.	Deaths.	Percentage of deaths to total treated.	Deaths.	Percentage of deaths to total treated.
1 Cholera	11	42.31	2	9.09	1	33.33	1	33.33
2 Dysentery	21	10.77	23	8.52	2	2.56	2	2.13
3 Enteric fever	5	15.15	4	9.76			2	8.00
4 Gonorrhoea	1	1.12						
5 Kala-Azar	6	14.63	6	17.14	4	20.00	1	7.14
6 Leprosy								
7 Malaria	12	3.17	15	3.46	1	1.20	1	0.75
8 Plague								
9 Pneumonia	38	33.92	17	32.03	7	22.58	2	8.70
10 Pyrexia of uncertain origin	11	11.00	4	3.67	3	3.45	4	6.56
11 Rheumatic fever and rheumatism					1	3.22	2	5.26
12 Small-pox								
13 Syphilis (primary and secondary)			5	1.75				
14 Tubercle of the lungs	29	15.34	37	21.89	3	7.14	1	2.00
15 Other tubercular diseases	5	5.10	3	3.33	1	0.90	1	6.25
16 All other infective diseases	113	15.31	111	13.45	18	5.00	33	8.42
17 Anæmia	13	19.65						
18 Diabetes	10	17.54	4	20.00				
19 Scurvy								
20 } New growth								
21 } { Non-Malignant.	4	14.28	15	16.48				
22 } { Malignant								
23 All other general diseases	4	4.25	7	16.28	1	3.12	1	4.54
24 Diseases of the nervous system	5	4.63	9	6.16			5	10.87
25 Do. eye			1	8.33				
26 Do. ear								
27 Do. nose	3	10.71						
28 Do. circulatory system	19	10.49	12	8.63	2	4.65	1	3.13
29 All diseases of the respiratory system except pneumonia and tubercle of the lungs.	30	9.93	36	13.23	11	10.00	13	10.66
30 Dyspepsia	1	2.85						
31 Diarrhoea	5	14.70	3	10.00			1	16.67
32 Abscess of the liver	5	15.15	7	17.50	1	10.00		
33 All other diseases of liver	21	17.79	11	14.86	1	7.69		
34 Appendicitis	3	13.63	1	5.88				
35 All other diseases of the digestive system.	77	7.73	50	5.76	14	5.20	19	7.82
36 Inflammation and suppuration of lymph glands.	2	1.57	2	1.83	1	2.17		
37 Goitre								
38 Bright's disease	9	25.00	1	4.35	4	44.41		
39 All other diseases of the urinary system.	7	3.43	17	7.23	1	2.27	2	3.92
40 Hydrocele	2	0.91	4	2.34				
41 Other diseases of the generative system.	3	1.59	1	0.95	1	3.33		
42 Diseases of the organs of locomotion.	8	3.86	2	1.55				
43 Diseases of the connective tissue	7	3.30	12	2.93			1	1.28
44 Ulcers	6	3.75	1	0.53	1	4.35	1	3.85
45 Other diseases of the skin	12	6.55	3	2.28	1	3.12		
46 All other local diseases	8	4.23	5	2.59	1	1.49	2	6.67
47 Injuries (general and local)	23	7.74	21	4.30	1	4.76	4	5.41
48 } Poisoning	1	5.55						
49 } { By opium								
50 } { By other poisons			1	11.11				
51 Labour								
52 } Normal								
53 } Abnormal								
Total	540	8.32	453	6.91	82	4.48	100	5.37

8,412 in-patients were treated during the year of which 553 died. This gives a death-rate of 65.74 per mille as compared with 74.74 per mille for 1918. The death-rate among Europeans was 53.73, and for non-Europeans 69.15.

The register of moribund cases gives a total of 163 admissions during the year. Deducting this number from the total treated, the death-rate for the hospital is 47.28 per mille as compared with 53 per mille for 1918.

Deaths from Septic Causes.—

	Number of cases.
Extravasation of urine	2
Tetanus	12
Sapraemia and septicæmia	38
Peritonitis	11
Hydrophobia and Pyæmia	3
Total ...	66

Sixty-six deaths from sepsis were recorded as compared with ninety-six in 1918. Of these, three cases acquired this disease in hospital and sixty-three before admission.

The following table shows the total number of deaths for the last three years, the deaths from septic cases and the number of cases admitted and discharged in a moribund condition. The percentage of mortality for the year was 6.57:—

Year.	Total number of deaths.	Ratio per cent of deaths to total treated.	Cases admitted moribund.	Cases removed moribund.	Deaths from septic diseases.		Ratio per cent of deaths to total treated exclusive of cases admitted moribund.
					Acquired in hospital.	Acquired before admission.	
1917	366	4.97	127	5	2	53	3.24
1918	822	7.47	191	4	2	94	5.17
1919	553	6.57	163	3	3	63	4.64

4. Classes of Diseases.—The following statement shows the total treated (both among in- and out-door patients) of the most important diseases which came up for treatment during 1919 as compared with 1918:—

Classes of diseases.	1918.			1919.		
	Total treated.		Total.	Total treated.		Total.
	In-door.	Out-door.		In-door.	Out-door.	
Other general diseases	126	1,242	1,368	65	1,063	1,128
Malarial fevers	461	5,102	5,563	568	4,752	5,320
Diseases of the digestive system	554	7,661	8,215	1,111	6,113	7,224
Do. respiratory system excepting pneumonia and tubercle of lungs.	412	6,446	6,858	394	5,168	5,562
Do. skin	215	4,098	4,313	159	3,987	4,146
Do. ear	24	1,371	1,395	24	2,327	2,351
Do. generative system	470	2,004	2,474	130	2,287	1,417
Do. nervous system	147	340	487	192	334	526
Do. urinary system	293	863	1,156	286	581	867
Do. connective tissue	259	4,345	4,604	488	4,121	4,609
Injuries (general and local)	318	3,193	3,511	562	3,303	3,865
Ulcers	183	4,399	4,582	213	4,078	4,291
Dyspepsia	39	399	438	32	363	395
Rheumatic fever and rheumatism	95	124	219	109	93	202
Dysentery	273	1,030	1,303	364	871	1,235
Tuberculous affections	342	103	1,379	303	872	1,175
Syphilis	209	558	767	323	304	627
Gonorrhœa	104	819	923	39	847	886

Comparing the figures for 1919 with those for 1918, the following differences occur:—

Diseases of the skin (— 167), diseases of the ear (+ 956), diseases of the connective tissue (+ 5), local and general injuries (+ 354), ulcers (— 291), tubercular affections (— 204), malarial fevers (— 243), diseases of the digestive system (— 1,991), diseases of the generative system (— 1,057), dysentery (— 68), other general diseases (— 240), diseases of the urinary system (— 289).

Malaria.—

Years.	Number of cases.	Years.	Number of cases.
1901	11,317	1911	1,871
1902	8,213	1912	3,513
1903	6,654	1913	8,457
1904	4,211	1914	9,118
1905	3,482	1915	8,821
1906	3,031	1916	7,495
1907	1,260	1917	6,687
1908	1,843	1918	5,563
1909	1,903	1919	5,320
1910	1,822		

There was again a decrease in the number of malarial fevers treated in 1919. This means that the epidemic which broke out in 1912 is gradually dying out.

Septic cases.—

	Number admitted.
Admitted with sepsis	237

5. Operations.—The following is the comparative statement of work done by the three surgeons during the years 1917, 1918 and 1919:—

	Years		
	1917.	1918.	1919.
First Surgeon	1,294	1,225	1,243
Second Surgeon	1,018	1,112	1,266
Third Surgeon	1,263	1,130	1,150
Total ...	3,575	3,467	3,662

A comparison of the figures for 1919 with those of the two preceding years show an increase of 195 over 1918 and 87 over 1917.

The number of operations performed during the year 1919 is as follows:—

First Surgeon	1,101
Second Surgeon	567
Third Surgeon	918
Total ...	2,586

The statement G appended show the details of operations performed during 1919 and the professional reports of the respective surgeons contain descriptive details of the most important and interesting cases.

6. Sexes and classes of patients treated.—Vide statement F attached. The following statement shows, in a convenient form, the various classes and sexes of patients, treated, both in and out, during the year as compared with the two preceding years:—

Years.	Europeans and Anglo-Indians.				Hindus.				Muhammadans.				Others.				Total treated.
	Adults.		Children.		Adults.		Children.		Adults.		Children.		Adults.		Children.		
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
In-patients.																	
1919	1,139	536	113	73	3,476	846	159	76	453	51	21	2	953	398	67	49	8,412
1918	1,072	502	104	93	3,694	797	145	65	403	53	16	10	893	335	45	35	8,322
1917	983	509	105	91	3,180	611	117	73	351	34	7	2	878	313	62	45	7,361
Out-patients.																	
1919	2,490	1,232	508	409	23,388	6,664	3,124	2,509	2,969	203	170	104	6,323	1,897	1,112	997	6,009
1918	2,513	1,195	559	412	30,728	6,509	3,512	3,004	2,667	150	151	97	6,192	1,848	1,081	1,093	61,721
1917	2,573	1,164	520	433	28,321	6,160	3,468	3,008	2,568	194	166	108	6,593	1,771	1,175	1,153	59,873
Total.																	
1919	3,629	1,768	621	482	32,864	7,510	3,283	2,535	3,422	254	191	106	7,276	2,295	1,179	1,046	68,511
1918	3,585	1,757	673	505	34,422	7,306	3,657	3,069	3,070	203	167	107	7,045	2,183	1,126	1,128	70,043
1917	3,556	1,673	625	524	32,001	6,771	3,585	3,081	2,919	228	173	108	7,471	2,084	1,237	1,198	67,234

Europeans.—There is a slight increase among European patients but the children show a slight decrease.

Hindus.—There is a slight decrease except among male children.

Muhammadans.—An all round increase is seen among this class of patients during this year.

Other castes.—All the classes show an increase except the female children. The total number of in-patients is steadily increasing while the out-patients decrease.

7. Epidemics.—Twelve cases of cholera were treated during the year (Europeans two and non-Europeans ten). Four cases of small-pox were treated during the year (two Europeans and two non-Europeans) against ten cases in 1918.

The accompanying table shows the number of enteric cases treated in the hospital during 1919, as compared with two preceding years:—

	1917.		1918.		1919.	
	Euro-peans.	Non-Euro-peans.	Euro-peans.	Non-Euro-peans.	Euro-peans.	Non-Euro-peans.
Admissions	76	41	20	33	25	41
	117		53		66	

The death-rate was 8 and 9.76 against nil and 15.15 in 1918 among Europeans and non-Europeans respectively.

8. Training of Medical Students.—Two hundred and forty-six students of different ranks were given clinical instructions against 241 of the preceding year 1918.

9. Training School for Nurses.—During the year under report, 101 applications were received from women desirous of joining the hospital as Government probationers.

Probationers.—The following are the figures for the year:—

Existing staff on 1st January 1919	27
Newly entertained	44
Total	71
Qualified and promoted to the staff	22
Left the service	17*
Remaining on the 31st December 1919	32
Total	71

* Seventeen probationers left the service on the following grounds:—

Found unsuitable	12
To join maternity hospital	2
To be married	2
On account of ill-health	1
Total	17

N.B.—There were twenty probationers over the sanctioned number twelve to fill up the vacancies in higher grades and also the temporary staff of twenty nurse probationers sanctioned in G.O. No. 380, Local and Municipal (Medical), dated 20th August 1918.

Female Ward Attendants—Probationers.—The sanctioned strength of this class is four.

Existing staff on 1st January 1919	4
Newly entertained	3
Total	7
Dismissed from the service	1
Resigned	2
Remaining on 31st December 1919	4
Total	7

10. Working of Special Departments.—Full particulars are given in the professional reports.

11. Finance.—Statement H gives the details of expenditure and income of the hospital during the year 1919.

Income.—The main sources of revenue to the hospital are—

(1) *Hospital stoppages recovered from paying patients.*—These represent recoveries made from such of the in-patients as are liable for payment under G.O. No. 399, Public, dated 17th September 1917.

The amount collected during the past three years are—

Year.	Amount. RS.
1917	25,485
1918	29,879
1919	27,002

(2) *Fees for X-ray treatment and skiagraphs.*—The total amount collected during the year under report is Rs. 1,871 against Rs. 1,322. The increase is due to the large number of patients treated. Out of the collection, a sum of Rs. 935-8-0 was disbursed to the X-Ray Assistant Surgeon and an attendant attached to the department—vide G.O. No. 437, Medical, dated 22nd October 1917.

(3) *Hire for Motor Ambulance Car recovered from the hospital patients and those of private practitioners.*—The amounts collected during the past three years are—

Year.	Amount. RS.
1917	837
1918	1,389
1919	1,248

The slight decrease under this item is due to the fact that influenza was not so virulent as in the previous year.

(4) *The sale-proceeds of garden produce including usufructs of coconut trees in the hospital compound.*—The amounts collected during the past three years are—

Year.	Amount. RS.
1917	315
1918	477
1919	320

(5) *Fines on contractors.*—The amounts collected during the past three years are—

Year.	Amount. RS. A. P.
1917	318 15 9
1918	100 0 2
1919	39 7 7

(6) *The sale-proceeds of unserviceable articles, empty packings and tins.*—The amounts collected during the past three years are—

Year.	Amount. RS.
1917	820
1918	623
1919	1,508

Expenditure.—(1) *Salaries.*—The increase in the salary is due to the larger number of Commissioned Medical officers and to the increased local allowance paid to the establishment and to the higher rate of ration and uniform allowance paid to the nurses.

(2) *Medicines, etc.*—The increased price paid to the medicines and instruments obtained from England on indents on account of the abnormal conditions that existed during the war as well as to the country medicines purchased locally accounts for the increased expenditure under medicines.

(3) *Diet.*—The abnormal rise in the cost of diets is due to the fact that the accepted tender rates of the articles of provisions for 1919 were nearly double that of the year 1918.

(4) *Miscellaneous charges.*—The difference is due to the facts that certain allowances paid to the medical staff and the establishment were added to this column instead of to the salaries during the year 1918.

(5) *Buildings.*—The increase is chiefly due to the construction of temporary operation room and converting the old engine room for venereal ward and other special improvements and annual painting and whitewashing.

12. Cost per head.—Information in detail is given in Appendix C on the amount expended on each patient, under the various heads.

13. General Hospital Poor Fund.—The receipts and expenditure of the Poor Fund for the year are as follows:—

Receipts.	Amount.	Expenditure.	Amount.
	RS. A. P.		RS. A. P.
Opening balance	93 11 0		
Mrs. Reid, a patient, through Lieut. Col. F. F. Elwes, M.D., C.I.E., I.M.S.	5 0 0		
Drawn from the bank	250 7 9	Expenditure during the year	290 7 9
Nurse Carnalho	0 2 0		
Nurse R. B. Bosen	0 2 0		
District Medical and Sanitary officer, Chittoor.	10 0 0		
A. Parthasarathi Chetti, a patient	1 0 0		
Dr. V. P. Kamath, L.M.S., Acting Resident Medical officer.	5 0 0	Balance on the 31st December 1919	84 15 0
Mr. O. H. James	10 0 0		
Total	375 6 9	Total	375 6 9

14. Supplies—Medicines and Surgical Equipments.—The procedure adopted in previous years was continued and medicines and instruments required were obtained as usual from the Government Medical Store Depot. Special and non-authorized medicines and instruments were obtained from England as well as from the local firms whenever urgently required.

Diet and non-diet articles.—These were obtained as usual by contract in majority of cases. A few were purchased departmentally for which no tenderers applied. The articles which were received in bulk and stocked are now obtained on indents whenever required.

The contract for the supply of firewood to the Presidency hospitals was as usual given by the Surgeon-General.

Bedding and clothing.—All articles were supplied by the Jail department except a few which were obtained departmentally by local purchases or by contract. No tenders were received for flannel banians, chintz, quilts, etc. These were made departmentally by purchasing materials required for making them.

Red blankets were not obtainable in the market during the year, hence no purchase was made.

The Jail department enhanced their rates for certain articles with the sanction of the Surgeon-General during the year owing to the high prices of articles that prevailed.

Hospital necessities.—These were obtained departmentally by contract and from Coimbatore Jail. The annual expenditure of a few important articles issued by the Store-keeper of medicines is found in the subjoined statement. The expenditure was being frequently checked by the Resident Medical officer with a view to prevent undue demand or waste.

The following statement shows the expenditure of a few of the more important articles of surgical dressings, etc., during the past four years :—

Articles.	1916.		1917.		1918.		1919.	
	Quantity.	Cost.	Quantity.	Cost.	Quantity.	Cost.	Quantity.	Cost.
		RS. A. P.		RS. A. P.		RS. A. P.		RS. A. P.
Absorbent cotton.	1,312 lb.	1,068 0 0	1,100 lb.	996 14 0	1,439½ lb.	1,439 4 0	1,606½ lb.	2,409 12 0
Comber cotton ...	4,000 "	2,000 0 0	4,600 "	2,875 0 0	4,372½ "	4,372 8 0	3,501½ "	3,501 8 0
Dungry cloth ...	20,000 pcs.	10,000 0 0	28,000 pcs.	15,750 0 0	21,496 pcs.	15,468 12 0	18,325 pcs.	19,470 5 0
Muslin ...	1,392 yds.	253 12 0	2,088 yds.	575 7 6	1,333½ yds.	251 0 0	840 yds.	315 0 0
Long cloth ...	2,512 "	497 2 8	4,200 "	1,050 0 0	2,697 "	1,149 0 7	* 2,573½ "	1,286 12 0
Glycerine ...	707 lb.	618 10 0	648 lb.	29 8 1½	184½ lb.	161 7 0	324½ lb.	1,297 0 0
Alcohol ...	3,002 "	750 8 0	2,000 "	350 0 0	3,211½ "	642 12 0	2,278 "	512 0 0
Carbolic acid ...	281 "	175 10 0	300 "	637 8 0	454 "	731 0 0	564 "	2,256 0 0
Flannel ...	932 yds.	699 0 0	964 yds.	421 12 0	436½ yds.	218 6 0	500½ yds.	250 4 0
White gauze ...	...	...	...	...	...	...	* 11,772½ "	1,009 8 0
Total ...		16,080 10 8		22,886 1 7½		24,434 1 7		32,358 1 0

* The increased expenditure both in quantity and cost is due partly to the enhancement of rates in the revised price list issued in 1919 and partly to larger demands from wards, theatres, and out-patient departments. A careful scrutiny was, however, made and undue demand prevented as far as possible.

Furniture and its Repairs.—These were repaired by the Jail department as well as by the hospital carpenter; whenever required certain articles were also had to be purchased from that department during the year.

15. Electric Installation of Punkahs, Lights, Fans, etc.—These were under the supervision of the Electrical Engineer to Government.

16. Establishment.—The following changes occurred during the year 1919 both in the medical staff and in the subordinate staff.

Rank.	Name.	Nature of duties.	Period during which the officers were present for duty.		Remarks.
			From	To	

Medical Staff.

Lieut.-Col., I.M.S.	W. J. Niblock, M.B., F.R.C.S., F.M.U. (Ire.).	Superintendent ...	1 Jan. 1919	2 Jan. 1919	Sub. pro tem.
Do.	E. M. Illington, M.R.C.S. (Eng.), L.R.C.P. (Lond.), F.R.C.S.	Do. ...	3 Jan. 1919	9 Mar. 1919	Do.
Do.	T. H. Symons, M.R.C.S. (Eng.), L.R.C.P. (Lond.)	Do. ...	10 Mar. 1919	5 Apr. 1919	Permanent.
Do.	E. M. Illington, M.R.C.S. (Eng.), L.R.C.P. (Lond.), F.R.C.S.	Do. ...	5 Apr. 1919	26 June 1919	Sub. pro tem.
Do.	F. F. Elwes, M.D., C.I.E.	Do. ...	27 June 1919	6 July 1919	Acting.
Do.	E. M. Illington, M.R.C.S. (Eng.), L.R.C.P. (Lond.), F.R.C.S.	Do. ...	7 July 1919	31 Aug. 1919	Sub. pro tem.
Do.	F. F. Elwes, M.D., C.I.E.	Do. ...	1 Sep. 1919	21 Sep. 1919	Do.
Major, I.M.S.	A. J. H. Russell, M.A., M.D., B.Ch.	Do. ...	22 Sep. 1919	30 Sep. 1919	Acting.
Lieut.-Col., I.M.S.	F. F. Elwes, M.D., C.I.E.	Do. ...	30 Sep. 1919	31 Dec. 1919	Do.
Do.	Do.	First Physician ...	1 Jan. 1919	25 May 1919	Permanent.
Major, I.M.S.	J. Kirkwood, M.B., F.R.C.S.E.	Do. ...	26 May 1919	25 June 1919	Acting.
Lieut.-Col., I.M.S.	F. F. Elwes, M.D., C.I.E.	Do. ...	26 June 1919	21 Sep. 1919	Permanent.
Major, I.M.S.	A. J. H. Russell, M.A., M.D., B.Ch.	Do. ...	22 Sep. 1919	30 Sep. 1919	Acting.
Lieut.-Col., I.M.S.	F. F. Elwes, M.D., C.I.E.	Do. ...	30 Sep. 1919	31 Dec. 1919	Permanent.
Civil Assistant Surgeon.	M. R. Guruswami Mudaliyar, B.A., M.B., C.M.	Second Physician.	1 Jan. 1919	12 Dec. 1919	Sub. pro tem.
Do.	M. L. Kamath, B.A., M.D., C.M.	Do.	13 Dec. 1919	20 Dec. 1919	Acting.
Do.	M. R. Guruswami Mudaliyar, B.A., M.B., C.M.	Do.	21 Dec. 1919	31 Dec. 1919	Sub. pro tem.
Major, I.M.S.	A. C. Ingram, B.A., M.D., B.C.D.T.H.	Third Physician...	1 Jan. 1919	12 June 1919	Do.
Civil Assistant Surgeon.	M. R. Guruswami Mudaliyar, B.A., M.B., C.M.	Do. ...	13 June 1919	22 June 1919	Acting.
Major, I.M.S.	A. C. Ingram, B.A., M.D., B.C.D.T.H.	Do. ...	23 June 1919	12 July 1919	Permanent.
Do.	A. J. H. Russell, M.A., M.D., B.Ch.	Do. ...	12 July 1919	26 Dec. 1919	Do.
Lieut.-Col., I.M.S.	F. F. Elwes, M.D., C.I.E.	Do. ...	27 Dec. 1919	31 Dec. 1919	Acting.
Civil Assistant Surgeon.	M. R. Guruswami Mudaliyar, B.A., M.B., C.M.	Fourth Physician.	1 Jan. 1919	1 Jan. 1919	Do.
Do.	M. L. Kamath, B.A., M.D., C.M.	Do.	2 Jan. 1919	30 Apr. 1919	Sub. pro tem.
Do.	M. R. Guruswami Mudaliyar, B.A., M.B., C.M.	Do.	1 May 1919	30 May 1919	Acting.
Do.	M. L. Kamath, B.A., M.D.	Do.	31 May 1919	29 Sep. 1919	Sub. pro tem.
Do.	M. R. Guruswami Mudaliyar, B.A., M.B., C.M.	Do.	30 Sep. 1919	8 Oct. 1919	Acting.
Do.	M. L. Kamath, B.A., M.D., C.M.	Do.	9 Oct. 1919	23 Dec. 1919	Sub. pro tem.
Do.	M. R. Guruswami Mudaliyar, B.A., M.B., C.M.	Do.	24 Dec. 1919	28 Dec. 1919	Acting.
Do.	M. L. Kamath, B.A., M.D., C.M.	Do.	29 Dec. 1919	31 Dec. 1919	Sub. pro tem.
Lieut.-Col., I.M.S.	W. J. Niblock, M.B., F.R.C.S. (Ire.), F.M.U.	First Surgeon ...	1 Jan. 1919	25 May 1919	Permanent.
Do.	E. M. Illington, M.R.C.S., L.R.C.P., D.T.M.	Do. ...	26 May 1919	25 June 1919	Acting.
Do.	W. J. Niblock, M.B., F.R.C.S. (Ire.), F.M.U.	Do. ...	26 June 1919	19 Sep. 1919	Permanent.

Rank.	Name.	Nature of duties.	Periods during which the officers were present for duty.		Remarks.
			From	To	

Medical Staff—cont.

Civil Assistant Surgeon.	W. J. Fernandes, L.M.S.	First Surgeon ...	20 June 1919	29 Sep. 1919	Acting.
Lieut.-Col., I.M.S.	W. J. Niblock, M.B., F.R.C.S. (Ire.), F.M.U.	Do. ...	30 Sep. 1919	23 Dec. 1919	Permanent.
Civil Assistant Surgeon.	W. J. Fernandes, L.M.S.	Do. ...	24 Dec. 1919	31 Dec. 1919	Acting.
Lieut.-Col., I.M.S.	W. J. Niblock, M.B., F.R.C.S. (Ire.), F.M.U.	Second Surgeon.	1 Jan. 1919	2 Jan. 1919	Do.
Do.	E. M. Illington, M.R.C.S. (Eng.), L.R.C.P. (Lond.), F.R.C.S.	Do.	3 Jan. 1919	9 Mar. 1919	Sub. pro tem.
Do.	T. H. Symons, M.R.C.S. (Eng.), L.R.C.P. (Lond.), F.R.C.S.	Do.	10 Mar. 1919	5 Apr. 1919	Permanent.
Do.	E. M. Illington, M.R.C.S. (Eng.), L.R.C.P. (Lond.), F.R.C.S.	Do.	5 Apr. 1919	26 June 1919	Acting.
Do.	W. J. Niblock, M.B., F.R.C.S. (Ire.), F.M.U.	Do.	27 June 1919	6 July 1919	Do.
Do.	E. M. Illington, M.R.C.S. (Eng.), L.R.C.P. (Lond.), F.R.C.S.	Do.	7 July 1919	31 Aug. 1919	Do.
Civil Assistant Surgeon.	S. Ranga Acharya, M.B., C.M.	Do.	1 Sep. 1919	31 Dec. 1919	Do.
Do.	W. J. Fernandes, L.M.S.	Third Surgeon ...	1 Jan. 1919	17 Nov. 1919	Sub. pro tem.
Lieut.-Col., I.M.S.	W. J. Niblock, M.B., F.R.C.S. (Ire.), F.M.U.	Do. ...	17 Nov. 1919	25 Nov. 1919	Acting.
Civil Assistant Surgeon.	W. J. Fernandes, L.M.S.	Do. ...	26 Nov. 1919	31 Dec. 1919	Sub. pro tem.
Major, I.M.S. ...	J. Kirkwood, M.B., F.R.C.S.E.	Resident Medical Officer.	1 Jan. 1919	26 June 1919	Do.
Civil Assistant Surgeon.	W. J. Fernandes, L.M.S.	Do.	27 June 1919	6 July 1919	Acting.
Major, I.M.S. ...	J. Kirkwood, M.B., F.R.C.S.E.	Do.	7 July 1919	7 Aug. 1919	Sub. pro tem.
Civil Assistant Surgeon.	V. Padmanabha. Kamath, L.M.S.	Do.	7 Aug. 1919	31 Dec. 1919	Do.

Subordinate Medical Staff.

Civil Assistant Surgeon.	C. Ramanujayya, L.M.S.	Senior Assistant Surgeon.	1 Jan. 1919	27 Jan. 1919	Civil Surgeon, Korapat.
Do.	R. A. D. Graham, M.B., C.M.	Do.	28 Jan. 1919	21 Feb. 1919	Civil Surgeon, Rajahmundry.
Do.	K. Krishna Rao, M.B., C.M.	Do.	22 Feb. 1919	28 May 1919	
Do.	R. A. D. Graham, M.B., C.M.	Do.	29 May 1919	9 July 1919	
Do.	Rao Sahib M. Govindarajulu Nayudu.	Do.	10 July 1919	4 Oct. 1919	
Do.	R. A. D. Graham, M.B., C.M.	Do.	5 Oct. 1919	11 Oct. 1919	
Do.	Rao Sahib M. Govindarajulu Nayudu.	Do.	12 Oct. 1919	13 Oct. 1919	
Do.	R. A. D. Graham, M.B., C.M.	Do.	14 Oct. 1919	18 Oct. 1919	
Do.	Rao Sahib M. Govindarajulu Nayudu.	Do.	19 Oct. 1919	31 Dec. 1919	
Temporary Civil Assistant Surgeon.	T. Balakrishnan, M.B., B.S.	Assistant to First Physician.	1 Jan. 1919	21 May 1919	
Civil Assistant Surgeon.	C. Abbu Mudaliyar, B.A., M.B., C.M.	Do.	22 May 1919	28 May 1919	
Temporary Civil Assistant Surgeon.	T. Balakrishnan, M.B., B.S.	Do.	29 May 1919	17 June 1919	Assistant to Second Physician.
House Physician.	R. Viswanathan, L.M.S.	Do.	18 June 1919	19 June 1919	
Temporary Civil Assistant Surgeon.	T. Balakrishnan, M.B., B.S.	Do.	20 June 1919	22 July 1919	
House Physician.	R. Viswanathan, L.M.S.	Do.	23 July 1919	27 July 1919	
Temporary Civil Assistant Surgeon.	T. Balakrishnan, M.B., B.S.	Do.	28 July 1919	31 Dec. 1919	
Do.	A. Narasinga Rao, L.M.S.	Assistant to Second Physician.	1 Jan. 1919	1 May 1919	

Rank.	Name.	Nature of duties.	Periods during which the officers were present for duty.		Remarks.
			From	To	

Subordinate Medical Staff—cont.

Temporary Civil Assistant Surgeon.	K. Ranganathan, L.M.S.	Assistant to Second Physician.	2 May 1919	2 May 1919	Transferred to Guindy.
Do.	T. Kulnayagam ...	Do.	3 May 1919	11 May 1919	
Do.	A. Narasinga Rao, L.M.S.	Do.	12 May 1919	21 June 1919	
House Surgeon...	K. N. Krishnan, B.A., M.B., B.S.	Do.	22 June 1919	24 June 1919	
Temporary Civil Assistant Surgeon.	A. Narasinga Rao, L.M.S.	Do.	25 June 1919	31 Dec. 1919	
Do.	N. Seshadrinathan, L.M.S.	Assistant to Third Physician.	1 Jan. 1919	6 Apr. 1919	
Do.	T. Kulnayagam, L.M.S.	Do.	7 Apr. 1919	9 Apr. 1919	
Do.	N. Seshadrinathan, L.M.S.	Do.	10 Apr. 1919	10 Apr. 1919	
Do.	T. Kulnayagam, L.M.S.	Do.	11 Apr. 1919	16 Apr. 1919	
Do.	N. Seshadrinathan, L.M.S.	Do.	17 Apr. 1919	26 May 1919	
Do.	T. Kulnayagam, L.M.S.	Do.	27 May 1919	1 June 1919	Promoted to Surgical Regis.
Do.	N. Seshadrinathan, L.M.S.	Do.	2 June 1919	21 Aug. 1919	
Do.	R. Viswanathan, L.M.S.	Do.	22 Aug. 1919	11 Oct. 1919	
Do.	P. Kulnayagam, L.M.S.	Do.	12 Oct. 1919	21 Oct. 1919	
Do.	R. Viswanathan, L.M.S.	Do.	22 Oct. 1919	31 Dec. 1919	
Do.	K. Ranganathan, L.M.S.	Assistant to Fourth Physician.	1 Jan. 1919	22 Mar. 1919	
Do.	T. Kulnayagam, L.M.S.	Do.	23 Mar. 1919	1 Apr. 1919	
Do.	K. Ranganathan, L.M.S.	Do.	2 Apr. 1919	21 June 1919	
House Physician.	R. Viswanathan, L.M.S.	Do.	22 June 1919	26 June 1919	
Temporary Civil Assistant Surgeon.	K. Ranganathan, L.M.S.	Do.	27 June 1919	18 July 1919	Assistant to First Surgeon.
Do.	T. Kulnayagam, L.M.S.	Do.	19 July 1919	21 July 1919	
Do.	K. Ranganathan, L.M.S.	Do.	22 July 1919	31 Dec. 1919	
Civil Assistant Surgeon.	B. V. Narasimayya, L.M.S.	Do.	1 Jan. 1919	8 May 1919	
Temporary Civil Assistant Surgeon.	P. Achuta Menon, L.M.S.	Do.	9 May 1919	23 May 1919	
Do.	B. Narasinga Rao, M.B., B.S.	Do.	24 May 1919	1 July 1919	
Civil Assistant Surgeon.	B. V. Narasimayya, L.M.S.	Do.	8 July 1919	1 Aug. 1919	
Temporary Civil Assistant Surgeon.	C. R. Krishnaswami, M.B., B.S.	Do.	2 Aug. 1919	31 Dec. 1919	
Do.	A. R. Viswanathan, L.M.S.	Assistant to Second Surgeon.	1 Jan. 1919	28 July 1919	
Do.	T. Kulnayagam, L.M.S.	Do.	29 July 1919	1 Aug. 1919	
Do.	A. R. Viswanathan, L.M.S.	Do.	2 Aug. 1919	10 Aug. 1919	Assistant to Third Surgeon.
Do.	G. W. L. Hoisington, L.M.S.	Do.	11 Aug. 1919	11 Aug. 1919	
Do.	A. R. Viswanathan, L.M.S.	Do.	12 Aug. 1919	2 Oct. 1919	
Do.	G. W. L. Hoisington, L.M.S.	Do.	3 Oct. 1919	5 Oct. 1919	
Do.	A. R. Viswanathan, L.M.S.	Do.	6 Oct. 1919	31 Dec. 1919	
Do.	V. Sadasivan, M.B., B.S.	Do.	1 Jan. 1919	23 July 1919	
House Surgeon...	K. N. Krishnan, B.A., M.B., B.S.	Do.	24 July 1919	28 July 1919	
Temporary Civil Assistant Surgeon.	V. Sadasivan, M.B., B.S.	Do.	28 July 1919	10 Aug. 1919	
House Surgeon.	K. N. Krishnan, B.A., M.B., B.S.	Do.	11 Aug. 1919	11 Aug. 1919	
Temporary Civil Assistant Surgeon.	V. Sadasivan, M.B., B.S.	Do.	12 Aug. 1919	17 Oct. 1919	Assistant to Third Surgeon.
House Surgeon...	Y. Hanumantha Rao, L.M.S.	Do.	18 Oct. 1919	22 Oct. 1919	
Temporary Civil Assistant Surgeon.	V. Sadasivan, M.B., B.S.	Do.	28 Oct. 1919	25 Nov. 1919	
Do.	T. Kulnayagam, L.M.S.	Do.	26 Nov. 1919	30 Nov. 1919	

Rank.	Name.	Nature of duties.	Periods during which the officers were present for duty.		Remarks.
			From	To	

Subordinate Medical Staff—cont.

Temporary Civil Assistant Surgeon.	V. Sadasivan, M.B., B.S.	Assistant to Third Surgeon.	30 Nov. 1919	31 Dec. 1919	
Civil Assistant Surgeon.	R. Subbayya, M.B., B.S.	Anaesthetist	1 Jan. 1919	19 Jan. 1919	
Temporary Civil Assistant Surgeon.	K. Srinivasa Sastri, L.M.S.	Do.	20 Jan. 1919	9 Feb. 1919	
Civil Assistant Surgeon.	R. Subbayya, M.B., B.S.	Do.	10 Feb. 1919	21 Mar. 1919	
Temporary Civil Assistant Surgeon.	K. Srinivasa Sastri, L.M.S.	Do.	22 Mar. 1919	22 Mar. 1919	
Civil Assistant Surgeon.	R. Subbayya, M.B., B.S.	Do.	23 Mar. 1919	14 June 1919	
Temporary Civil Assistant Surgeon.	T. Kulanyagam, L.M.S.	Do.	15 June 1919	23 June 1919	
Civil Assistant Surgeon.	R. Subbayya, M.B., B.S.	Do.	24 June 1919	16 Aug. 1919	
House Surgeon.	Y. Hanumantha Rao, L.M.S.	Do.	17 Aug. 1919	17 Aug. 1919	
Civil Assistant Surgeon.	R. Subbayya, M.B., B.S.	Do.	18 Aug. 1919	5 Dec. 1919	
Temporary Civil Assistant Surgeon.	T. Kulanyagam, L.M.S.	Do.	6 Dec. 1919	6 Dec. 1919	
Civil Assistant Surgeon.	R. Subbayya, M.B., B.S.	Do.	7 Dec. 1919	31 Dec. 1919	
Temporary Civil Assistant Surgeon.	K. Srinivasa Sastri, L.M.S.	First Assistant to Resident Medical Officer.	1 Jan. 1919	28 Jan. 1919	
Do.	T. Kulanyagam, L.M.S.	Do.	29 June 1919	30 June 1919	
Do.	K. Srinivasa Sastri, L.M.S.	Do.	1 July 1919	19 Nov. 1919	
Do.	L. S. Ramachandran, M.B., B.S.	Do.	20 Nov. 1919	31 Dec. 1919	
Civil Assistant Surgeon.	M. Thiruvankata Acharya, L.M.S.	Second Assistant to Resident Medical Officer.	1 Jan. 1919	14 June 1919	
Temporary Civil Assistant Surgeon.	T. Kulanyagam, L.M.S.	Do.	15 June 1919	31 Dec. 1919	
Civil Assistant Surgeon.	Rao Sahib M. Govindarajulu Nayudu.	X-Ray Assistant Surgeon.	1 Jan. 1919	12 Jan. 1919	
Do.	R. A. D. Graham, M.B., C.M.	Do.	13 Jan. 1919	14 Jan. 1919	
Do.	Rao Sahib M. Govindarajulu Nayudu.	Do.	15 Jan. 1919	31 May 1919	
Do.	R. A. D. Graham, M.B., C.M.	Do.	1 June 1919	8 June 1919	
Do.	Rao Sahib M. Govindarajulu Nayudu.	Do.	9 June 1919	4 Oct. 1919	
Do.	R. A. D. Graham, M.B., C.M.	Do.	5 Oct. 1919	11 Oct. 1919	
Do.	Rao Sahib M. Govindarajulu Nayudu.	Do.	12 Oct. 1919	13 Oct. 1919	
Do.	R. A. D. Graham, M.B., C.M.	Do.	14 Oct. 1919	18 Oct. 1919	
Do.	Rao Sahib M. Govindarajulu Nayudu.	Do.	19 Oct. 1919	31 Dec. 1919	
Do.	R. A. D. Graham, M.B., C.M.	X-Ray Second Assistant Surgeon.	1 Jan. 1919	27 Feb. 1919	
Do.	Rao Sahib M. Govindarajulu Nayudu.	Do.	28 Apr. 1919	2 Mar. 1919	
Do.	R. A. D. Graham, M.B., C.M.	Do.	3 Mar. 1919	27 Apr. 1919	
Do.	Rao Sahib M. Govindarajulu Nayudu.	Do.	28 Mar. 1919	29 Apr. 1919	
Do.	R. A. D. Graham, M.B., C.M.	Do.	30 Apr. 1919	1 Aug. 1919	
Do.	Rao Sahib M. Govindarajulu Nayudu.	Do.	2 Aug. 1919	17 Sep. 1919	
Do.	R. A. D. Graham, M.B., C.M.	Do.	18 Sep. 1919	2 Dec. 1919	

Rank.	Name.	Nature of duties.	Periods during which the officers were present for duty.		Remarks.
			From	To	

Subordinate Medical Staff—cont.

Civil Assistant Surgeon.	Rao Sahib M. Govindarajulu Nayudu.	X-Ray Second Assistant Surgeon.	3 Dec. 1919	12 Dec. 1919	
Do.	R. A. D. Graham, M.B., C.M.	Do.	13 Dec. 1919	31 Dec. 1919	
Temporary Civil Assistant Surgeon.	G. W. L. Hoisington, L.M.S.	Venereal Assistant Surgeon.	1 Jan. 1919	31 Dec. 1919	
Civil Assistant Surgeon.	V. N. Venkataraman, M.B., B.S.	Clinical Instructor.	1 Jan. 1919	3 July 1919	
Temporary Civil Assistant Surgeon.	B. Srinivasa Acharya, B.A., L.M.S.	Do.	1 Jan. 1919	27 June 1919	
Do.	B. Narasinga Rao, M.B., B.S.	Do.	3 July 1919	31 Dec. 1919	
Do.	V. K. Narayana Menon, M.B.	Do.	28 June 1919	31 Dec. 1919	
House Surgeon.	Y. Hanumantha Rao, L.M.S.	House Surgeon to First Surgeon.	12 May 1919	7 July 1919	Resigned.
Do.	K. N. Krishnan, B.A., M.B., B.S.	House Surgeon to Third Surgeon.	14 May 1919	12 Sep. 1919	Reverted to I.M.S. Service.
House Physician.	R. Viswanathan, L.M.S.	House Physician to First Physician.	17 June 1919	21 Aug. 1919	Promoted to Assistant Surgeon.
Do.	C. Balakrishnan, M.B., B.S. (Bombay).	Do.	21 Aug. 1919	16 Oct. 1919	Resigned.

Sub-Assistant Surgeons.

Sub-Assistant Surgeon.	P. Baskara Rao, No. 999.	In-dispensary	1 Jan. 1919	6 Nov. 1919	
Do.	P. C. Nayudu, No. 821.	Do	7 Nov. 1919	31 Dec. 1919	
Do.	Sivasambu, No. 1033.	Out-patient dispensary.	1 Jan. 1919	23 Jan. 1919	
Do.	P. N. Thomas, No. 43.	Do	24 Jan. 1919	28 May. 1919	
Do.	P. Chakrapani Nayudu, No. 821.	Do	29 May 1919	6 Nov. 1919	
Temporary Sub-Assistant Surgeon.	L. R. Ramachandra Sastri.	Do.	6 Nov. 1919	31 Dec. 1919	
Sub-Assistant Surgeon.	D. Narayanaswami Ayyangar, No. 721.	Reserve duty	1 Jan. 1919	13 Mar. 1919	
Do.	Kandaswami Pillai, No. 958.	Do.	26 Mar. 1919	24 Apr. 1919	
Do.	S. Devanayagam Ayyangar	Do.	23 July 1919	9 Aug. 1919	
Temporary Sub-Assistant Surgeon.	M. A. Ephraim	Do.	7 Oct. 1919	23 Oct. 1919	
Do.	C. Raman, No. 1160	Do.	17 Nov. 1919	31 Dec. 1919	
Sub-Assistant Surgeon.	Amos Patro, No. 600	Do.	20 Nov. 1919	31 Dec. 1919	X-Ray training.
Do.	J. Jessudoss Pillai, No. 831.	Do	24 Nov. 1919	20 Dec. 1919	

Mrs. K. S. Palsgrave, Matron Superintendent, was granted privilege leave for one month from the 13th June 1919 as per No. 5 Es. /5456, dated 26th June 1919, from the Personal Assistant to the Surgeon-General with the Government of Madras. Consequently, Miss B. Royal Dawson, Assistant Matron Superintendent and Senior Sister Mrs. A. F. Harper, have been appointed to act as Acting Matron Superintendent and Acting Assistant Matron Superintendent in their orders Local and Municipal (Medical) Department Mis. Nos. 433 and 492, Medical, dated 16th September 1919 and 24th October 1919, respectively, for one month.

Again Mrs. K. S. Palsgrave, Matron Superintendent, has been granted combined leave for one year (privilege leave for one month and 18 days and furlough for ten months and 12 days) from the 9th December 1919 in letter R.C. No. 1499/2, dated 3rd December 1919, from the Personal Assistant to the Surgeon-General with the Government of Madras.

Appointments of Miss Royal Dawson, Assistant Matron Superintendent and Senior Sister Mrs. A. F. Harper, as Acting Matron Superintendent, and Acting Assistant Matron Superintendent have been sanctioned in Surgeon-General's letter R.C. Nos. 1499/2, dated 3rd December 1919 and 5 Es. /10472, dated 11th December 1919, respectively, with effect from 9th December 1919 and the sanction of Government is awaited.

English Trained Sisters.—Of the six English Trained Sisters, four left the service during the year—

- (1) Sister Watt (joined temporarily) rejoined her husband on 15th December 1919.
- (2) Sister Biddulph (Indian trained and joined temporarily) went to England for further training on 9th April 1919.
- (3) Sister Knowles left on the same date and joined Lady Minto's Association to better her prospects.
- (4) Sister Vernede (joined temporarily) left the service to join Lady Ampthill Nurses' Institute as she preferred it.

One of the six Sisters, senior Sister Harper was appointed as Acting Assistant Matron Superintendent in December 1919. The sixth and the last Sister Warn has given notice of resignation on account of inadequate pay.

Government in their Order Mis. No. 120, Medical, dated 27th February 1919, Local and Municipal (Medical) Department, have sanctioned employment of twenty Pupil Nurses on Rs. 15 per mensem each in the first year and Rs. 25 each in the second year with a ration allowance of Rs. 22-8-0 each per mensem and a uniform allowance of Rs. 50 each per annum.

Ration allowance.—Government in their Order Mis. No. 114, Medical, dated 25th February 1919, sanctioned the temporary increase of the ration allowance during the duration of the war to Nurses whose pay exceeds Rs. 50 per mensem in the State hospitals in Madras to Rs. 26 per mensem with effect from 1st January 1919.

House-Keeper.—Mrs. A. Anderson, an outsider, has been appointed as Nurse House-Keeper on the 1st May 1919 when one of the Nursing staff Miss M. Stephens who held the appointment temporarily was relieved of her duties and resumed her original work of a Nurse.

During the year under report Government in their Order Mis. No. 310, Medical, dated 7th June 1919, sanctioned the appointment of an Assistant House-Keeper on a salary of Rs. 40-2-50 per mensem and also Rs. 150 (originally Rs. 120) for the up-keep of servants in the Nurses' Quarters.

The following statement shows the strength of the Nursing Staff during the year 1919:—

	No.
Existing staff on the 1st January 1919	39
Nurses trained in the hospital	22
Otherwise attached	4
Total	65
Left the service	21
On military duty	2
Leave on loss of pay	1
On Hospital Ship	1
On two years' furlough	1
On military duty	1
Remaining on the 31st December 1919	38
Total	65

	No.
NOTE. —Twenty-one nurses left the service on the following grounds:—	
To better their prospects	9
To be married	2
On private affairs	1
Unsuitable	1
Died	1
To join Lady Ampthill Nurses' Institute	2
To join Ophthalmic Hospital	3
To join Maternity Hospital	1
To join Military duty	1
Total	21

Male Ward Attendants and Probationers.—Ward attendants are now reduced to 22 owing to the strike towards the end of October 1918 and the Nurses were proportionally increased.

Female Ward Attendants.—The sanctioned establishment is distributed as follows:—

	No.	Pay.
		RS.
First grade	4	15
Second grade	6	12
Third grade	8	9
Fourth grade	4	7
Total	22	
Existing staff on the 1st January 1919	22	
Remaining on the 31st December 1919	22	

Linen Department.—The work done in this department is shown in the following table:—

Year.	Amount spent under bedding and clothing.	Cost of materials used in the laundry.	Cost of washing 100 pieces in the laundry.	Number of pieces washed in the laundry.	Amount paid by nurses, etc., to replace linen lost.	Amount paid to extra tailors.
	RS. A. P.	RS. A. P.	RS. A. P.		RS. A. P.	RS. A. P.
1917 ...	...	2,422 5 7	1 2 4	320,625	259 4 6	...
1918 ...	8,468 2 5	2,929 3 9	1 8 7	278,177	308 3 5	58 6 8
1919 ...	...	2,718 3 1	1 3 7	331,462	674 2 6	14 1 0

The stock of linen was examined quarterly and the work of the linen department was satisfactory throughout the year.—

Year.	Number of pieces condemned.	Cost of articles condemned.	Number of pieces washed.	Remarks.
		RS.		
1916-17 ...	5,217	4,507	300,820	These figures are for the official year.
1917-18 ...	4,723	5,672	308,657	
1918-19 ...	4,288	6,023	275,683	

Steam Laundry.—A licensed driver is in charge of this machine.

The electric motor by which it is worked is under the Electrical Section of the Public Works Department. The Inspector of Steam Boilers and Prime Movers made his usual inspection during the year and revised the licence.

Steam Disinfector (Lyons).—A licensed driver is in charge of this plant. The disinfection of articles is carried on thrice a week under the supervision of one of the Sub-Assistant Surgeons.

Motor Ambulance Car.—The Chauffeur is available at all hours of the day or night, as he is provided, with free quarters at the General Hospital. He made 559 trips covering a distance of 4,050 miles against 570 trips, making a total distance of 3,488 miles during 1918.

The quantity of commercial spirit used by the car was 368 gallons and this gives an average of 11.01 miles per gallon as compared with 12.11 miles for each gallon used in 1918. The total collections aggregated Rs. 1,248 in 1919 as compared with Rs. 1,389 in 1918.

Electrical Department.—(Vide paragraph 15 above.) The whole installation was under the Electrical Inspector to Government and in immediate charge of the Head Wireman, who is ready for urgent calls as he is provided with free quarters.

Sanitary Department.—This department was in charge of the Hospital Sergeant under the supervision of the Resident Medical Officer.

Office Establishment.—Mr. T. Duraiswami Mudaliyar continued to act as Head Steward during this year.

Telephones.—The Oriental Telephone line with the inter-communication switch board open for communication for the public both day and night.

Diet Accounts.—These are under the audit of the Accountant-General, Madras.

The following statement shows the expenditure of most important extras which often increase the diet average in the hospital :—

Item.	Articles.	1916.		1917.		1918.		1919.	
		Quantity.	Cost.	Quantity.	Cost.	Quantity.	Cost.	Quantity.	Cost.
			RS. A. P.		RS. A. P.		RS. A. P.		RS. A. P.
1	Milk ... Pints.	197,511	20,574 1 7	208,212	22,502 4 11	217,598-2½	26,899 8 6	244,433-3	48,233 9 0
2	Apples ... No.	4,960	820 0 0	816	102 0 0	485	60 12 0	777	1,795 4 0
3	Oranges ... "	6,470	235 14 2	6,194	225 13 2	7,026	256 2 6	6,918	295 15 0
4	Eggs ... "	47,108	1,410 10 2	51,040	1,576 9 9	42,598	1,275 10 7	60,149	2,084 10 10
5	Ice ... lb.	80,867	1,263 8 9	96,202	1,698 8 6	99,153	1,807 7 8	129,463	3,803 6 10
6	Wine and spirits.	...	542 9 5	...	846 7 8	...	984 9 4	...	2,081 1 3
7	Arrowroot biscuits. lb.	531-6	531 6 0	73-10½	73 10 6	...	...	10-½	15 0 9
8	Coffee powder. "	3,704-13½	2,199 12 0	3,714-1½	2,205 3 0	4,060-3	2,537 9 10½	4,346-4	2,919 3 3
9	Sugar, brown "	...	...	4,538-1	468 5 0	7,693-1½	801 5 10	8,044-9	837 15 8
10	Sugar ... "	11,614-7	1,905 7 10½	7,446-10	1,352 4 3	4,096-7	618 11 9	5,904-15½	764 13 5
11	Tea ... "	182-9½	132 6 6½	180-4½	101 6 3	185-10½	92 13 5	191-4½	173 8 8
AERATED WATERS.									
Lemonade.									
12	Large (botls.).	...	...	...	...	...	...	...	...
13	Splits (do.).	5,114	159 13 0	5,013	178 4 4	3,919	142 14 1	6,861	285 14 0
Soda.									
14	Large (botls.).	...	...	...	...	...	...	...	...
15	Splits (do.).	14,420	300 6 8	14,301	297 15 0	12,807	266 13 0	15,269	318 1 8
16	Worcester Sauce.	6	10 8 0	3	5 4 0	...	...	...	...

The total cost for 1919 shows an increase of Rs. 40,051 over 1918. The increase in cost is due to the increased expenditure of many articles noted in the foregoing statement excepting oranges, as well as to the enhanced rates prevailed during 1919.

Average daily cost of in-patients.—The following table shows the average daily cost of dieting European and Indian patients, per diem in the general ward of this hospital, together with the average daily attendance of patients, dieted during each month of the three years from 1917 :—

Months.	Indians.						Europeans.					
	1917.		1918.		1919.		1917.		1918.		1919.	
	Average daily attendance of patients dieted.	Average cost per head per diem.	Average daily attendance of patients dieted.	Average cost per head per diem.	Average daily attendance of patients dieted.	Average cost per head per diem.	Average daily attendance of patients dieted.	Average cost per head per diem.	Average daily attendance of patients dieted.	Average cost per head per diem.	Average daily attendance of patients dieted.	Average cost per head per diem.
		A. P.		A. P.		A. P.		A. P.		A. P.		RS. A. P.
January ...	243-93	5 0½	261-71	4 11	304-52	6 1½	85-22	9 9½	69-00	9 11½	89-87	0 10 7½
February ...	241-96	4 6½	275-53	5 1½	308-6	6 5	89-14	9 4½	71-86	9 5½	86-3	0 11 6½
March ...	264-95	4 9	290-09	4 11½	313-2	6 5½	98-83	9 8½	77-03	9 5	87-58	0 11 6½
April ...	285-24	5 1½	289-96	5 2	310-66	8 6½	82-40	10 6½	94-73	9 5	78-06	1 0 4
May ...	267-41	4 11½	296-03	5 1½	310-66	8 7½	80-74	9 10½	85-64	9 5½	74-03	0 15 9
June ...	265-34	4 11½	296-13	5 1 3½	301-80	8 0½	80-00	9 9½	69-56	9 7½	72-00	0 15 9½
July ...	287-12	4 10	292-09	5 3½	313-4	9 0½	83-00	9 3½	71-13	9 9½	75-84	1 0 9½
August ...	267-00	4 11	281-09	5 4½	322-8	9 3½	93-00	9 3	65-84	10 1	88-00	1 0 5½
September ...	264-00	4 11	293-20	5 5	322-53	9 5½	82-11	9 6½	80-06	9 8½	84-26	1 0 7
October ...	283-12	4 8½	309-13	5 8½	294-55	9 6½	71-22	9 5½	102-45	9 4½	95-84	1 0 8½
November ...	274-67	4 11½	270-13	5 10½	316-6	9 11½	67-40	9 5	84-60	9 10½	94-13	1 1 1½
December ...	273-16	4 9	304-71	5 9½	301-93	9 8½	63-86	9 7	76-78	10 10½	75-39	1 1 6½
Total average ...	268-15	4 10½	288-73	5 4	310-04	8 5½	81-08	9 7½	79-0	9 8½	83-1	0 15 2½

Water-supply.—The following statement shows the expenditure of water with cost during the past four years :—

Year.	Expenditure.	Cost.
	GALLONS.	RS. A. P.
1916 ...	8,494,950	2,545 10 0
1917 ...	7,430,000	1,603 3 8
1918 ...	6,980,266	1,444 5 2
1919 ...	8,398,870	2,249 2 5

Protection of buildings.—For minimax extinguishers remain fixed to the wall on the ground floor while there is one small fire pump in the nurses' quarters. There are 84 fire buckets in charge of the Hospital Sergeant. The fire-station is within easy call of the hospital.

Hot water furnace.—These were supervised by the steward on duty as usual and the temperature of water was recorded in their morning reports. The supply of hot water to European Special Wards was restored to order during the year.

Kitchens (European and Indian).—Separate kitchens are maintained for European and Indian patients. The cooks for the Indian patients are castemen. Brahman cook was not entertained as no accommodation is available for a separate kitchen.

Sale of unserviceable articles.—Public auctions were as usual held every now and then in the hospital compound. Excepting the articles of crockery which are ordered to be destroyed, all other articles returned as unserviceable from the wards and other departments of the hospital were sold in auction and the sale-proceeds credited to Government.

The appended statement shows the amount realized during the past five years :—

Years.	Amount realized.
	RS.
1915 ...	1,193
1916 ...	846
1917 ...	778
1918 ...	613
1919 ...	1,508

17. Inspection.—The Honourable the Surgeon-General visited the hospital several times during the year.

18. Verification of Stock.—The stock of furniture and crockery in the wards and other rooms in the hospital was verified by a committee of Medical Officers appointed for the purpose and the stock in the nurses' quarters by the Matron Superintendent.

19. Verification of Service Registers.—The service registers of both the superior and inferior permanent establishments were verified up to the 31st December 1919.

20. Sanctioned Establishment.—During the year under report 20 pupil nurses were entertained in lieu of the 44 ward boys whose services were dispensed with towards the close of the year 1919 as per G.O. Mis. No. 120, Medical, dated 27th February 1919, Local and Municipal (Medical) Department. One assistant nurse housekeeper was also sanctioned in G.O. Mis. No. 310, Medical, dated 7th June 1919, on a salary of Rs. 40—2—50 and also the lump sum of Rs. 120 sanctioned to the servants of the nurses' quarters has been raised to Rs. 150 in the Government Order quoted above.

21. Statement of Wound and Post-Mortem Certificates, etc.

Number of wound certificates issued during the year 1919.	Number of post-mortem certificates issued during the year 1919.	Number of post-mortem examinations made		Number of days during the year spent in courts of justice by Medical officers and subordinates.
		For medico-legal purposes.	For scientific purposes.	
167	15	15	96	Temporary Civil Asst. Surgeon T. Balakrishnan. ... 8 Do. do. T. Kulanaya-gam ... 10 Civil Asst. Surgeon B. V. Narasimmayya ... 2 Temporary Civil Asst. Surgeon K. Srinivasa Sastri ... 21 Do. do. N. Seshadri-nathan ... 7 Civil Asst. Surgeon C. Abbu ... 5 Temporary Civil Asst. Surgeon A. Narasinga Rao. ... 6 Civil Asst. Surgeon R. Subbaya ... 6 Temporary Civil Asst. Surgeon A. R. Viswanathan ... 4 Do. do. V. Sadasivan. ... 2 Do. do. R. Viswanathan ... 5 Do. do. S. Luther ... 2 Do. do. C. R. Krishna-swami ... 2 Civil Asst. Surgeon M. Govindarajulu Nayudu ... 1 Temporary Civil Asst. Surgeon G. Hoisington ... 2 Do. do. Y. Hanumantha Rao ... 3 Total ... 84

22. General Remarks.—The following statement shows receipts and expenditure during the past four years ending with 1919 :—

Receipts.	1916.	1917.	1918.	1919.
	Rs. 3,53,741	Rs. 3,90,775	Rs. 4,17,273	Rs. 5,45,609
Expenditure—	Rs.	Rs.	Rs.	Rs.
Salaries (Medical Officers)	70,370	75,249	64,882	90,103
Salaries (nurses)	47,772	51,072	41,892	65,822
Salaries (inferior servants)	44,911	44,214	36,150	50,785
Medicines (European)	31,189	42,524	32,126	62,954
Medicines (Bazaar)	1,180	1,436	1,907	3,596
Diet	58,575	60,802	61,901	1,01,952
Miscellaneous charges	79,958	85,476	1,54,021	1,10,665
Buildings or repairs	19,844	20,202	24,394	59,630
Average daily sick in 1915 (401·3)	379·23	372·60	404·37	421·71
Cost per head of the total average strength	Rs. A. P. 387 7 8	Rs. A. P. 385 7 11	Rs. A. P. 476 6 3	Rs. A. P. 674 8 8

A sum of Rs. 1,28,236 has been expended more than that of the previous year which is mainly due to the following :—

1. The contract rate of the articles of provisions and other hospital necessities for the year 1919-20 were nearly double that of 1918.
2. The increased local allowances paid to the establishment.

GOVT. GENERAL HOSPITAL, MADRAS,
19th February 1920.

F. F. ELWES, M.D., C.I.E., Lieut.-Col., I.M.S.,
Superintendent.

APPENDIX A.

Comparative statement of the medical work done in the General Hospital, Madras, for the three years ending 1919.

Years.	In-patients.										Out-patients.											
	Total treated.		Average daily sick.		Deaths.		Average stay in hospital.		Average cost of diet.				Total treated.		Average daily sick.		Operations.					
	Europeans and Eurasians.	Non-Europeans.	Europeans and Eurasians.	Non-Europeans.	Europeans and Eurasians.	Non-Europeans.	Europeans and Eurasians.	Non-Europeans.	Europeans and Eurasians.	Non-Europeans.	Europeans and Eurasians.	Non-Europeans.	Male side.	Female side.	Total.							
RS.	A.	P.	RS.	A.	P.	RS.	A.	P.	RS.	A.	P.	RS.	A.	P.	RS.	A.	P.					
1917	...	1,688	5,673	93·90	275·70	62	304	366	4,515	20·29	17·94	0 9 8	0 4 11½	2 5 2½	0 13 9½	4,690	55,188	59,873	340·89	144·77	485·86	5,240
1918	...	1,831	6,491	93·25	311·12	82	540	622	4,854	18·59	17·49	0 9 3½	0 5 2½	1 5 7	0 13 8	4,689	57,082	61,721	288·13	104·89	409·02	5,973
1919	...	1,861	6,551	95·08	326·63	100	453	553	3,590	18·65	18·20	0 15 2½	0 8 5½	2 4 0½	1 9 8½	4,639	55,460	60,099	258·35	128·06	387·01	5,027

APPENDIX D.

INDIANS.

Statement showing the in-patients treated with results in the year 1919.

No.	Diseases.	Remained.	Admitted.	Total.	Results.					Total.
					Cured.	Relieved.	Discharged otherwise.	Died.	Remaining.	
1	Cholera	...	22	22	5	6	9	2	...	22
2	Dysentery	6	264	270	194	29	16	23	8	270
3	Enteric fever	...	41	41	28	3	4	4	2	41
4	Gonorrhoea	...	34	34	19	14	1	...	...	34
5	Kala Azar	4	31	35	...	14	11	6	4	35
6	Leprosy	1	...	1	...	...	1	...	...	1
7	Malaria	13	421	434	289	88	27	15	15	434
8	Plague	...	...	...	...	...	...	...	...	...
9	Pneumonia	...	53	53	13	16	2	17	5	53
10	Pyrexia of uncertain origin	5	104	109	65	21	19	4	...	109
11	Rheumatic fever and rheumatism	3	68	71	26	31	14	...	...	71
12	Small-pox	...	5	5	...	...	5	...	...	5
13	Syphilis (primary and secondary)	21	264	285	131	100	38	5	11	285
14	Tubercle of the lung	9	160	169	5	46	75	37	6	169
15	Other tubercular diseases	8	82	90	26	28	25	3	8	90
16	All other infective diseases	15	810	825	609	44	40	111	21	825
17	Anæmia	4	25	29	13	13	3	...	...	29
18	Diabetes	2	18	20	8	4	2	4	2	20
19	Scurvy	...	...	...	...	...	...	...	...	...
20	} New growth { Non-malignant	1	60	61	27	21	13	...	...	61
21		} Malignant	...	91	91	27	6	42	15	1
22	All other general diseases		3	40	43	21	6	4	7	5
23	Diseases of the nervous system	10	186	196	24	65	37	9	11	196
24	Do. eye	...	12	12	4	6	...	1	1	12
25	Do. ear	2	18	20	10	6	3	...	1	20
26	Do. nose	1	14	15	13	1	1	...	...	15
27	Do. circulatory system	7	132	139	42	48	29	12	8	139
28	All diseases of the respiratory system except pneumonia and tubercle of the lungs.	14	258	272	120	79	33	36	4	272
29	Dyspepsia	...	28	28	12	16	...	...	...	28
30	Diarrhoea	1	29	30	18	4	3	3	2	30
31	Abscess of the liver	...	40	40	23	6	3	7	1	40
32	All other diseases of the liver	4	70	74	12	28	19	11	4	74
33	Appendicitis	...	17	17	7	2	7	1	...	17
34	All other diseases of the digestive system	27	841	868	431	192	167	50	28	868
35	Inflammation and suppuration of lymph glands.	4	105	109	72	17	9	2	9	109
36	Goitre	...	6	6	4	...	2	...	...	6
37	Bright's disease	4	19	23	3	13	5	1	1	23
38	All other diseases of the urinary system	12	223	235	95	84	32	17	7	235
39	Hydrocele	11	160	171	136	12	11	4	8	171
40	Other diseases of the generative system	12	93	105	60	17	23	1	4	105
41	Diseases of the organs of locomotion	13	116	129	60	50	8	2	9	129
42	Diseases of the connective tissue	31	379	410	298	42	36	12	22	410
43	Ulcers	26	161	187	114	39	28	1	5	187
44	Other diseases of the skin	...	133	133	77	37	12	3	4	133
45	All other local diseases	2	191	193	118	74	35	5	11	193
46	Injuries (general and local)	28	484	488	341	34	45	21	47	488
47	} Poisoning { By opium	...	4	4	...	3	1	...	...	4
48		} By other poisons	7	2	9	4	3	...	1	1
49	} Labour { Normal		...	...	...	...	...	...	...	...
50		} Abnormal	...	...	...	...	...	...	...	...
Total			811	6,240	6,551	3,604	1,318	800	453	276

APPENDIX E.

EUROPEANS AND ANGLO-INDIANS.

Statement showing the in-patients treated with results in the year 1919.

No.	Diseases.	Remained.	Admitted.	Total.	Results.					Total.
					Cured.	Relieved.	Discharged otherwise.	Died.	Remaining.	
1	Cholera	...	3	3	...	...	2	1	...	3
2	Dysentery	5	83	94	63	23	4	2	2	94
3	Enteric fever	...	25	25	11	1	3	2	8	25
4	Gonorrhœa	...	5	5	1	4	...	...	...	5
5	Kala Azar	3	11	14	2	2	3	1	6	14
6	Leprosy	...	...	...	...	...	...	...	...	...
7	Malaria	2	132	134	96	30	4	1	3	134
8	Plague	...	...	...	...	...	...	...	...	...
9	Pneumonia	...	23	23	18	...	2	2	1	23
10	Pyrexia of uncertain origin	1	60	61	39	5	9	4	4	61
11	Rheumatic fever and rheumatism	3	35	38	11	18	7	2	...	38
12	Smallpox	...	7	7	2	...	5	...	...	7
13	Syphilis (primary and secondary)	2	36	38	15	16	7	...	...	38
14	Tubercle of the lung	5	45	50	4	16	25	1	4	50
15	Other tubercular diseases	...	16	16	6	6	1	1	2	16
16	All other infective diseases	11	381	392	312	24	13	33	10	392
17	Anæmia	...	4	4	1	1	2	...	...	4
18	Diabetes	...	20	20	13	4	3	...	...	20
19	Scurvy	...	...	...	...	...	...	...	...	...
20	New growth { Non-malignant	...	8	8	4	...	4	...	...	8
21		1	17	18	5	7	4	...	2	18
22	All other general diseases	...	22	22	12	5	2	1	2	22
23	Diseases of the nervous system	3	43	46	7	16	15	5	3	46
24	Do. eyes	1	...	1	1	...	...	...	...	1
25	Do. ear	...	4	4	2	2	...	...	...	4
26	Do. nose	1	...	1	1	...	...	...	...	1
27	Do. circulatory system	3	29	32	11	12	4	1	4	32
28	All diseases of the respiratory system except pneumonia and tubercle of the lungs.	4	118	122	64	30	9	13	6	122
29	Dyspepsia	...	4	4	3	...	1	...	...	4
30	Diarrhœa	...	6	6	2	...	...	1	3	6
31	Abscess of the liver	...	8	8	8	...	...	...	...	8
32	All other diseases of the liver	...	11	11	5	6	...	...	...	11
33	Appendicitis	1	2	3	3	...	...	...	...	3
34	All other diseases of the digestive system	17	226	243	118	44	52	19	10	243
35	Inflammation and suppuration of lymph glands.	2	39	41	31	6	2	...	2	41
36	Goitre	...	3	3	2	...	1	...	...	3
37	Bright's disease	1	2	3	1	1	1	...	...	3
38	All other diseases of the urinary system	3	48	51	26	11	9	2	3	51
39	Hydrocele	1	27	28	22	4	1	...	1	28
40	Other diseases of the generative system	4	21	25	19	3	2	...	1	25
41	Diseases of the organs of locomotion	1	20	21	8	10	1	...	2	21
42	Diseases of the connective tissue	2	76	78	51	21	4	1	1	78
43	Cloers	3	23	26	11	13	1	1	...	26
44	Other diseases of the skin	...	26	26	29	6	...	...	...	26
45	All other local diseases	...	30	30	17	8	2	2	10	30
46	Injuries (general and local)	3	71	74	47	9	4	4	10	74
47	Poisoning { By opium	...	...	...	...	...	...	...	...	...
48		2	2	1	...	...	...	...	1	2
49	Labour { Normal	...	...	...	...	...	...	...	...	...
50		1	1	...	...	...	...	...	...	...
Total ...		83	1,778	1,861	1,096	364	209	100	92	1,861

APPENDIX B.

Statement showing the medical work done by each Medical Officer during 1919.

In-patients.

Medical officers.	Class of patients.	Admissions.				Operations.				Average cost of diet.	Post-mortem examinations.
		Remained.	Admitted.	Total.	Cured.	Relieved.	Discharged otherwise.	Died.	Remained.		
First Physician	Non-Europeans	32	638	670	387	145	166	78	22	110	17
	Europeans	40	709	749	482	143	121	53	33	132	1
Second Physician	Non-Europeans	72	1,405	1,477	700	288	287	133	60	242	18
	Europeans	37	1,090	1,127	600	211	186	85	35	224	22
Third Physician	Non-Europeans	45	1,314	1,359	720	271	215	104	49	184	23
	Europeans	35	682	717	296	203	109	83	21	400	19
Fourth Physician	Non-Europeans	35	682	717	296	203	109	83	21	400	19
	Europeans	38	948	986	453	329	106	55	11	400	14
First Surgeon	Non-Europeans	33	1,161	1,194	578	384	117	49	19	84	15
	Europeans	60	941	1,001	643	123	128	55	32	272	4
Second Surgeon	Non-Europeans	70	1,176	1,246	814	165	146	60	61	1,050	7
	Europeans	69	1,022	1,091	632	202	129	35	63	533	7
Third Surgeon	Non-Europeans	73	1,193	1,266	703	242	142	40	74	567	7
	Europeans	54	921	975	703	105	76	56	45	782	8
Total	Non-Europeans	311	6,910	7,221	3,604	1,318	900	453	276	2,842	91
	Europeans	33	1,778	1,811	1,096	394	309	100	92	634	5
Grand Total		344	8,618	9,032	4,700	1,682	1,209	553	368	3,476	96

Out-patients.

Medical officers.	Class of patients.	Total treated.				Average daily sick.				Oper. Post-mortem exami- nations.
		Men.	Women.	Male children.	Female children.	Total.	Men.	Women.	Male children.	
Resident Medical Officer and Assistant Surgeons.	Non-Europeans	38,680	8,764	4,406	3,610	55,460	247.41	57.22	32.39	5,149
	Europeans	2,430	1,233	508	400	4,569	10.94	6.73	2.91	183
Total		41,110	9,996	4,914	4,010	60,039	258.35	63.95	35.30	5,332

* Post mortems conducted for scientific purposes ... 15
Post mortems conducted for medico-legal purposes ... 96

APPENDIX C.

Statement showing 'Cost per head per annum' of the Daily Average Strength of the General Hospital, Madras, for the year 1919, as compared with those of 1916, 1917 and 1918.

Name of hospital or dispensary.	Number of medical institutions.	Daily average number of in-patients treated.	Daily average number of out-patients treated.	Total cost.		Establishment.		Medicines, both European and country.		Diet.		Miscellaneous charges.	
				Cost.	average strength of the total.	Cost.	average strength of the total.	Cost.	average strength of the total.	Cost.	average strength of the total.	Cost.	average strength of the total.
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Government General Hospital, Madras. Founded in 1763.	1	379.23	424.67	834.10	3,05,405 0 0	367 7 8	1,63,063 0 0	197 5 8	32,819 0 0	39 2 0	58,575 0 0	154 7 4	49,458 0 0
	1916.												
	1917.												
	1918.												
Government General Hospital, Madras. Founded in 1763.	1	372.60	485.36	857.96	3,50,947 0 0	409 12 8	1,70,535 0 0	195 11 2	43,960 0 0	51 3 9	60,602 0 0	162 10 4	55,648 0 0
	1916.												
	1917.												
	1918.												
Government General Hospital, Madras. Founded in 1763.	1	404.37	408.02	813.89	3,87,394 0 0	476 4 4	1,84,520 0 0	226 13 7	34,033 0 0	41 13 5	61,901 0 0	76 1 7	1,24,143 0 0
	1916.												
	1917.												
	1918.												
Government General Hospital, Madras. Founded in 1763.	1	421.71	387.01	808.72	5,13,560 0 0	635 0 4	2,08,710 0 0	255 9 7	66,552 0 0	82 4 8	1,01,952 0 0	126 1 1	78,716 0 0
	1916.												
	1917.												
	1918.												

Column 6 is the same as column 22 in Statement H, minus column 11 of the same.
Column 8 is the same as column 4 of Statement H.
Column 10 is the total of columns 16 and 17 of Statement H.

Column 12 is the same as column 18 of Statement H.
Column 14 is the same as column 19 of Statement H, minus column 11 of the same.
Cost of petty repairs to buildings has been included in column 20 of Statement H.

APPENDIX F.

Table showing the number of admissions, etc., from 1862.

Years.	In-patients.										Out-patients.				Total.			
	Total treated.					Average daily sick.					Total treated.		Average daily sick.		Total treated.		Average daily sick.	
	Europeans.		Indians.		Total.	Europeans.		Indians.		Total.	Europeans.		Indians.		Europeans.		Indians.	
	Medical.	Surgical.	Medical.	Surgical.		Medical.	Surgical.	Medical.	Surgical.		Medical.	Surgical.	Medical.	Surgical.	Medical.	Surgical.	Medical.	Surgical.
1862	1,118	741	691	793	145	672	1,314	153	31	1780	2,085	82	111	116	1,790	2,085	82	111
1863	1,229	651	621	804	115	827	1,654	131	20	2,056	2,305	75	107	103	2,305	2,305	75	107
1864	1,326	650	721	811	129	1,111	2,224	101	22	2,437	2,874	88	74	74	2,437	2,874	88	74
1865	1,480	663	82	941	230	1,251	2,502	12	22	2,471	2,847	88	116	116	2,471	2,847	88	116
1866	1,278	1,238	921	941	189	1,729	3,458	17	34	3,131	4,723	116	132	132	3,131	4,723	116	132
1867	1,402	1,265	991	981	189	2,154	4,308	14	26	3,643	5,777	114	121	121	3,643	5,777	114	121
1868	1,489	1,469	100	97	160	2,154	4,308	14	26	3,643	5,777	114	121	121	3,643	5,777	114	121
1869	782	525	700	766	107	1,577	5,052	10	41	2,884	6,528	66	115	115	2,884	6,528	66	115
1870	663	402	489	781	109	1,666	6,069	11	53	3,147	7,544	72	137	137	3,147	7,544	72	137
1871	738	475	601	853	90	1,934	6,866	15	54	3,689	8,613	84	189	189	3,689	8,613	84	189
1872	991	499	1,118	838	97	2,199	6,607	17	59	3,715	10,561	79	195	195	3,715	10,561	79	195
1873	830	460	815	988	118	2,425	8,758	13	71	4,112	11,456	91	191	191	4,112	11,456	91	191
1st quarter of 1874	252	123	287	323	20	1,777	2,167	13	64	2,659	8,443	18	81	81	2,659	8,443	18	81
1874-75	922	551	993	1,058	89	3,001	9,502	19	81	4,380	12,155	87	185	185	4,380	12,155	87	185
1875-76	921	458	1,142	1,111	52	4,096	11,959	27	86	5,066	12,186	84	221	221	5,066	12,186	84	221
1876-77	978	432	2,128	1,104	70	5,292	13,281	32	101	6,470	18,450	109	239	239	6,470	18,450	109	239
1877	1,314	560	3,306	1,804	276	4,908	16,984	33	113	6,306	20,769	93	277	277	6,306	20,769	93	277
1878	1,662	2,535	75	130	210	4,389	22,185	30	138	4,863	22,506	34	169	169	4,863	22,506	34	169
1879	1,367	2,345	70	136	229	5,533	25,129	31	154	6,276	23,752	39	183	183	6,276	23,752	39	183
1880	1,188	2,568	56	172	238	8,862	32,405	55	238	9,735	37,007	61	301	301	9,735	37,007	61	301
1881	1,046	2,240	60	153	211	5,719	18,904	41	143	6,276	23,752	39	183	183	6,276	23,752	39	183
1882	1,027	2,221	61	178	235	4,947	18,698	35	134	5,874	20,919	96	279	279	5,874	20,919	96	279
1883	1,044	2,088	62	138	187	4,939	22,185	30	138	4,939	22,185	30	138	138	4,939	22,185	30	138
1884	1,181	2,173	65	208	285	4,939	22,185	30	138	4,939	22,185	30	138	138	4,939	22,185	30	138
1885	1,160	2,313	73	208	285	4,939	22,185	30	138	4,939	22,185	30	138	138	4,939	22,185	30	138
1886	1,209	2,298	72	143	192	6,276	23,752	39	143	6,276	23,752	39	143	143	6,276	23,752	39	143
1887	1,210	2,827	59	230	290	6,943	27,135	41	177	8,087	30,417	48	221	221	8,087	30,417	48	221
1888	1,423	3,462	69	138	241	8,087	30,417	48	194	8,862	32,405	55	238	238	8,862	32,405	55	238
1889	1,433	3,451	67	143	238	8,862	32,405	55	238	8,862	32,405	55	238	238	8,862	32,405	55	238
1890	1,499	3,946	71	172	246	7,735	31,970	47	329	8,517	34,911	61	301	301	8,517	34,911	61	301
1891	1,285	3,416	82	141	246	7,735	31,970	47	329	8,517	34,911	61	301	301	8,517	34,911	61	301
1892	1,273	3,077	81	141	246	7,735	31,970	47	329	8,517	34,911	61	301	301	8,517	34,911	61	301
1893	1,329	3,161	80	141	246	8,171	41,450	50	301	8,171	41,450	50	301	301	8,171	41,450	50	301

APPENDIX F—cont.

Table showing the number of admissions, etc., from 1862—cont.

Years.	In-patients.										Out-patients.				Total.			
	Total treated.					Average daily sick.					Total treated.		Average daily sick.		Total treated.		Average daily sick.	
	Europeans.		Indians.		Total.	Europeans.		Indians.		Total.	Europeans.		Indians.		Europeans.		Indians.	
	Medical.	Surgical.	Medical.	Surgical.		Medical.	Surgical.	Medical.	Surgical.		Medical.	Surgical.	Medical.	Surgical.	Medical.	Surgical.	Medical.	Surgical.
1864	1,543	3,947	197	11	360	8,465	42,350	49	54	288	10,013	46,297	133	75	10,013	46,297	133	75
1865	1,620	4,233	260	81	377	10,656	42,309	61	53	294	12,276	46,542	171	01	12,276	46,542	171	01
1866	2,150	5,232	267	91	442	14,332	47,442	74	48	328	16,483	52,674	185	13	16,483	52,674	185	13
1867	2,069	5,823	267	78	533	14,268	51,353	70	93	346	16,327	57,176	191	52	16,327	57,176	191	52
1868	1,632	5,119	282	83	555	12,993	45,328	70	54	318	14,675	50,447	181	87	14,675	50,447	181	87
1869	1,527	4,677	266	08	521	11,751	42,350	75	57	313	13,278	47,067	172	45	13,278	47,067	172	45
1870	2,028	5,585	294	50	605	11,178	51,829	69	06	370	13,206	57,414	179	30	13,206	57,414	179	30
1871	1,886	5,032	278	93	654	10,465	56,532	67	18	385	12,351	61,564	167	92	12,351	61,564	167	92
1872	2,015	5,302	279	51	685	10,375	50,395	70	92	394	12,351	61,564	167	92	12,351	61,564	167	92
1873	1,943	5,234	283	01	644	10,223	50,219	72	86	381	11,566	55,453	191	85	11,566	55,453	191	85
1874	1,938	5,036	272	46	571	10,186	46,518	68	94	348	12,124	51,554	186	18	12,124	51,554	186	18
1875	1,979	5,287	281	30	614	8,720	46,036	57	14	353	10,689	50,323	160	07	10,689	50,323	160	07
1876	1,933	4,668	283	75	558	8,007	46,539	49	65	345	9,940	51,207	164	31	9,940	51,207	164	31
1877	1,747	4,592	284	03	518	7,038	46,202	46	53	359	8,785	50,854	149	70	8,785	50,854	149	70
1878	1,979	5,533	308	63	589	6,538	45,705	45	53	382	8,517	51,238	157	78	8,517	51,238	157	78
1879	1,946	5,629	305	61	614	6,097	45,998	47	06	411	8,043	51,627	162	09	8,043	51,627	162	09
1880	2,038	5,818	309	95	646	6,130	45,876	40	73	407	8,158	51,694	159	84	8,158	51,694	159	84
1881	2,066	5,705	312	65	529	6,107	41,453	40	77	398	8,173	47,158	182	18	8,173	47,158	182	18
1882	2,022	6,270	327	59	552	5,740	45,232	35	04	341	7,762	51,502	143	58	7,762	51,502	143	58
1883	2,057	5,579	332	63	512	6,229	47,006	35	24	349	8,281	52,855	159	27	8,281	52,855	159	27
1884	2,127	6,179	318	09	484	6,047	45,807	38	86	421	8,174	52,855	159	27	8,174	52,855	159	27
1885	1,823	5,740	291	90	440	5,900	45,958	27	41	409	7,638	62,432	136	74	7,638	62,432	136	74
1886	1,743	6,176	284	76	391	5,100	43,177	27	57	427	6,903	59,353	122	04	6,903	59,353	122	04
1887	1,688	5,678	278	70	366	4,690	45,153	25	73	459	6,378	60,856	119	69	6,378	60,856	119	69
1888	1,831	6,431	311	12	622	4,689	47,082	25	42	383	6,520	63,523	118	67	6,520	63,523	118	67
1889	1,861	6,551	326	63	553	4,639	45,400	23	53	368	6,500	62,011	118	61	6,500	62,011	118	61

Old Organization.

New Organization.

* Styled as Resident Physician from 1st January 1901

STATEMENT A

Showing the number of dispensaries in the Government General Hospital, Madras, during the year 1919. [Population of the City 518,660.]

Class of dispensary.	Number open on 31st December 1918.	Number opened during the year.	Number closed during the year.	Number opened on the last day of the year.	Remarks.
1	2	3	4	5	6
I.—State-Public ...	1	...	...	...	...

STATEMENT B

Showing the number of in-door and out-door patients treated in the State-Public of Government General Hospital, Madras, during the year 1919.

District.	Name of dispensary.	Of what class.	In-door patients.										Out-door patients.										Total number of patients treated both in-door and out-door.										
			Total treated during the year.					Number cured.	Number relieved.	Discharged otherwise.	Died.	Ratio of deaths per cent to total treated.	Number of beds available.					Daily average number.						Number treated.					Average daily attendance.				
			Men.	Women.	Children.	Total.	Men.						Women.	Children.	Total.	Men.	Women.	Children.	Total.	Men.	Women.	Children.		Total.	Men.	Women.	Children.	Total.	Men.	Women.	Children.	Total.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	
Madras.	Government General Hospital, Madras.	I.—STATE-PUBLIC.	4,882	1,295	247	127	6,551	3,604	1,318	900	453	6.91	218	70	239.72	67.75	13.94	7.42	326.63	55,460	...	38,680	8,764	4,406	3,610	85,460	247.41	57.22	32.39	29.46	335.48	62,611	
			1,139	586	113	73	1,961	1,096	364	299	100	5.37	92	37	60.22	26.20	4.80	393	95.08	4,639	...	2,490	1,232	598	409	4,639	10.94	6.73	2.91	2.95	23.53	6,500	
			6,021	1,931	360	200	8,412	4,700	1,682	1,199	553	6.57	310	127	298.74	93.94	18.83	11.10	421.71	60,099	...	41,170	9,996	4,914	4,019	60,099	258.35	63.95	35.30	29.41	387.01	68,511	
			Total	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

INSTRUCTIONS.

- Statement B is intended to comprise only those institutions from which full information can be expected. These are State-Public, Local Fund and Private-aided Institutions.
- The classification in column 3 should accordingly be into I, II, III, IV of the classes shown in Statement A.
- In column 2 individual dispensaries should be shown, the dispensary being arranged by district. The arrangement of districts should be geographical, not alphabetical. In each district should be shown first: A.—General dispensaries, that is at least one dispensary open to both sexes, and then B.—Female dispensaries. The whole statement will continue with a provincial total for A.—General dispensaries, a provincial total for B.—Female dispensaries, and a combined provincial total.
- In filling up columns 6, 7, 18, 19, 25, 26, 30 and 31 all persons under 10 years of age should be treated as children.
- The columns for "total treated" (Nos. 4 to 8 and 23 to 27) should include both those remaining from the previous year and those admitted during the year under report. The words "total treated" refer to the number of different individual cases. If, for example, the same person attends for 10 days, he should not be counted 10 times; if he re-appears as a fresh case he should be counted again.

STATEMENT C (II).

Showing the diseases of the out-door patients treated in the State-Public, Government General Hospital, Madras, during the year 1919.

District.	Infective diseases.																	
	Cholera.	Dysentery.	Enteric fever.	Gonorrhoea.	Kala-azar.	Leprosy.	Malaria.	Plague.	Pneumonia.	Pyrexia of uncertain origin.	Rheumatic fever and rheumatism.	Smallpox.	Syphilis (primary and second-ary).	Tubercle of the lungs.	Other tubercular diseases.	All other infective diseases.		
1	3	+	5	6	7	8	9	10	11	12	13	14	15	16	17	18		
Madras.	{ Government General Hospital, Madras— Class I, State- Public. }	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
		{ Non-Europeans }	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
		{ Europeans }	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
		Total ...	7	871	210	847	14	5	4,752	...	166	4,455	93	6	304	467	405	4,265
	Class of dispensary.	Other general diseases.										Systemic diseases.						
		Anemia.	Diabetes.	Scurvy.	Non-malignant.	Malignant.	All other general diseases.	Diseases of the nervous system.	Diseases of the eye.	Diseases of the ear.	Diseases of the nose.	Diseases of the circulatory system.	All diseases of the respiratory system except pneumonia and tubercle of the lungs.	Dyspepsia.	Diarrhoea.	Abscess of the liver.	All other diseases of the liver.	
Madras.	{ Government General Hospital, Madras— Class I, State- Public. }	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
		{ Non-Europeans }	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		{ Europeans }	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Total ...	161	142	3	120	28	1,063	334	50	2,827	81	46	5,168	3,631	165	348	789

STATEMENT C (II)—cont.

Showing the diseases of the out-door patients treated in the State-Public, Government General Hospital, Madras, during the year 1919—cont.

District.	Class of dispensary.	Systemic diseases—cont.															General and local.			Total number of out-door patients.	Operations.
		Appendicitis.	All other diseases of the digestive system.	Inflammation and suppuration of lymph glands.	(Goitre.	Bright's disease.	All other diseases of the urinary system.	Hydrocele.	Other diseases of the generative system.	Diseases of the organs of locomotion.	Diseases of the connective tissue.	Ulcers.	Other diseases of the skin.	All other local diseases.	Injuries (general and local).	By operation.	By other means.	Poisoning.			
Madras.	Government General Hospital, Madras—	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52		
	1919 { Non-Europeans ...	4	5,545	142	3	41	486	308	1,191	3,042	4,017	3,965	3,879	4,736	3,215	6	9	55,480	6,149		
	Europeans ...	6	568	18	1	...	95	44	96	108	104	113	108	84	88	...	2	4,639	938		
	Total ...	10	6,113	160	4	41	581	35	1,287	3,150	4,121	4,078	3,987	4,840	3,303	6	11	60,089	6,087		

INSTRUCTIONS.

- (1) Statement C (II) is complementary to statement B and is intended to relate only to those institutions from which complete information can be expected. These are State-Public, Local Fund and Private-aided institutions (Classes I, III, IV of the classes in statement A).
- (2) Details need not be given for each institution. It will suffice if totals are given for each class.
- (3) For guidance in filling up the columns the following remarks are added:—
In all cases the instructions contained in "The Nomenclature of Diseases," fourth edition, 1903, should be followed.
- Column 9 to include all diseases due to malaria. Non-malarial fevers should be returned in column 24—"All other general diseases."
15 to include all diseases due to the poison of syphilis, e.g., syphilitic iritis.
8 to include all diseases resulting from gonorrhoeal infection, e.g., gonorrhoeal rheumatism.
19 to include only cases of anaemia of which the cause cannot be ascertained.
Late cases should be included under columns 51 and 52 of statement C (I).

Showing the diseases, etc., of the in-door patients treated in the (State-Public) in the Government General Hospital, Madras, during the year 1919.

District.	Class of dispensary.	Infective diseases.																		Systemic diseases.										Other general diseases.							
		Cholera.		Dysentery.		Enteric fever.		Gonorrhoea.		Kala azar.		Leprosy.		Malaria.		Plague.		Pneumonia.		Pyrexia of uncertain origin.		Rheumatic fever and rheumatism.		Smallpox.		Syphilis (primary and secondary).		Tubercle of the lung.		Other tubercular diseases.		All other infective diseases.		Total treated.		Deaths.	
		Total treated.	Deaths.	Total treated.	Deaths.	Total treated.	Deaths.	Total treated.	Deaths.	Total treated.	Deaths.	Total treated.	Deaths.	Total treated.	Deaths.	Total treated.	Deaths.	Total treated.	Deaths.	Total treated.	Deaths.	Total treated.	Deaths.	Total treated.	Deaths.	Total treated.	Deaths.	Total treated.	Deaths.	Total treated.	Deaths.	Total treated.	Deaths.	Total treated.	Deaths.		
Madras.	Non-Europeans ... Government General Hospital, Madras. I Class. State-Public.	22	2	270	23	41	4	34	...	35	1	...	434	15	...	53	17	109	4	71	...	5	...	5	...	285	5	189	37	90	3	825	111	29	...		
		3	1	94	2	25	2	5	...	14	1	...	134	1	...	23	2	61	4	38	2	7	...	38	...	50	1	16	1	332	33	4	...				
		25	3	364	25	66	6	39	...	49	7	1	...	568	16	...	76	19	170	8	109	2	12	...	323	5	219	38	106	4	1,217	144	33	...			
District.	Class of dispensary.	Diabetes.		Gouty.		New growth.		All other general diseases.		Diseases of the nervous system.		Diseases of the eye.		Diseases of the ear.		Diseases of the nose.		Diseases of the skin.		All diseases of the respiratory system.		Abscess of the liver.		All other diseases of the liver.		Appendicitis.		All other diseases of the digestive system.		Total treated.		Deaths.					
		Total treated.	Deaths.	Total treated.	Deaths.	Total treated.	Deaths.	Total treated.	Deaths.	Total treated.	Deaths.	Total treated.	Deaths.	Total treated.	Deaths.	Total treated.	Deaths.	Total treated.	Deaths.	Total treated.	Deaths.	Total treated.	Deaths.	Total treated.	Deaths.	Total treated.	Deaths.	Total treated.	Deaths.	Total treated.	Deaths.						
		20	4	...	...	61	...	61	15	43	7	146	9	12	1	20	...	15	...	139	12	272	36	...	30	28	...	30	3	40	7	74	11	17	1	868	50
Madras.	Non-Europeans ... Government General Hospital, Madras. I Class. State-Public.	20	...	...	...	8	...	18	...	22	1	46	5	1	...	4	1	...	32	1	122	13	...	6	1	...	11	...	...	...	...	...	...	...	243	19	
		20	...	...	...	69	...	109	15	65	8	192	14	13	1	24	...	16	...	171	13	394	49	...	36	4	...	48	7	85	11	20	1	1,111	69		
		40	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		

STATEMENT C (I)—cont.

Showing the diseases, etc., of the in-door patients treated in the (State-Public) in the Government General Hospital, Madras, during the year 1919—cont.

District.	Class of dispensary.	Systemic diseases—cont.														General and Local.						Labour.				Total number of in-door patients.		Deaths.	Operations.
		Inflammation and suppuration of lymph glands.	Gout.	Bright's disease.	All other diseases of the urinary system.	Hydrocele.	Other diseases of the generative system.	Diseases of the organs of locomotion.	Diseases of the connective tissue.	Ulcers.	Other diseases of the skin.	All other local diseases.	Injuries (general and local).	Poisoning.		Normal.		Abnormal.		Total treated.	Deaths.	Total treated.	Deaths.	Total treated.	Deaths.				
Madras.	Government General Hospital, Madras— I Class, State-Public.	109	2	6	23	1	235	17	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	96	96				
		41	...	3	...	28	...	21	...	78	1	26	1	26	1	26	1	26	1	...	...	1,861	100	634	4				
		150	2	9	...	26	1	286	19	199	4	130	1	488	13	213	2	488	13	213	2	488	13	213	2	488			

- (1) Statement C (I) is complementary to statement B and is intended to relate only to those institutions from which complete information can be expected. These are State-Public, Local Fund, and Private-aided institutions (classes I, III, IV of the classes in Statement A).
- (2) Details need not be given for each institution. It will suffice if totals are given for each class.
- (3) For guidance in filling up the columns the following remarks are added:—
In all cases the instructions contained in "The Nomenclature of Diseases," fourth edition, 1906, should be followed.
- INSTRUCTIONS.
- Column 9 to include all diseases due to malaria. Non-malarial fevers should be returned in column 24—"All other general diseases."
- Column 15 to include all diseases due to the poison of syphilis, i.e., syphilitic lesions.
- Column 16 to include all diseases resulting from gonorrhoeal infection, e.g., gonorrhoeal rheumatism.
- Column 19 to include only cases of anaemia of which the cause cannot be ascertained.
- Columns 51 and 52 should also include labour cases among out-patients.

STATEMENT F.

Number of in-door and out-door patients, according to class and sex, treated in the State-Public, Government General Hospital, Madras, in the year 1919.

Name and class of dispensary.		Europeans and Eurasians.				Hindus.				Muhammadans.				Others.				Total treated.	
		Adults.		Children.		Adults.		Children.		Adults.		Children.		Adults.		Children.			
		Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.		
District.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
1																			
Madras.	{ Government General Hospital, Class I, State-Public, 1919.	In-door ...	1,139	536	113	73	3,476	846	159	76	453	51	21	2	953	393	67	49	8,412
		Out-door ...	2,490	1,232	503	409	29,388	6,664	3,124	2,509	2,969	203	170	104	6,323	1,897	1,112	997	60,069
		Total ...	3,629	1,768	621	482	32,864	7,510	3,253	2,585	3,422	254	191	108	7,276	2,295	1,179	1,046	69,511

INSTRUCTIONS.

- (1) Statement F is intended to comprise only those institutions from which full information can be expected. These are State-Public, Local Fund and Private-aided dispensaries (Classes I, III and IV of the classes shown in Statement A).
- (2) In filling up columns 5, 6, 9, 10, 11, 13, 14, 17, 18 all under ten years of age should be reckoned as children.
- (3) The number of individual patients and not the number of visits should be shown throughout.
- (4) The specimen form is primarily adapted for use in provinces of India proper. For the Burma Provincial report the arrangement of the columns may be altered as the local Government sees fit.

GOVERNMENT GENERAL HOSPITAL

STATEMENT F (SUPPLEMENT).

Number of in-door and out-door patients, according to class and sex, treated in the State-Public, Government General Hospital, Madras, in the year 1919.

District.	Name and class of dispensary.	Europeans and Eurasians.				Hindus.				Muhammadans.				Others.				Total.
		Adults.		Children.		Adults.		Children.		Adults.		Children.		Adults.		Children.		
		Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Madras.	(Government General Hospital, Class I, State Public, 1919.)	1,139	536	113	73	3,476	846	159	78	453	51	21	2	953	398	67	49	8,412
	In-patients ...	...	...	...	...	...	...	...	...	...	Nil.	...	...	...	...	...	...	...
	Out-door labour cases.	...	...	...	...	...	...	...	...	...	Nil.	...	...	...	...	...	...	...
	Other out-door cases represented by friends.	...	...	...	...	...	...	...	...	...	Nil.	...	...	...	...	...	...	...
	Out-door cases attended personally.	2,490	1,232	508	409	29,368	6,664	3,124	2,509	2,969	203	170	104	6,323	1,897	1,112	997	60,099
	Total ...	3,629	1,768	621	482	32,864	7,510	3,233	2,585	3,422	254	191	106	7,276	2,295	1,179	1,046	68,511

INSTRUCTIONS.

- (1) Statement F is intended to comprise only those institutions from which full information can be expected. These are State-Public, Local Fund and Private-aided dispensaries (Classes I, III and IV of the classes shown in Statement A).
- (2) In filling up columns 5, 6, 9, 10, 11, 13, 14, 17, 18 all under ten years of age should be reckoned as children.
- (3) The number of individual patients and not the number of visits should be shown throughout.
- (4) The specimen form is primarily adapted for use in provinces of India proper. For the Burma Provincial report the arrangement of the columns may be altered as the local Government sees fit.

Showing the Results of the Surgical Operations performed in the General Hospital, Madras, for the year 1919.

(Note.—The Asterisk indicates operations not specifically mentioned in the nomenclature.)

Class of operations.	Nature of operations.	Number of patients remaining from last year.	Number of operations performed during the year.			Number of patients operated on in columns 4 to 6.	Results of operations on patients.				Number of patients remaining at the end of the year.
			Primary.	Secondary.	Total.		Cured.	Relieved.	Discharged otherwise.	Died.	
1	2	3	4	5	6	7	8	9	10	11	12
Operations on tumours	Removal by excision or other methods ...	2	70	...	70	70	66	3	...	2	1
	Destruction by electrolysis or exposure to X-rays.	...	11	...	11	11	11	...	...	...	...
Operations on cysts	Total	2	81	...	81	81	77	3	...	2	1
	Removal by enucleation or excision	...	39	...	39	39	39	...	...	...	...
Operations on abscess	Treatment by—	...	5	...	5	5	4	...	...	...	1
	Incision and plugging ...	...	1	...	1	1	1	...	...	...	...
Operations for abscess	Tapping ...	...	45	...	45	45	44	...	...	...	1
	Total	...	1,854	3	1,857	1,854	1,840	18	3	2	8
Operations for abscess	Acute abscess—incision ...	15	26	...	26	26	20	2	...	3	3
	Chronic abscess—incision and drainage	2	10	...	10	10	7	2	1	...	1
Operations for abscess	Incision and drainage with subsequent closure.	1	7	1	8	7	4	4	...	...	1
	aspiration, with or without injection.	2	...	...	...	...	...	...	...	...	...
Removal of foreign bodies	Total	20	1,897	4	1,901	1,897	1,871	24	4	5	13
	In the natural passages excluding the external ear and urethra.	...	101	...	101	101	100	...	1	...	...
Removal of foreign bodies	Impacted or embedded substances except in the eyeball.	1	83	...	83	83	83	1	...	...	...
	Total	1	184	...	184	184	183	1	1	...	...
Operations on veins	Infusion of saline or other fluid ...	4	475	184	659	475	410	44	17	2	6
	For varices excision ...	...	1	...	1	1	1	...	...	...	...
Operations for arrest of hæmorrhage.	Total	4	476	184	660	476	411	44	17	2	6
	Ligature of bleeding point ...	...	12	...	12	12	12	...	...	...	...

Operations on lymphatics	Removal of lymphatic glands by excision	2	38	1	39	38	38	4	...	...	3
	by cauterizing	2	118	1	119	118	114	2	...	...	2
Operations on nerves	Removal of varicose lymphatic vessels	...	6	...	6	6	4	...	...	...	2
	Total	4	162	2	164	162	151	6	...	...	7
Operations on nerves	Excision of a portion of a nerve trunk	...	1	...	1	1	1	...	...	...	...
	Plastic operations for cicatrices and congenital malformations.	2	9	...	9	9	10	1	...	...	...
Operations on the skin and subcutaneous tissues.	Skin grafting (Thiersch's method)	...	13	1	14	13	12	...	...	...	1
	Curettage—	...	43	...	43	43	32	11	...	...	...
Operations on the skin and subcutaneous tissues.	For chronic ulcer	...	78	1	79	78	67	10	1	...	3
	For sinuses	...	2	...	2	2	1	1	...	...	...
Operations on the skin and subcutaneous tissues.	For gummata	...	9	...	9	9	7	2	...	...	...
	Cauterization thermo or electric	...	6	...	6	6	5	1	...	...	...
Operations on the skin and subcutaneous tissues.	Infective granuloma excision	...	1	...	1	1	1	...	...	...	...
	" erosion and cauterization	...	69	...	69	69	64	4	2	...	2
Operations on the skin and subcutaneous tissues.	Linear scarification—	7	30	12	42	30	24	6	...	...	1
	For inflamed tissues	...	7	...	7	7	6	...	...	...	...
Operations on the skin and subcutaneous tissues.	For sloughing tissues	...	57	...	57	57	57	...	...	...	...
	For hamatoma	...	74	...	74	74	74	...	...	...	...
Operations on the skin and subcutaneous tissues.	For whitlows	...	47	1	48	47	43	1	5	...	...
	For boils and carbuncles	...	15	...	15	15	15	...	...	...	...
Operations on the skin and subcutaneous tissues.	Excision of carbuncles	2	27	...	27	27	27	...	...	...	...
	Excision of corns and warts	...	184	...	184	184	181	1	...	...	2
Operations on the skin and subcutaneous tissues.	Avulsion of nails	...	6	...	6	6	5	...	...	...	1
	Repair of wounds	...	677	15	692	677	631	38	3	9	10
Operations on the skin and subcutaneous tissues.	Excision of keloids	14	...	...	...	...	...	...	...	...	...
	Total	...	...	...	...	...	...	...	...	...	...
Operations on bones	Incision of periosteum	2	4	...	4	4	4	1	...	...	1
	Osteotomy, linear or cuneiform	...	1	...	1	1	1	...	...	...	...
Operations on bones	Wiring or otherwise uniting recent or ununited fractures.	8	308	...	308	308	304	2	4	1	5
	Removal of sequestra	7	60	4	64	60	40	10	2	3	12
Operations on bones	Erosion of diseased bones	3	19	1	20	19	17	4	...	...	1
	Excision, partial or complete	1	4	...	4	4	4	...	...	...	...
Operations on bones	Enucleation of a new growth	...	2	...	2	2	1	1	...	...	...
	Total	21	399	5	404	399	372	18	6	5	19
Operations on joints	Reduction of dislocation—	...	...	...	...	...	...	...	...	...	...
	Lower jaw	...	4	...	4	4	4	...	2	...	...
Operations on joints	Shoulder	...	13	...	13	13	11	...	...	...	...
	Elbow	...	6	...	6	6	6	...	...	...	...

STATEMENT G—cont.
Showing the Results of the Surgical Operations performed in the General Hospital, Madras, for the year 1919—cont.

Class of operations.	Nature of operations.	Number of patients remaining from last year.	Number of operations performed during the year.			Number of patients operated on in columns 4 to 6.	Results of operations on patients.				Number of patients remaining at the end of the year.
			Primary.	Secondary.	Total.		Cured.	Relieved.	Discharged otherwise.	Died.	
1	2	3	4	5	6	7	8	9	10	11	12
Operations on joints—cont.	Reduction of dislocation—cont.										
	Wrist	...	2	...	2	2	2	...	...	...	...
	Hand and fingers	...	4	...	4	4	4	...	...	...	...
	Hip	...	4	...	4	4	4	...	...	...	...
	Displaced internal semi-lunar cartilage, knee	...	1	...	1	1	1	...	...	...	...
Operations on muscles and tendons.	For Ankylosis by passive movements	...	13	...	13	13	10	3	...	...	1
	Aspiration with or without injection	...	16	...	16	16	11	6	...	...	1
	Incision with or without drainage	...	16	1	17	16	13	3	...	1	2
	Arthroctomy	...	2	...	2	2	...	...	...	...	2
	Excision, partial or complete	...	6	...	6	6	5	2	...	...	2
Amputations	Total	9	87	3	90	87	71	14	4	1	6
	Tenotomy	1	3	...	3	3	4	...	...	...	...
	Union of a divided tendon	...	1	...	1	1	1	...	...	...	...
	Division of cicatricial adhesions	...	1	...	1	1	1	...	...	...	...
	Total	1	5	...	5	5	6	...	...	...	...
Amputations	For injury—										
	Arm, upper third	...	2	...	2	2	1	...	...	1	...
	Arm, middle third	...	1	...	1	1	2	...	...	...	...
	Forearm, upper third	...	1	...	1	1	1	...	...	...	...
	Forearm, middle third	...	1	...	1	1	1	...	...	...	...
Amputations	Forearm, lower third	...	1	...	1	1	1	...	...	...	...
	Wrist	...	21	...	21	21	20	...	...	1	1
	Hand and fingers	...	1	...	1	1	...	...	...	...	...
	Hip	...	1	...	1	1	...	...	...	...	...
	Thigh, upper third	...	1	...	1	1	...	...	...	...	...
Amputations	Thigh, middle third	...	1	...	1	1	...	...	...	...	...
	Knee	...	3	...	3	3	3	...	...	...	...
	Leg, upper third	...	1	...	1	1	1	...	...	...	...
	Leg, lower third	...	4	...	4	4	4	...	...	...	...
	Foot and toes	...	1	...	1	1	1	...	...	...	...
Amputations	For disease or deformity—										
	Shoulder	...	1	...	1	1	1	...	...	...	...
	Arm, upper third	...	1	...	1	1	1	...	...	...	...
	Arm, middle third	...	1	...	1	1	2	...	...	...	...
	Total	...	...	...	...	...	...	...	...	...	...

Operations on the skull	Arm, lower third	1	1	1	1	1	1	1	1	1	1	1
	Forearm, upper third	1	1	1	1	1	1	1	1	1	1	1
	Forearm, middle third	1	1	1	1	1	1	1	1	1	1	1
	Forearm, lower third	1	1	1	1	1	1	1	1	1	1	1
	Hand and fingers	13	1	1	1	1	14	1	1	1	1	1
	Hip	1	...	...	...	1	1	...	...	...	...	...
	Thigh, upper third	1	...	...	...	1	1	...	...	...	...	...
	Thigh, middle third	1	...	...	...	1	1	...	...	...	...	...
	Thigh, lower third	1	...	...	...	1	1	...	...	...	...	...
	Leg, upper third	15	...	...	...	15	14	...	...	...	...	...
	Leg, middle third	1	...	...	...	1	1	...	...	...	...	...
	Leg, lower third	2	...	...	...	2	2	...	...	...	...	...
	Foot and toes	8	...	...	...	8	1	...	...	...	...	...
	Total	98	1	...	99	98	92	...	...	7	6	...
Operations on the skull	Thinning or removing of portions of skull	1	4	...	4	4	3	...	...	2	...	...
	Elevation of depressed bone	...	2	...	2	2	1	...	...	1	...	...
	Total	1	6	...	6	6	4	...	...	3	...	...
Operations on the face	For barelip	...	7	...	7	7	6	...	...	...	1	...
	For relief of various acquired deformities	...	3	...	3	3	3	...	...	...	...	...
	Total	...	10	...	10	10	9	...	...	...	1	...
Operations on the mouth	For ranula	1	1	...	1	1	1	...	...	...	...	...
	Removal of tongue, partial or complete	3	3	...	3	3	2	...	...	...	...	...
	Excision of uvula	10	10	...	10	10	10	...	...	...	...	...
	Removal of tonsils	22	22	...	22	22	22	...	...	...	...	...
	For cleft palate	1	1	...	1	1	2	...	...	...	...	...
	Total	37	37	...	37	37	37	...	...	...	1	...
Dental operations	Extraction of teeth	2,799	2,799	...	2,799	2,799	2,799	...	...	...	...	...
	Filling	103	103	...	103	103	103	...	...	...	...	...
	Other Dental operations—	382	382	...	382	382	382	...	...	...	...	...
	Scaling	99	99	...	99	99	99	...	...	...	...	...
	Incision of gums, etc.	11	11	...	11	11	11	...	...	...	...	...
	Removal of sequestra	5	5	...	5	5	5	...	...	...	...	...
	Uniting fractured jaw	...	...	...	...	...	...	...	...	...	...	...
	Total	3,399	3,399	...	3,399	3,399	3,399	...	...	...	...	...
Operations on the nose and accessory sinuses.	For removal of nasal polypus	10	10	...	10	10	9	...	1	...	...	...
	Operations on maxillary sinus	3	3	...	3	3	3	...	...	...	...	...
	Removal of turbinated bodies, partial or complete	17	17	...	17	17	17	...	...	...	...	...
	Application of electro cauter for Hypertrophic mucous membrane over inferior turbinated bones.	24	24	...	24	24	24	...	...	...	...	...
	Total	54	54	...	54	54	53	...	1	...	...	...

STATEMENT G—cont.
Showing the Results of the Surgical Operations performed in the General Hospital, Madras, for the year 1919—cont.

Class of operations.	Nature of operations.	Number of patients remaining from last year.	Number of operations performed during the year.			Number of patients operated on in columns 4 to 6.	Results of operations on patients.				Number of patients remaining at the end of the year.
			Primary.	Secondary.	Total.		Cured.	Relieved.	Discharged otherwise.	Died.	
1	2	3	4	5	6	7	8	9	10	11	12
Operations on the naso-pharynx.	Removal of adenoid growths ...	...	17	...	17	17	17	...	...	...	...
	Removal of naso-pharyngeal growths ...	...	2	...	2	2	2	...	...	...	...
	Canterisation for granular pharyngitis ...	...	21	...	21	21	21	...	...	...	...
	Total ...	...	40	...	40	40	40	...	...	...	...
	* For restoration of pinna ...	...	1	...	1	1	1	...	...	...	...
Operations on the ear and accessory cavities.	Removal of foreign bodies ...	...	6	...	6	6	6	...	...	...	...
	For acute suppurative otitis media opium of mastoid Antrum.	3	13	...	13	13	12	...	1	2	1
	Perforation of mastoid cells ...	...	2	...	2	2	2	...	...	...	...
	Radical operation for chronic otitis media ...	1	6	...	6	6	5	1	...	...	1
	Total ...	4	28	...	28	28	26	1	1	2	2
Operations on the larynx and trachea.	Tracheotomy ...	...	1	...	1	1	1	...	...	...	...
	Enucleation of cysts or adenomata ...	...	2	...	2	2	2	...	...	...	...
	Oesophagotomy ...	...	1	...	1	1	...	...	...	1	...
	For cyst or benign tumour ...	...	2	...	2	2	2	...	...	...	...
	Excision of breast ...	...	4	...	4	4	4	...	...	...	...
Operations on the breast.	Excision of breast with axillary glands and adjacent structures.	...	8	...	8	8	4	...	...	2	2
	Total ...	...	14	...	14	14	10	...	...	2	2
	Paracentesis of the pleura ...	...	33	...	33	33	18	15	...	...	...
	Incision and drainage of pleura ...	...	4	...	4	4	3	1	...	...	...
	Trans-thoracic incision for drainage of Sub-diaphragmatic or hepatic abscess.	...	7	...	7	7	7	...	...	...	...
Operations on the thorax.	Total ...	...	44	...	44	44	28	16	...	...	...
	Paracentesis abdominis ...	3	151	...	151	151	109	38	6	12	1
	Abdominal section—Exploratory ...	1	27	...	27	27	9	3	4	...	...
	Operations on the stomach—Gastrostomy ...	1	...	...	...	...	1	...	...	...	...
	Total ...	...	...	...	...	...	...	...	...	...	...

12	Operations on the abdomen ...	13	461	...	461	461	345	48	20	48	13
Operations on the abdomen ...	Posterior Gastroenterostomy	...	6	...	6	6	5	...	...	1	...
	Operations on the intestines—	...	3	...	3	3	1	...	...	2	...
	Excision of portions of the intestine (Enterectomy).	...	4	...	4	4	1	...	...	3	...
	Colotomy inguinal ...	...	15	...	15	15	...	...	...	14	...
	Intestinal anastomosis ...	...	...	...	...	...	...	...	...	...	...
Operations on the rectum and anus.	For intestinal obstruction ...	...	18	...	18	18	17	...	...	2	...
	Operations for disease of the vermiform appendix—	...	11	...	11	11	8	...	...	3	...
	Excision of the appendix ...	...	3	...	3	3	...	...	...	6	...
	Opening and drainage of abscess ...	...	36	...	36	36	26	...	...	...	...
	Operations for external hernia—	...	146	...	146	146	142	...	...	...	11
Operations on the bladder.	(a) Strangulation—(i) Taxis	...	7	...	7	7	...	...	...	...	...
	(ii) Herniotomy and radical cure.	...	...	...	...	...	...	...	...	...	...
	Radical cure for external hernia ...	...	...	...	...	...	...	...	...	...	...
	Operations on the liver—	...	...	...	...	...	...	...	...	...	...
	Exploratory puncture ...	...	19	...	19	19	14	...	...	5	...
Operations on the rectum and anus.	For hepatic abscess ...	...	1	...	1	1	...	...	...	...	...
	For hydatid cyst ...	...	2	...	2	2	2	...	...	...	...
	Operations on the gall-bladder and bile ducts—	...	2	...	2	2	1	...	...	...	...
	Cholecystotomy ...	...	1	...	1	1	1	...	...	...	...
	Cholecystostomy ...	...	2	...	2	2	2	...	...	...	...
Operations on the bladder.	Cholecystectomy ...	...	2	...	2	2	2	...	...	...	...
	Operations on the pancreas—	...	3	...	3	3	1	...	...	...	...
	For cyst ...	...	2	...	2	2	2	...	...	...	...
	Operations on the kidney—	...	3	...	3	3	1	...	...	...	...
	Nephrotomy ...	...	2	...	2	2	2	...	...	...	...
Operations on the rectum and anus.	Nephrectomy ...	...	1	...	1	1	1	...	...	...	...
	For congenital malformations—	...	...	...	...	...	...	...	...	...	...
	Imperforate anus ...	...	1	...	1	1	1	...	...	...	...
	For anal fistula ...	...	46	...	46	46	43	...	...	...	...
	For anal fissure or ulcer ...	...	25	...	25	25	18	...	...	...	...
Operations on the bladder.	For hemorrhoids ...	...	78	...	78	78	79	...	...	...	...
	For prolapse ...	...	1	...	1	1	1	...	...	...	...
	For non-malignant stricture ...	...	1	...	1	1	...	...	...	...	...
	Excision of Rectum (Complete)	...	1	...	1	1	...	...	...	...	...
	Total ...	8	156	...	156	156	144	11	2	2	5
Operations on the bladder.	Sounding ...	...	2	...	2	2	2	...	...	...	...
	Supra-pubic puncture ...	...	5	...	5	5	...	...	...	...	...
	Cystostomy-supra-pubic ...	...	3	...	3	3	...	...	...	...	...
	Lithotomy-supra-pubic ...	...	4	...	4	4	...	...	...	...	...
	Total ...	2	14	...	14	14	8	6	...	1	1

* This operation is not mentioned in nomenclature of diseases.

STATEMENT G—cont.

Showing the Results of the Surgical Operations performed in the General Hospital, Madras, for the year 1919—cont.

Class of operations.	Nature of operations.	Number of patients remaining from last year.	Number of operations performed during the year.			Number of patients operated on in columns 4 to 6.	Results of operations on patients				Number of patients remaining at the end of the year.
			Primary.	Secondary.	Total.		Cured.	Relieved.	Discharged otherwise.	Died.	
1	2	3	4	5	6	7	8	9	10	11	12
Operations on the prostate	Removal of the prostate (Complete)	...	1	...	1	1	...	...	...	1	...
Operations on the urethra	Dilatation of stricture	...	328	177	505	328	281	34	2	1	5
	Urethrotomy—i. Internal	...	1	...	1	1	1	...	...	...	...
	Urethrotomy—ii. External	...	2	...	2	2	2	...	...	...	...
	Perineal section	...	1	...	1	1	1	...	...	1	...
	Operation for extravasation of urine	...	5	...	5	5	3	1	...	...	...
	Operation of urethral fistula	...	8	...	8	8	6	2	...	...	...
	Removal of foreign body from urethra	...	1	...	1	1	1	...	...	...	...
	Total	5	346	177	523	346	305	37	2	2	5
	Circumcision	1	176	...	176	176	177	...	...	...	...
	* For paraphimosis	...	51	...	51	51	51	...	...	...	...
Operations on the male generative organs.	Amputation of penis, partial or complete	...	8	...	8	8	8	...	...	...	...
	For hypospadias	...	1	4	5	1	1	...	...	...	...
	For varicocele	...	6	...	6	6	6	...	...	...	...
	For hydrocele—	...	38	...	38	38	...	38	...	...	...
	Tapping	...	2	...	2	2	2	...	...	...	...
	Do. and injection	...	162	...	162	162	161	1	...	...	6
	Incision and eversion of sac	...	6	...	6	6	5	...	...	...	1
	Excision of part of parietal sac	...	19	...	19	19	20	...	...	...	1
	Incision and drainage	...	2	...	2	2	2	...	...	...	...
	Hydrocele of the cord	...	4	...	4	4	1	1	...	...	2
	For hematocele—	...	7	...	7	7	7	...	...	...	1
	Incision and eversion of sac	...	8	...	8	8	9	1	...	...	...
	Incision and drainage	...	17	...	17	17	16	3	...	...	...
	Excision of part of the parietal sac	...	27	...	27	27	29	...	...	...	1
	Removal of testis	3	...	...	...	...	...	...	...	...	...
	Removal of elephantoid scrotum and penis	...	...	...	...	...	...	...	...	...	...
	Total	17	534	4	538	534	495	44	...	...	12
Operations on the female generative organs.	Operations involving abdominal section.	...	3	...	3	3	4	...	...	...	...
	Oophorectomy (single or double)	1	1	...	1	1	1	...	...	...	...
	Removal of uterine appendages—	...	...	...	...	...	...	...	...	...	...
	For matted tubes and ovaries	...	1	...	1	1	1	...	...	...	...
	Drainage of abscess in connexion with uterine appendages—	...	1	...	1	1	1	...	...	...	...
	Pyosalpinx	...	1	...	1	1	1	...	...	...	...
	Hysterectomy supravaginal	...	1	...	1	1	1	...	...	...	...
	Enucleation of Myoma (sessile)	...	1	...	1	1	1	...	...	...	...
	Ventral fixation of uterus	...	1	...	1	1	1	...	...	...	...
	Operations by the vagina or vulva.	...	...	...	...	...	...	...	...	...	...
Operations on the female generative organs.	Removal of vaginal portion of cervix uteri :—	...	1	...	1	1	...	1	...	...	...
	For cancer	...	1	...	1	1	...	1	...	...	...
	Curettage of uterus	...	1	...	1	1	...	...	...	...	...
	Removal of hypertrophied nymphæ or labia	...	1	...	1	1	...	...	...	...	...
	Total	1	11	...	11	11	10	2	...	...	...
Grand Total		135	9,282	395	9,677	9,282	8,837	813	61	95	111

STATEMENT G. (I)—cont.
Showing the Results of the Surgical Operations in the General Hospital, Madras, for the year 1919—cont.

Class of Operations.	Name of operations.	Number of operations during the year.			Number of patients operated on in columns 4 to 6.	Results.				Remaining.
		Primary.	Secondary.	Total.		Cured.	Relieved.	Discharged otherwise.	Died.	
1	2	3	4	5	6	7	8	9	10	11
Operations on the abdomen—cont.	Operations for disease of the vermiform Appendix:—									
	Excision of the Appendix ...	18	...	18	18	16	...	...	2	...
	Opening and drainage of abscess ...	11	...	11	11	8	...	...	3	...
	Operations for external Hernia:—									
	(a) For Strangulation:—Hermiotomy and Reducal cure.	36	...	36	36	26	...	3	6	1
	(b) Radical cure for external Hernia ...	146	...	146	146	135	...	...	...	11
	Operations on the Liver—									
	For hepatic abscess ...	19	...	19	19	14	...	...	5	...
	For hydatid cyst ...	1	...	1	1	1	...	...	...	...
	Operations on the gall bladder and bile ducts—									
	Chole cystotomy ...	2	...	2	2	2	...	...	...	...
	Chole cystostomy ...	2	...	2	2	1	...	1	...	...
	Chole cystectomy ...	1	...	1	1	1	...	...	...	...
	Operation on the Pancreas:—For cyst.	2	...	2	2	2	...	...	...	...
	Operations on the Kidney—									
Nephrotomy ...	3	...	3	3	3	1	2	...	...	
Nephropexy ...	2	...	2	2	2	2	...	...	...	
Nephrectomy ...	1	...	1	1	1	1	...	...	...	
	Total ...	300	...	300	300	226	7	7	48	12
Operations on the Rectum and anus.	For congenital malformations:—Imperforate anus ...	1	...	1	1	1	...	...	...	...
	Excision of rectum (complete) ...	1	...	1	1	...	...	...	1	...
Operations on the bladder	Total ...	2	...	2	2	1	...	...	1	...
	Lithotomy (suprapubic) ...	4	...	4	4	3	...	...	1	...
Operations on the Prostate	Removal of the prostate (complete) ...	1	...	1	1	...	...	...	1	...

Operations on the male generative organs.	Amputation of penis partial or complete	8		8	8	8				
	For Hypospadias ...	1		1	1	1				
	For Hydrocele:—									
	Incision elevation of sac	162		162	162	155	1			6
	Excision of part of the parietal sac	6		6	6	5				1
	Hydrocele of the cord	2		2	2	2				
	For Hematocele:—									
	Incision eversion of sac	4		4	4	2				1
	Excision of part of the parietal sac	8		8	8	7				
	Removal of testis	17		17	17	14	3			1
Operations on the female generative organs.	Removal of elephantoid scrotum and penis	27		27	27	25				
	Total ...	235	4	239	235	220	6			9
	Operations involving abdominal section:—									
	Oophorectomy (single or double) ...	3		3	3	3				
	Removal of uterine appendages:—For matted tubes and ovaries.	1		1	1	1				1
	Drainage of abscess in connexion with uterine appendages—Pyosalpinx.	1		1	1	1				
	Hysterectomy supravaginal	1		1	1	1				
	Eucleation of myoma (sessile)	1		1	1	1				
	Total ...	7		7	7	7				
	Grand Total ...	750	4	754	750	610	22	8	68	42

GOVERNMENT GENERAL HOSPITAL, MADRAS,
8th June 1920.

A. J. H. RUSSELL, Major, M.A., M.D., I.M.S.,
Superintendent.

FIRST PHYSICIAN.

These wards were under my charge throughout the year except during the month of June when Major J. Kirkwood, I.M.S., dated for me.

The number of admissions and deaths were as follows :—

Class.	1917.		1918.		1919.	
	Total treated.	Deaths.	Total treated.	Deaths.	Total treated.	Deaths.
Europeans	721	28	801	34	809	55
Non-Europeans	569	38	791	88	668	78
Total	1,290	66	1,592	122	1,477	133

Thirty-four (34) cases were admitted moribund.

The total percentage of deaths was 9 per cent or excluding moribund cases 6·7 per cent.

The death-rate among Europeans was 6·7 per cent and amongst non-Europeans 10·6 per cent or excluding moribund cases, 5·1 per cent amongst Europeans and 8·5 per cent amongst non-Europeans.

It is interesting to note that the number of children treated has increased during the last two years, whilst the morality amongst these children has been very much higher during the years 1918 and 1919 and to a great extent accounts for the high total mortality in these wards. This high mortality amongst children is probably due to the high prices of foodstuffs.

The total number of patients treated in 1919 has been somewhat less than in 1918 when an additional ward was opened on account of the influenza epidemic but the number of patients treated in 1919 is considerably in excess of those treated in 1917.

No special cases of interest were recorded.

Kala-Azar.—These cases were as usual treated with intravenous injections of tartar emetic but it is worthy of record that those cases which have been previously treated for a considerable period by tartar emetic administered orally do not seem to react to intravenous injection so rapidly or effectively as those who have not been so treated.

The principal diseases and their mortality were as follows :—

Diseases.	Total treated.			Deaths.			
	Europeans.	Non-Europeans.	Total.	Europeans.	Non-Europeans.	Total.	Moribund.
Malaria { Benign tertian ...	18	22	40	...	...	...	...
{ Malignant tertian...	11	10	21	...	1	1	...
{ Chronic	48	42	90	...	...	...	...
Enteric	50	13	63	5	2	7	...
T. P.	23	31	54	2	5	7	...
Kala-Azar	14	7	21	1	2	3	...
Pneumonia	7	9	16	1	2	3	...
Dysentery	42	37	79	1	3	4	2
Enteritis	41	31	72	6	7	13	4
Pleurisy	7	12	19	1	...	1	...
Rheumatism	19	11	30	1	...	1	...
Bronchitis	31	10	41	1	1	2	...
Asthma	19	18	32	1	...	1	...
P. U. O.	99	14	48	...	2	2	...
Influenza	185	99	284	12	16	28	18
Ankylostomiasis	1	46	47	...	1	1	...

Ankylostomiasis cases treated during 1919.

Triplicane	3	} Madras	20
Egmore	1		
Chintadripet	1		
Mylapore	3		
Vepery	3		
Purasawalkam	1		
George Town	2		
Park Town	1		
Periyamet	1		
Choolai	1		
New Town	1		
Muthiyalpet	1		
Kilpauk	1		
Cochin	...	...	1
Ceylon	...	...	1
Wandiwash	...	...	1
Rameswaram	...	...	1
Thiruvannamalai	...	...	2
Ponneri	...	...	1
Malabar	...	...	1
Trichinopoly	...	...	1
No address	...	...	17
Total	46		

One case occurred in a European, the remainder were all Indians.

GOVT. GENERAL HOSPITAL, MADRAS, F. F. ELWES, M.D., C.I.E., Lieut.-Col., I.M.S.,
February 1920. Superintendent

STATEMENT III-B.

Selected List of Operations performed by each Medical Officer, Government General Hospital, Madras, for the year 1919.

Number.	Names of Surgeons.	Period of duty.	Excision of tumours (all kinds).	Operations on bones.	Excision of joints (partial or complete).	Through and above the metacarpus.	Through and above the metatarsus.	Arthrocentesis.	Operations on arteries and veins.	Operations on skull, brain and spinal cord.	Operation for removal of carcinoma-tumour (extra-buccal method).	Operations for empyema.	Operations for removal of supernumerary rib.	Operations for excision of the breast.	Cesareanotomy.	Abdominal section (for any purpose other than obstetrical).	Abscess of the liver (all operations).	Operation for hydatid cyst liver.	Operations on intestines including hernia.	Operations on the stomach.	Operations on the gall bladder.	Operations on the pancreas.	Operations on the kidney.	Operations on bladder and urethra.	Operation for removal of prostate.	Operation for removal of vesical calculus by incision.	Operations on elephantoid scrotum.	Operations on testicle and spermatic cord.	Other operations on male generative organs.	Operations on the female generative organs.	Plastic operations.	Total.	
1		3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	
1	Lieut.-Col. W. J. Niblock, I.M.S.	From 1st Jan. to 15th May, 1919, 26th June to 19th Sep. 1919, 30 Sep. to 23rd Dec. 1919 (S-1).	41	18	3	2	4	2	1	11	1	3	1	4	1	8	8	1	99	4	5	1	6	4	1	..	7	81	1	5	16	339	
2	Lieut.-Col. E. M. Ellington, I.M.S.	From 1st Jan. to 2nd Jan., 27th Jan. to 6th July 1919 (S-2).	10	13	..	2	9	2	..	5	..	2	..	4	..	6	4	..	28	..	..	1	..	1	..	..	..	8	25	5	1	134	
3	Dr. W. J. Fernandez, I.M.S.	From 26th May to 25th June 1919 (S-1).	20	12	1	6	12	..	..	8	..	..	..	2	..	6	9	..	62	2	1	..	..	..	..	..	2	10	96	2	..	253	
4	Lieut.-Col. T. H. Symons, I.M.S.	From 1st Jan. to 17th Nov. 1919 and 26th Nov. to 31st Dec. 1919 (S-3).	2	3	..	..	..	..	..	3	..	..	..	..	..	2	1	..	2	..	..	..	..	..	..	..	..	1	7	..	..	21	
5	Dr. S. Rangachari, M.B., C.M.	From 10th Mar. to 5th Apr. 1919 (S-2).	10	7	3	2	3	2	..	..	..	1	..	4	..	4	3	..	25	..	..	..	1	..	..	..	2	3	23	4	2	6	105
6	Major J. Kirkwood, I.M.S.	From 1st Sep. to 31st Dec. 1919 (S-2).	..	..	..	1	5	..	..	..	..	1	..	..	..	2	1	..	18	..	..	..	..	1	..	..	..	..	..	..	..	24	
7	Dr. V. P. Kamath, I.M.S.	From 1st Jan. to 26th June 1919 and 7th July to 7th Aug. 1919 (R.M.O.).	..	..	..	4	3	..	..	1	..	..	..	..	..	1	..	..	7	..	..	..	..	..	..	..	..	..	..	..	..	18	
8	Dr. V. P. Kamath, I.M.S.	From 7th Aug. to 31st Dec. 1919 (R.M.O.).	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	18	
		Total ..	83	53	7	17	36	6	1	28	1	7	1	14	1	29	26	1	236	6	6	2	7	6	1	4	30	232	13	8	82	894	

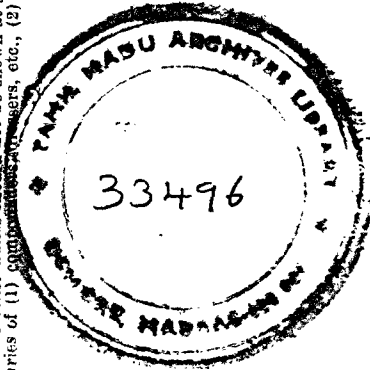
STATEMENT H.

Showing the Income and Expenditure of the State-Public, Government General Hospital, Madras, in the year 1919.

District.	Name of dispensary.	Income.						Expenditure.												Closing balance.		
		Cash balance.	Government contribution.		Local fund contribution.	Municipal fund contribution.	Interest on investments.	Subscriptions.		Miscellaneous receipts (to include sale of securities).	Total receipts.	Salaries.			Medicines.			Miscellaneous charges.			Buildings or repairs.	Investments.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Madras.	Government General Hospital.	11	2,06,710	3,06,850	...	...	...	...	...	31,949	5,45,509	90,103	65,822	50,785	62,958	3,593	1,01,952	1,10,885	59,630	...	...	5,45,509

INSTRUCTIONS.

- (1) Statement is intended to comprise only those institutions from which complete information can be expected. These are State-Public, Local Fund and Private-aided dispensaries (Classes I, III and IV of the classes shown in Statement A).
- (2) Figures for individual dispensaries should be given: and dispensaries should be arranged in column 2 as in Statement B, except that district totals (for general, female or combined institutions) need not be given.
- (3) Annas and pies should be omitted throughout.
- (4) In column 13 should be shown (1) the pay of Surgeons, Assistant Surgeons, Apothecaries, Hospital Assistants and Native Doctors, attached to the dispensary, including special dispensary allowance (if any), and (7) the special dispensary allowance given to Surgeons, Assistant Surgeons, Apothecaries, Hospital Assistants and Native Doctors for holding charge of the dispensary in addition to their ordinary civil work. The pay of Civil Surgeons or other Medical officers holding charge of the dispensary in addition to other duties should not be shown at all in this statement.
- (5) In column 16 should be shown the salaries of (1) compounders, dispensers, etc., (2) menial servants, e.g., cooks, sweepers, chaulidars, etc.



N20

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SECOND PHYSICIAN'S WARDS.

Non-European ward was converted into Special Influenza ward during the months of July and August 1919 during which period six beds were used for clinical purposes in the Fourth Physician's wards on the non-European side.

Interesting cases.

1. ? *Addison's disease*.—Muhammad Usuff, aged 20 years, admitted for weakness, diarrhoea and pigmentation of palms and soles of six months' duration. Gave a history of gradual onset with marked gastro-intestinal irritation, thirst and asthenia. His expression was peculiar due to pigmentation over malar and falling off of hair from eyebrows and most of the eyelashes. Tongue and palate showed numerous characteristic pigment patches. Spleen was enlarged. There was marked tenderness in both renal regions. Temperature now and then rose up to 100° or 102°. No parasites in blood. No amebæ in motion. No Malarial or Kala Azar changes. Von Perquet slightly positive—was put on adrenaline chloride solution (1 in 1000) half a dram per day. Temperature became normal, vomiting and diarrhoea stopped. Pigmentation began to fade. But patient caught Influenza after three weeks in hospital and succumbed. Post-mortem not allowed because patient was a Muhammadan and so the actual condition of the suprarenal glands could not be made out. The peculiar feature of this case is the mixture of symptoms of myxoedema and Addison's disease.

2. *Typhoid in a chronic malaria patient*.—J. Muliyl, a forest ranger, aged 24 years, admitted with a history of chronic malaria of some months. No history of hæmophylic tendency. Has been suffering from an irregular low fever for the last 15 days. Spleen just palpable, soft. Liver not palpable. Heart first sound in mitral area very soft. Four days after admission patient started having diarrhoea. Blood showed 1 in 100 strong positive and 1 in 200 partial for widal. On the 30th day of the disease patient started bleeding from gums and buccal mucous membrane. A few clots of blood were noticed in the motion the same day. Next there were subconjunctival and subcuticular hæmorrhages; next blood in the urine; next hæmorrhage from the bowel started which could not be stopped for a week. Ultimately the patient made a good recovery and was discharged about two months after admission.

The peculiar feature of the case was the continuous hæmorrhage from practically every part of the body.

3. *Toxemia (? Cholemia) in cases of cirrhosis liver*.—Five cases of cirrhosis liver became comatose during treatment, four of them a few days after paracentesis abdominis, and one case which had been treated without paracentesis and in which the abdominal fluid had practically disappeared. There was no albumin in urine in any of these cases. Three of them showed marked jaundice and bile in urine and two to a less extent. Three cases had muttering delirium and one was very violent. Pulse was small, slow, regular. Pupils equal and dilated. The interest of these cases comes in in the fact that they recovered consciousness within 36 hours, having been treated with saline per rectum and large doses of magnesium sulphate by mouth. One case was discharged in the comatose condition as patient's relatives insisted on taking him away and another had a relapse of coma on the 29th day after recovery and responded to the same treatment satisfactorily.

4. *A case of ascariasis canis complicating pneumonia*.—A patient who was admitted for pneumonia, was suffering from diarrhoea also. He vomited an ascaris canis. Santonine was given and he passed 142 worms. This infection is, I believe, very rare in Madras. Said to occur more commonly in cats and dogs.

Some observations on treatment of Ankylostomiasis.—01: Chinopodium, Thymol and modified Manson's mixture were tried in my wards. 01. Chinopodium was not found satisfactory. One of the cases was treated by the Hon. Physician with Ayurvedic drug, viz., 45 graino doses of chinopodium ambrosoides, from which the oil is extracted. The result was negative. Further this oil was found to produce tachy-cardia with marked softing of pulse. Manson's mixture was modified by substituting spirit: chloroform for chloroform. The results were fair; good number of worms being expelled, proving that 01: Eucalyptus is the essential ingredient in this mixture.

Thymol.—Was tried in smaller doses than usual. I found Thymol in 7 to 10 grs. doses repeated at intervals of one hour quite effective in expelling ankylostomes. There was no necessity in any case to exceed a total of 30 grs. of Thymol in a day. Very often 15 or 20 grs. was quite enough. In some of the cases ova were found on the 3rd day after Thymol. Cases were declared cured if no ova were found after repeated examinations for four days, commencing from the 8th day after cessation of Thymol.

Class of patients.	Admissions.							Average daily sick.	Death-rate per 1,000.	Operations.					
	Remained.	Admitted.	Total.	Cured.	Relieved.	Discharged otherwise.	Died.			Remained.	Performed during 1919.	Cured.	Relieved.	Discharged otherwise.	Died.
Non-Europeans	37	1,080	1,117	600	211	186	85	35	38.24	76.10	124	72	50	2	...
Europeans	8	234	242	120	60	29	19	14	14.44	78.51	60	38	12	...	...
Total	45	1,314	1,359	720	271	215	104	49	52.68	76.52	...	...	...	2	...

Paracentesis thoracis 4 cured.
Do. abdominis 62 relieved.
Intravenous saline 40 relieved, 2 deaths.
Do. others 22 cured.

Class of patients.	Remained.	Admitted.	Cured.	Relieved.	Discharged otherwise.	Died.	Remain- ing.
Europeans	8	234	120	60	29	19	14
Non-Europeans	37	1,080	609	211	186	85	35
Total ...	45	1,314	720	271	215	104	49

Percentage of mortality.

Class of patients.	Total treated.	Deaths.	Percent-age.	Moribund cases.	Percentage of deaths exclud-ing moribund cases.
Europeans	242	19	7.85	6	5.37
Non-Europeans	1,117	85	7.6	21	5.7

Principal diseases treated and their deaths.

Diseases.	Europeans.			Non-Europeans.		
	Admission.	Death.	Remarks.	Admission.	Death.	Remarks.
Malaria { Benign tertian	11	...	...	74	...	...
{ Malignant tertian	2	...	...	14	...	...
{ Chronic	5	...	...	30	2	...
Enteric fever	4	...	...	10	1	...
Pyrexia of unknown origin	6	...	...	18	...	...
Tubercle of lungs	4	1	Admitted moribund.	40	13	One admitted moribund.
Dysentery	15	...	...	52	1	...
Valvular disease of heart	3	...	...	18	...	...
Disease of stomach	8	...	...	43	...	...
Enteritis	4	1	...	17	4	...
Nephritis	1	...	...	39	2	Two admitted moribund.
Cirrhosis of liver	...	...	...	16	2	One admitted moribund.
Pneumonia	2	1	...	20	5	Do.
Nervous disorders	12	2	...	29	...	...
Asthma	5	...	...	17	...	...
Diabetes	2	...	...	3	...	...
Kala Azar	1	...	...	3	...	...
Hepatitis	2	...	...	15	...	...

THIRD PHYSICIAN'S WARDS.

The wards were in charge of Major A. C. Ingram, M.D., I.M.S., from 4th January to 13th July 1919 on which date I assumed charge.

Cases of influenza were the most numerous and on several occasions the whole wards were filled with cases of this disease. During the two acute outburst from July to August and September to October, the usual admissions of cases of chronic diseases were more or less barred. No remarks on treatment are necessary, as this followed the usual line, except that in about a dozen cases doses of curative vaccine were given. It cannot be said that the vaccine treatment had any effect.

The following are the statistics of the wards:—

	1917.	1918.	1919.
Remained in January 1919	...	...	35
Total admissions	501	626	682
Discharged cured	223	296	293
Do. relieved	123	139	203
Do. otherwise	120	76	109
Died	33	100	88
Remaining for 31st December 1919	...	...	21
Total death-rate	6.3	15.9	12.27
	per cent	per cent	per cent
Total death-rate excluding moribund cases, 17 in number	4.3	10.1	9.90
	per cent	per cent	per cent
Total death-rate excluding moribund cases and influenza	...	7.7	6.83
		per cent	per cent

Minor operations for the year 1919:—

Cured	...	242
Relieved	...	165
Discharged otherwise	...	2
Died	...	Nil.
Total	...	409

The principal diseases treated and their deaths are as follows:—

Diseases.	Total treated.	Deaths.	Remarks.
Influenza { Febrile	76	4	Four were admitted moribund.
Respiratory	84	18	
Gastro-intestinal	6	...	
B.T.	38	...	This was an acute cerebral case of M.T.
M.T.	14	1	
Malaria { Chronic	8	...	Three were admitted moribund.
Enteric	12	...	
Kala-Azar	7	1	
T. P.	29	2	
Pneumonia	19	8	
Cirrhosis liver	17	3	Two were admitted moribund.
Ankylostomiasis	15	...	
Heart disease	18	3	Most of these cases were old chronic cases in a state of semi-starvation.
Nephritis	42	6	
Dysentery	27	4	All amoebic in type.
Enteritis	47	6	Many of these cases presented a form of chronic colitis associated with a state of semi-starvation.
Beri-beri	12	...	Four cases were cases of hemiplegia.
P.W.O.	12	...	
Nervous disorders	15	...	
Diseases of the stomach	18	...	Cases of chronic gastritis predominated.

REPORT ON "HOOKWORM."

Localities.	No. of patients treated.	Results.
Rayapuram	1	
Georgetown	1	
Kilpauk	2	
Parasawakam	2	Cured 9
Nungambakam	1	Relieved 5
Chintadripet	1	Discharged otherwise 1
Teynampet	1	Died Nil.
Saidapet	1	
Trivandrum	1	
Residence unknown	4	
Total	15	Total 15

A. J. H. RUSSELL, Major, I.M.S., M.A., M.D., D.P.H., D.T.M.,
Third Physician.

GOVT. GENERAL HOSPITAL, MADRAS,
27th January 1920.

FOURTH PHYSICIAN'S WARDS.

The wards were in my charge throughout the year except from 1st to 30th May 1919 when I was on privilege leave during which period M.R.Ry. Dr. M. R. Guruswami Mudaliyar Avargal, B.A., M.B., C.M., was in charge.

There were ten cases admitted moribund and all died.

No septic cases admitted.

1. **Spleno-Medullary Leukemia.**—A Hindu, male, aged about 30 years, with an enlarged spleen 5½ inches below the costal arch and pain in the long bones, specially those of the leg—duration six months—was admitted on 22nd January 1919. On examination of the blood megaloblasts, normoblasts and myelocytes were seen. Blood count: white corpuscles 290,000, red corpuscles 3,760,000. He was put on Liq. arsenicalis; and was given 0.6 grms. of amsalvs on 7th February 1919. On 13th February 1919, blood count was white corpuscles 310,000, red corpuscles 2,890,000, spleen 5 inches below the costal margin. On 25th February 1919 blood count: white corpuscles 170,000, red corpuscles 2,900,000. Spleen was 4½ inches below the costal margin. General condition better. Left the hospital on 26th February 1919.

2. **Psoriasis Universalis.**—A Hindu, male, aged about 38 years, from Malabar admitted on 8th January 1919 with a history of eruptions on his body which first appeared about twenty years ago. Noticed first on his knees and then gradually spreading over the body. Eruptions appear once in about three years, duration each time being about six months. On examination, eruptions were seen over the whole body except soles and palms, cheeks and nose. The patches were covered with heaped up silvery scales, on removing which red areas with a bleeding point here and there were seen, was treated with Sodii Salicylas internally and an ointment consisting of sulphur gr. 20; thymol gr. 20 and paraffin oz. 1 externally. He left the hospital on 29th January 1919 with about a dozen eruptions left and the rest cured.

3. **Chronic Bulbar Paralysis** (Infranuclear).—A Hindu, male, aged about 30 years, was admitted complaining of great weakness and difficulty in swallowing and speaking. On examination, speech was slow and indistinct. Head bent to the left side—wasting of the sterno-mastoid and upper part of the Trapezins on the right side. No sensory disturbances—looks up when walking and gait slightly staggering. Knee jerks exaggerated; ankle clonus and babinski's sign present. Pupils normal. No paralysis of the soft palate—vocal cords could not be made out distinctly not able to blow out the right cheek, muscles of which were a little atrophied—muscles of left side were normal—slight parosis and atrophy of the orbicularis on the right side—able to breath properly and swallow with slight difficulty. No dribbling of saliva or epiphora.

4. **Paralysis agitaus.**—A Hindu, male, aged about 45 years, was admitted on 21st May 1919 for inability to walk and weakness. The patient was dull, speech indistinct, gait and attitude characteristic—propulsion and retropulsion marked. Tremors were present only in the lower jaw and stopped when speaking—knee jerks exaggerated. No ankle clonus or babinski's sign. Slight stiffness of the muscles and loss of elasticity of the skin.

5. **Catalepsy.**—A Hindu, male, a graduate-in-law, aged about 24 years, was admitted on 27th September 1919 with a history that the patient became suddenly unable to speak and lying down with his limbs rigid not taking food—said to be due to failure to secure any appointment and want of money for his expenses—previous history of having had a similar attack about three years ago. Patient was lying down flat on his back, eyes closed, hands put together in a praying posture, anaesthesia present, muscles in a condition of plastic rigidity, speechless and refusing nourishment.

28th September 1919, only pronounced his name, given nasal feeding.

29th September 1919, hands kept by the side, began to talk to the nurses and not to males saying that his guru had given him permission to speak only to ladies.

30th September 1919, muscles relaxed, answered all questions, spoke sensibly to all, took his food all right. Discharged from hospital on 30th September 1919.

6. **Chronic Malaria.**—A Muhammadan, male, aged about 25 years, ryot, was admitted on 26th August 1919 for intermittent fever and swelling of the abdomen and legs.

History of malarial fever three years back, tongue flabby, furred. Liver a finger's breadth below the costal margin. Spleen enlarged, hard and slightly moveable—extending up to the level of the umbilicus and to the middle line. Superficial veins of the abdomen distended—ascites.

Vomited about 8 oz. of blood on the evening of 14th September 1919 and about 6 oz. on morning of 15th September 1919, spleen became smaller after the bleeding—four fingers breadth below the costal margin but extending up to the middle line; also diminution of fluid in the peritoneal cavity, general condition fair but for the rapidity of the pulse.

120 per minute—veins on the surface of the belly were also discerned with difficulty—had a motion containing blood and blood clots on the evening of 15th September 1919. From 18th September 1919, spleen began to increase in size. On 27th September 1919, spleen came to nearly the original size and distended veins over the abdomen as presented on admission—ascites was marked.

The patient gives history of having had a similar attack of hæmatemesis and passing blood per anum. He says also that the spleen went down in size a good deal immediately after; but later on increased in size.

Medical Officer.	Class of patients.	Admissions.							Average daily sick.	Deaths per 1,000	Operations exclusive of morphia and other hypodermic injections and catheters passed.							Number of Post-mortem examination held.
		Remained.	Admitted.	Total.	Cured.	Relieved.	Discharged otherwise.	Died.			Remained.	Performed during the year.	Total.	Cured.	Relieved.	Discharged otherwise.	Died.	
Fourth Physician.	Non-Europeans.	33	913	981	453	329	106	55	38	33.10	53.07	83	83	53	23	2	...	19
	Europeans	3	213	216	125	55	11	14	11	10.09	64.81	1	1	...	...	1	...	1
	Total	36	1,161	1,197	578	384	117	69	49	48.19	57.64	84	84	53	23	3	...	20

Table showing the percentage of deaths during the year 1919.

Class.	Percentage including cases admitted moribund.	Total number of cases admitted moribund.	Percentage excluding cases admitted moribund.
Non-Europeans	5.61	10	4.58
Europeans	6.48	...	6.48

Principal diseases and their death-rate.

Diseases.	Total treated.			Deaths.		
	Non-Europeans.	Europeans.	Total.	Non-Europeans.	Europeans.	Total.
Aneurysm	1	2	3	...	1	1
Ankylostomiasis	58	1	59	1	...	1
Asthma	16	7	23	1	...	1
Bronchitis	10	4	14	...	...	...
Cirrhosis of the liver	21	1	22	3	...	3
Diabetes	7	1	8	...	...	...
Dysentery	65	11	76	5	...	5
Enteric fever	8	9	17	1	2	3
Enteritis	35	10	45	5	...	5
Diseases of the heart	20	6	26	3	...	4
Cerebral hæmorrhage	8	7	15	3	1	4
Hepatitis	7	...	7	...	1	...
Gastritis	63	9	72	3	...	4
Kala-Azar	5	...	5	...	1	...
Malaria { Benign tertian	90	22	112	...	...	...
{ Malignant tertian	22	3	25	1	...	1
{ Quartan	2	...	2	...	...	...
{ Chronic	25	2	27	...	...	...
Nervous diseases	19	2	21	...	...	...
Pleurisy	5	1	6	1	...	1
Pneumonia	26	4	30	2	...	2
Pulmonary tuberculosis	53	5	61	9	...	11
Nephritis	31	5	36	2	2	3
Filariasis	5	...	5	...	1	...
Influenza { Febrile	90	33	123	...	...	...
{ Pneumonias	57	11	68	8	...	12
{ Pleurisy	4	...	4	1	4	1
{ Bronchitis	8	8	16	...	...	...
{ Meningitis	4	...	4	1	...	1
{ Intestinal	3	1	4	...	...	...
Post-influenza mania	1	...	1	...	...	...
Post-influenza neuritis	1	1	2	...	...	...

REPORT ON "HOOK WORM."

		Localities.			
Madras.	Georgetown	...	8	Malabar	...
	Perambur	...	2	Villupuram	...
	Mylapore	...	2	Other parts of South Arcot district	...
	Triplicane	...	1	Travancore	...
	Choolai	...	1	Quilon	...
	Royapettah	...	1	Kumbakonam	...
	Chintadripet	...	1	Rajahmundry	...
	Chetput	...	1	Bezwada	...
	Adyar...	...	1	Place not known	...
	Pudupet	...	4		
Ponneri	...	...	10		
Other parts in Chingleput district.		...	10		
		Occupation.			
Coolies	...	17	Peon	...	1
Ryots	...	7	Sweeper	...	1
Cooks	...	4	Police constable	...	1
Merchants	...	2	Weaver	...	1
Students	...	2	Tailor	...	1
Clerks	...	2	Nil.	...	16
Fitters	...	2			
Beggars	...	2			

Results.

Cured	...	42
Relieved	...	15
Discharged otherwise	...	1
Died	...	1
		59

Of the 59 cases, 58 occurred among Indians and one among Europeans.

GOVT. GENERAL HOSPITAL, MADRAS,
5th February 1920.

M. L. KAMATH, B.A., M.D., C.M.,
Fourth Physician.

The attention of the medical officers and subordinates was daily drawn to excess average noticed in their wards. The limit of annas 10 and annas 5 in the European and Indian patients cannot be a guide for Medical Officers in ordering extras owing to the prevalence of abnormal state.

FIRST SURGEON'S WARDS.

These wards were in my charge throughout the year except from 26th May to 25th June 1919, when Lieut.-Col. E. M. Illington, I.M.S., acted for me.

The following table shows the number of persons treated :—

Class.	Remained.	Admitted.	Total.	Cured.	Relieved.	Discharged otherwise.	Died.	Remaining.
Europeans	10	235	245	171	42	18	5	9
Non-Europeans	60	941	1,001	643	123	128	55	52
Total	70	1,176	1,246	814	165	146	60	61

Mortality.—4.8 per cent. This includes 23 cases admitted moribund.

The following table shows the operative work done :—

Class.	Remained.	Operations during the year.	Total.	Cured.	Relieved.	Discharged otherwise.	Died.	Remaining.
Europeans	7	222	229	203	13	3	3	7
Non-Europeans	44	828	872	729	58	24	29	32
Total	51	1,050	1,101	932	71	27	32	39

The following table shows the more important operations done during the year :—

Diseases.	Total number of operations during the year.	Cured.	Relieved.	Discharged otherwise.	Died.	Remaining.
Tumours (including 7 malignant)	44	39	3	...	1	...
Plastic operations	9	5	2	1	...	1
Excision of joints	4	4	...	...	...	...
Amputation	12	10	...	...	1	1
Laparotomy	11	3	2	2	4	...
Gastro-enterostomy	4	3	...	...	1	...
Excision of portion of intestine	3	1	...	...	2	...
Intestinal anastomosis (lateral)	1	...	1	...	...	...
Intestinal obstruction	6	...	...	...	6	...
Appendicectomy	14	13	...	...	1	...
Appendicular abscess	5	4	...	...	1	...
Strangulated hernia	13	9	...	2	2	...
Inguinal hernia (reducible and irreducible)	69	60	...	...	...	9
Harelip	2	2	...	...	...	...
Cleft palate	1	1	...	...	...	...
Excision of tongue	2	1	...	...	...	1
Excision of tonsils for malignant disease (extra-buccal method)	1	1	...	...	...	...
Suppuration of the antrum of Highmore	3	3	...	...	...	...
Trephining for depressed fracture skull	3	2	...	...	1	...
Mastoid abscess	8	7	...	...	...	1
Excision of breast (complete)	6	5	...	...	...	1
Empyema thoracis	2	2	...	...	...	...
Liver abscess	9	6	...	...	2	...
Hydatid cyst liver	1	1	...	...	...	...
Gall bladder (gall stones)	4	3	1	...	...	...
Pancreatic cyst	1	1	...	...	...	...
Kidney	6	4	2	...	...	...
Hydrocele and hamatocele	78	75	...	...	...	3
Elephantiasis scrotum and penis	6	6	...	...	...	...
Cancer penis	1	1	...	...	...	...

The only operations during the year calling for special remarks were :—

(1) *Hypernephroma*.—A badly developed, half starved, irritable, Hindu child, aged two years, was admitted with a firm, irregularly shaped, tumour apparently originating from the region of the right kidney. Dullness was continuous with that of the liver and extended downwards more than four inches below the umbilicus and across the abdomen towards the left iliac region. No reliable history could be obtained. There was no trouble as regards urine, bowels, etc.

An incision was made along the right rectus muscle and the tumour exposed. The colon (ascending and transverse) was firmly adherent to it and several large veins ran across it.

The tumour was separated from the colon and other structures to which it was adherent leaving a sort of false pedicle. This was clamped and divided, and the tumour removed. Bleeding from the vena cava then took place at two points corresponding with the renal and supra-renal veins. This was stopped by lateral silk ligatures applied to the vena cava. The total duration of the operation was seventeen minutes. There was no collapse and the patient made a good recovery.

The tumour weighed just over five pounds and microscopically had the typical appearances of a hypernephroma. When a microscopical examination was made by the pathologist, in addition to the usual appearances of a hypernephroma sarcomatous cells were also discovered.

(2) *Communication between gall-bladder and stomach*.—A Hindu man, aged 36, was admitted to hospital for severe pain in the right epigastric region said to be of three years duration. Nothing abnormal could be felt on palpation. Patient was in a debilitated condition and suffered from symptoms of indigestion. No history of jaundice at any time.

On opening the abdomen, dense adhesions were discovered round the gall-bladder which was shrivelled. On opening the gall-bladder, it was seen to communicate with the stomach through an opening large enough to admit a finger. This opening was carefully sutured.

Owing to the low condition of the patient nothing further was done but it was proposed to do a gastro-jejunostomy later when his general health improved. The pain, which had been continuous and intense, disappeared completely immediately after the operation and the patient refused further operative interference.

In this case it was impossible to determine whether the trouble originated in the gall-bladder or in the stomach, but most probably it began in the gall-bladder.

(3) *Hydatid cyst-liver*.—A Hindu female, aged 26 years, was admitted suffering from an enormous hydatid cyst originating at the upper and back of the liver and filling the abdomen. The cyst cavity was evacuated and packed with gauze, the patient making a good recovery.

(4) *Strangulated left inguinal hernia with inflamed appendix in sac*.—This occurred in a Muhammadan boy, aged six months, and is the fourth case in which I have found the appendix in the sac of a left inguinal hernia. The other three cases also occurred in young boys.

(5) *Fistula between urinary bladder and a tuberculous abscess*.—In this case—occurring in a Hindu man aged 25—a large iliac abscess had burst into the bladder. The bladder was drained through a supra pubic opening which closed in a few weeks. Another opening made into the abscess cavity from just internal to the anterior superior iliac spine has not quite closed at the time of writing this report—about two months later—but promises to close within an appreciable time.

(6) *Carcinoma tonsil*.—An Anglo-Indian medical practitioner, aged 55, was admitted for advanced carcinoma of the right tonsil, which he first noticed fourteen months prior to admission.

The tonsil and surrounding structures had a typical cancerous appearance. His general condition was below *par*. The tonsil and surrounding tissues were freely removed by the extra-buccal method, the jaw having first been divided and a tracheotomy performed. The external carotid was not tied nor was there any necessity to do so as bleeding gave little trouble owing to the fact that the field of operation was well exposed.

There was no shock after the operation and the patient made a good recovery.

GOVT. GENERAL HOSPITAL, MADRAS,
2nd March 1920.

W. J. NIBLOCK, Lieut.-Col., I.M.S.,
First Surgeon.

SECOND SURGEON'S WARDS.

These wards were in charge of the following officers during the year for the periods noted against their names:—

1. Lieut.-Col. W. J. Niblock, I.M.S., from 1st to 2nd January 1919.
2. " E. M. Illington, I.M.S., from 3rd January to 9th March 1919.
3. " T. H. Symons, I.M.S., from 10th March to 5th April 1919.
4. " E. M. Illington, I.M.S., from 5th April to 26th June 1919.
5. " W. J. Niblock, I.M.S., from 27th June to 6th July 1919.
6. " E. M. Illington, I.M.S., from 7th July to 31st August 1919.
7. Mr. S. Ranga Acharya, M.B., C.M., Acting Senior Surgeon from 1st September to 31st December 1919.

The following table shows the number of patients treated:—

Class of patients.	Remained.	Admitted.	Total.	Cured.	Relieved.	Discharged otherwise.	Died.	Remaining.
Europeans	10	138	148	103	21	10	4	10
Non-Europeans	37	724	761	493	89	99	33	47
Total	47	862	909	596	110	109	37	57

Mortality.—4.07 per cent including 20 moribund cases.

Average daily sick including venereal cases.

Europeans 10.14
Non-Europeans 63.73

Total ... 73.87

The following table shows the operative work done:—

Class of patients.	Remained.	Performed during the year.	Total.	Cured.	Relieved.	Discharged otherwise.	Died.	Remaining.
Europeans	8	61	69	61	6	1	...	1
Non-Europeans	27	506	533	395	71	13	26	29
Total	35	567	602	456	77	14	26	30

Mortality.—4.35 per cent.

The following table shows the important operations done during the year:—

Diseases.	Total number operated.	Cured.	Relieved.	Discharged otherwise.	Died.	Remaining.
Tumours and cysts	17	16	...	...	1	...
Plastic operations	6	6	...	...	...	...
Wiring or plating for fractures	4	2	...	...	...	2
Arthrectomy	2	...	...	...	...	2
Excision of joints	3	...	2	...	...	1
Major amputations	18	16	...	...	1	1
Trephining	1	...	...	...	1	...
Harelip	2	2	...	...	...	1
Excision of tongue for cancer	1	1	...	...	...	...
Mastoid abscess	9	6	1	1	1	...
Excision of breast	7	5	...	...	1	1
Liver abscess	8	8	...	...	...	...
Laparotomy	10	2	1	1	6	...
Colotomy	1	...	...	...	1	...
Intestinal obstruction	3	...	...	...	3	...
Appendicectomy	1	1	...	...	...	...
Strangulated hernia	12	9	...	1	1	1
Inguinal hernia	37	35	...	...	...	2
Pancreatic cyst	1	1	...	...	...	...
Nephropexy	1	1	...	...	...	...
Vesical calculus	2	1	...	...	1	...
Amputation penis	5	5	...	...	...	...
Varicocele	4	4	...	...	...	...
Hydrocele and Hæmatocele	39	36	...	...	...	3
Removal of Testis	7	7	...	...	...	...
Removal of elephantoid penis and scrotum	11	10	...	...	...	1
Ovariectomy	1	1	...	...	...	...
Removal of malted tubes and ovaries	1	1	...	...	...	...
Fibroid uterus (Enucleation of fibroid)	1	1	...	...	...	...

REMARKS ON SOME OF THE ABOVE CASES.

(1) A case of liver abscess in a Hindu male, aged 40 years, was admitted into hospital on 21st October 1919. Since the patient was not in a fit condition for open operation—aspiration of the contents of the liver abscess to the extent of 50 ounces was done by means of Potaines aspirator. Ten days later, forty ounces of pus was aspirated once again from the same abscess. The patient was showing signs of improvement and was once again aspirated about a fortnight later; only a few drams of pus could be drawn. A week later the patient was discharged from the hospital cured, the liver having resumed its normal size. The patient had no temperature all along: he had twelve injections of emetine also.

(2) A Hindu boy, aged 12 years, was admitted into hospital with retention of urine. On examination he was found to have a stone impacted in the urethra which was removed. The symptoms not being relieved the bladder was sounded and a grating sensation was felt. A suprapubic cystotomy was done and a stone about the size of a walnut was found in a pouch behind the internal meatus which was removed. On further examination, a soft tumour about the size of a lime was found in the upper part of the bladder which was also removed.

Professor of Pathology's report about the tumour was "a fibroma with necrotic areas."

(3) An Indian Christian woman, aged about 20 years, was admitted with a compound comminuted fracture of the left femur with considerable overriding of the fragments; there was much bleeding; the wound was opened, loose pieces of bone were removed, the fragments were brought into apposition with considerable difficulty and were plated. The patient is still in hospital and the fragments have united fairly well.

(4) A Hindu boy, aged 5 years, was admitted into hospital with a cystic tumour in the epigastric region. There was a history of injury to epigastrium about six weeks previously. It was diagnosed as a pancreatic cyst. It was explored with a needle and a clear brown fluid was drawn, which on examination was found to contain bile and blood. On laparotomy, the peritoneum was found adherent to the cyst wall and on opening into the cyst—a large quantity of bile and bloodstained fluid was evacuated. The operation confirmed the diagnosis, the cyst was plugged with gauze and a drainage tube was left in. The patient made an uninterrupted recovery and was discharged cured.

VENEREAL WARDS.

Class of patients.	Remained.	Admitted.	Total.	Cured.	Relieved.	Discharged otherwise.	Died.	Re- maining.
Europeans	3	38	36	13	19	3	...	1
Non-Europeans	23	298	321	159	113	30	3	16
Total	26	331	357	172	132	33	3	17

Mortality.—84 per cent.

During the last two months of the year the venereal hut for male patients was closed for repairs. Five of the beds in the Third Surgeon's hut were made use of. In spite of the smaller number of beds available for the male patients, the total number of admissions for the year compares favourably with that of last year. There is no doubt that the wards are well utilized as a large number of patients deserving admission have to be refused admission for want of beds.

Syphilis.—Seventy-five per cent of the cases treated in the wards were suffering from syphilis in some form or other. Treatment by the intra-muscular administration of mercury has been largely tried with very good results. There is no doubt that this method is superior to the other methods of administration of mercury as patients are rapidly brought under the influence of mercury and the toxic symptoms arising from the other methods have not been met with.

During the early part of the year, ampsalvs was administered mainly intravenously. Latterly, it was given also intramuscularly with the idea that in this way the early elimination of the drug is prevented and better results will be obtained. The only disadvantage when administered intramuscularly is a certain amount of dull pain which the patient complains of for the first few days.

Infective granuloma.—Twenty-six cases were treated—the majority were given tartar emetic intravenously and improvement was noticed from the beginning. Six cases were treated by excision. All six were discharged cured.

GOVT. GENERAL HOSPITAL, MADRAS,
26th January 1920.

S. RANGA ACHARYA, M.B., C.M.,
Second Surgeon.

ANNUAL REPORT OF THE X-RAY DEPARTMENT FOR 1919.

1. The X-Ray Department had been under the management of two X-Ray Assistant Surgeons Rao Sahib M. Govindarajulu Nayudu and R. A. D. Graham, M.B., C.M., the former looking after the Radiographic and Photographic works and the latter, Radio and Electro-therapeutic works.

As usual in addition to the cases of this hospital, patients from Ophthalmic and Rayapuram hospitals were also attended to.

Suggestions.

Though there are several induction coils in the Radio-therapeutic section, sufficient current could not be obtained for treating uterine fibroids and these cases had therefore to be treated with the powerful coil in the Radiographic section, which very often interfered with the regular work of that section. Hence a more powerful set of X-Ray apparatus for administering enormous doses of X-Rays is necessary in the therapeutic section. The want of a high frequency apparatus was keenly felt for treating certain nervous diseases.

The following table will show the nature and amount of work done during the year under report as compared with the two previous years :—

Table I.

Nature of work.	1917.	1918.	1919.
I. Radiographic work—			
(a) Radiograph (Sktagraph)	824	825	999
(b) Radioscopes (Screen examinations)	41	41	55
II. Radio-therapeutic work—			
X-Ray exposures	438	848	602
III. Photographic work—			
Photograph	8	6	16
IV. Electro-therapeutic work—			
(a) Galvanization	122	140	564
(b) Faradization	100	59	281
(c) Electrolysis	5	5	1
(d) Ionic medication	335	372	860
(e) Cantherization	61	49	71
(f) Vibratory massage	...	9	72
Total ...	1,934	2,354	2,531

The decrease in the number of X-Ray exposures is due to the powerful doses given to patients at longer intervals and hence patients had to attend less number of times than hitherto.

Table II.

Assistant Surgeons deputed to learn X-Ray work in 1919.

Serial No.	Name.	Designation.	Period.		Remarks.
			From	To	
1	B. Padmanabha Rao, L.M.S.	Civil Assistant Surgeon ...	8 Apr. 1919	30 June 1919	Gone back to the Tanjore Medical School.
2	M. Jayaram Nayudu ...	Ex : Burma Medical Pupil.	5 Aug. 1919	16 Jan. 1920	Still working in X-Ray Department, General Hospital.
3	C. Raman, L.M.P., No. 1160.	Sub-Assistant Surgeon ...	17 Nov. 1919	16 Jan. 1920	Gone back to Madura Hospital.

GENERAL HOSPITAL, MADRAS,
5th February 1920.

F. F. ELWES, M.D., C.I.E., Lieut.-Col., I.M.S.,
Superintendent.

NOSE, THROAT AND EAR DEPARTMENT.

Civil Assistant Surgeon R. A. D. Graham, M.B., C.M., was in charge of this department throughout the year except for 1½ months when he was on privilege leave, during which period temporary Assistant Surgeon Narayana Menon, B.A., M.B., B.S., was looking after this work.

The total number of cases treated during the year was 1,058 as against 635 of the previous year and the number of operations performed 155 as against 110 of the previous year. The following statement gives the different classes and sexes that were treated during 1919 with the average daily attendance :—

Total treated, 1,058.																Operations..		Total average daily attendance.
Europeans.				Hindus.				Muhammadans.				Other castes.				Europeans.	Indians.	
Male.	Female.	Male child.	Female child.	Male.	Female.	Male child.	Female child.	Male.	Female.	Male child.	Female child.	Male.	Female.	Male child.	Female child.			
94	47	20	8	478	112	55	42	43	3	2	4	88	42	10	12	33	122	782

This department requires a good deal of improvement to make it more useful and up to date.

GOVT. GENERAL HOSPITAL, MADRAS, F. F. ELWES, M.D., C.I.E., Lieut.-Col., I.M.S.,
February 1920. Superintendent.

THIRD SURGEON'S WARDS.

I was in charge of these wards throughout patients treated during the year 1919.—
The following table shows the number of the year.

Class.	Remained.	Admitted.	Total.	Cured.	Relieved.	Discharged otherwise.	Died.	Remain- ing.
Non-Europeans ...	54	931	985	703	105	76	56	45
Europeans ...	9	156	165	112	24	17	3	9
Total ...	63	1,087	1,150	815	129	93	59	54

Mortality.—4.5 per cent. This includes 32 cases admitted moribund.

Operative work.—The following table shows the operations done during the year :—

Class.	Remained.	Operated.	Total.	Cured.	Relieved.	Discharged otherwise.	Died.	Remain- ing.
Non-Europeans ...	48	782	825	705	50	2	36	32
Europeans ...	5	136	141	118	16	...	1	6
Total ...	48	918	966	823	66	2	37	38

Mortality.—5 per cent.

The following were the important operations done during the year :—

Tumours and cysts.—18 cases, 17 cured, 1 remaining.

Operations on bones.—Sequestrotomy (for necrosis) 37 cases, 31 cured, 2 relieved, and 4 remaining.

Excision and arthroplasty.—One (for bony ankylosis elbow) cured.

Major amputations.—Thirty-three cases, 25 cured, 5 died, and 3 remaining.

Trephining for depressed fracture of the skull.—Three cases, 2 cured, and 1 died.

Harelip.—Two cases, cured.

Mastoid abscess.—Six cases, 5 cured and 1 died.

Liver abscess.—Nine cases, 3 died and the rest cured.

Abdominal operations.—(a) Gastro-enterostomy.—Two cases (for pyloric stenosis), cured.

(b) Colotomy.—Three cases, one was done as a palliative operation for inoperable carcinoma of the rectum. The patient left the hospital much benefited by the operation. Another was done for acute-intestinal obstruction in a case of cancer rectum. The patient died. Another was done for a case of imperforate anus. The child died six days after the operation of exhaustion.

(c) Appendicectomy.—Three cases, all cured.

(d) Suppurative cholecystitis with gall stoner.—One case cured.

Besides these, six laparotomies were done for intestinal obstructions, inoperable tumours, peritonitis, moveable spleen, etc.

Hernia.—(a) Red inguinal.—Thirty-nine cases, cured.

(b) Strangulated inguinal.—Thirteen cases, 10 cured, 3 died.

(c) Irreducible inguinal.—Four cases, cured.

Imperforate anus.—One case, cured.

Suprapubic lithotomy.—Four cases, cured.

Stricture urethra.—(a) Dilatation.—Forty-one cases, 26 cured, 12 relieved, and 3 remaining.

(b) Cock's perineal section.—Three cases, 2 cured and 1 died.

Amputation of the penis.—(For cancer) 2 cases, cured.

Hydroceles.—Seventy-five cases, 72 cured and 3 remaining.

Haematocoles.—Eight cases, 7 cured and 1 remaining.

Castration.—Seven cases, 6 cured and 1 relieved.

Elephantoid scrotum.—Eleven cases, cured.

GOVT. GENERAL HOSPITAL, MADRAS,
28th January 1920.

W. J. FERNANDES,
Acting Third Surgeon.

OUT-PATIENT DEPARTMENT BY THE RESIDENT MEDICAL OFFICER.

The out-patient was in charge of the Resident Medical Officer Major J. Kirkwood, I.M.S., from 1st January 1919 to 7th August 1919. I took over charge of the out-patient department on the afternoon of 7th August 1919.

The following Assistant Surgeons and Sub-Assistant Surgeons were on the out-patient staff during the year :—

Civil Assistant Surgeon K. Srinivasa Sastri, First Assistant to the Resident Medical Officer, from 1st January 1919 to 19th November 1919.

Civil Assistant Surgeon L. S. Ramachandran, L.M. & S., from 20th November to 31st December 1919.

Civil Assistant Surgeon Tiruvankata Acharya, Second Assistant to the Resident Medical Officer, from 1st to 14th January 1919.

Civil Assistant Surgeon T. Kulanayagam from 14th January to 31st December 1919.

Clinical Instructions.

	From	To
Civil Assistant Surgeon V. N. Venkataraman, B.A., M.B., B.S.	23 July 1917	3 July 1919
Temporary Civil Assistant Surgeon B. Srinivasa Acharya, L.M.S. ...	24 Sep. 1918	27 June 1919
" B. Narasinga Rao, M.B., B.S. ...	3 July 1919	31 Dec. 1919
" V. K. Narayana Menon, M.B., B.S.	25 June 1919	31 Dec. 1919

Sub-Assistant Surgeons.

Sub-Assistant Surgeon B. Bhaskara Rao, No. 999 ...	1 Jan. 1919	6 Nov. 1919
" Narayanaswami Ayyar, No. 721 ...	1 Jan. 1919	13 Mar. 1919
" Sivasambu, No. 1033.	1 Jan. 1919	23 Jan. 1919
" Kandaswami Pillai, No. 958 ...	26 Mar. 1919	29 Apr. 1919
" P. V. Thomas, No. 483 ...	24 Jan. 1919	28 May 1919
" P. Chakrapani Nayudu, No. 821.	29 May 1919	31 Dec. 1919
Temporary Assistant Surgeon Devanayagam Ayyangar ...	23 July 1919	9 Aug. 1919
" M. A. Ephraim ...	7 Oct. 1919	23 Oct. 1919
" C. Raman, No. 1160.	17 Nov. 1919	31 Dec. 1919
" K. R. Ramachandra Sastri ...	6 Nov. 1919	31 Dec. 1919
" Amos Patro, No. 600.	20 Nov. 1919	31 Dec. 1919
" J. Jasudoss Pillai, No. 831 ...	24 Nov. 1919	20 Dec. 1919

The following table shows the work done in the out-patient department during the year :—

	Total treated.					Average daily sick.					Opera- tions.	Post-mortem Examination.
	Men.	Women.	Male children.	Female children.	Total.	Men.	Women.	Male children.	Female children.	Total.		
Non-Europeans	38,680	8,764	4,406	3,610	55,460	247.41	57.22	32.39	26.46	363.48	5,149	2
Europeans	2,490	1,232	508	409	4,639	10.94	6.73	2.91	2.95	23.53	938	1
Total	41,170	9,996	4,914	4,019	60,099	258.35	63.95	35.30	29.41	387.01	6,087	3

The number of Europeans and non-Europeans treated decreased during 1919 as compared with the previous year and the decrease is probably due to influenza not being so prevalent as in the previous year.

The clinical teaching of students was done by Major J. Kirkwood, I.M.S. and myself and Civil Assistant Surgeons V. N. Venkataraman, B. Srinivasa Acharya, B. Narasinga Rao and K. Narayana Menon (Assistant to the Professors of Medical College).

GOVT. GENERAL HOSPITAL, MADRAS,
10th February 1920.

V. P. KAMATH, L.M. & S.,
Resident Medical Officer.

DENTAL DEPARTMENT.

The number of admissions during 1919 was	...	...	...	...	...	...	...	...	3,402
Including :—									
Europeans and Anglo-Indians	...	...	...	...	...	...	...	...	841
Muhammadans	...	...	...	...	...	...	...	...	135
Hindus	...	...	...	...	...	...	...	...	2,140
Other castes	...	...	...	...	...	...	...	...	286
									2,319
Males	...	...	...	...	...	...	...	...	845
Females	...	...	...	...	...	...	...	...	238
Children	...	...	...	...	...	...	...	...	

The treatment carried out by me was as follows :—

Deciduous teeth extracted in treatment of retention, stomatitis, and dental caries	...	...	...	...	...	...	...	...	182
Permanent teeth and stumps extracted in treatment of the following conditions :—									
Dental caries	...	...	...	...	...	...	...	...	502
Pyorrhea alveolaris	...	...	...	...	...	...	...	...	592
Alveolar abscess, etc.	...	...	...	...	...	...	...	...	231
Impacted lower third molars	...	...	...	...	...	...	...	...	22
Abrasion and attrition	...	...	...	...	...	...	...	...	7
Fractured and partially dislocated teeth	...	...	...	...	...	...	...	...	18
Irregularity	...	...	...	...	...	...	...	...	8
Supernumerary teeth	...	...	...	...	...	...	...	...	3
									Extractions ... 1,565
Cocaine injections	...	...	...	...	...	...	...	...	22
Ethyl chloride administrations	...	...	...	...	...	...	...	...	94
									35
Fillings	...	...	...	...	...	...	...	...	116
Scalings	...	...	...	...	...	...	...	...	32
Incisions, in cases of erupting lower third molars, etc.	...	...	...	...	...	...	...	...	7
Sequestra removed	...	...	...	...	...	...	...	...	1
Vulcanite and gold splint, in case of fracture of alveolar process of maxilla.	...	...	...	...	...	...	...	...	1
Vulcanite splint in case of fracture of mandible	...	...	...	...	...	...	...	...	1
Struck metal splint, in case of necrosis of mandible	...	...	...	...	...	...	...	...	1
Regulating plate	...	...	...	...	...	...	...	...	1
Denture carrying two teeth	...	...	...	...	...	...	...	...	1
									Total operations ... 1,760
Treatment of gums, alveolo-dental periosteum, etc.	...	...	...	...	...	...	...	...	185
Advice	...	...	...	...	...	...	...	...	34
Either examination or treatment refused by patients	...	...	...	...	...	...	...	...	19

The Second Dental Surgeon reports in a separate memorandum on the cases treated by him.

The number of admissions for 1919 (3,400) shows an increase of 900 on the number for 1918 (2,500), and an increase of 1,184 on the average of the four previous years (2,266).

The highest previous record, that for 1918, was 2,630, when I was assisted by Mr. S. I. Blairman, who was appointed to act for me during July, August and September of that year. In my 1913 report I wrote :—

“The increase over last year in admissions is chiefly due to the fact that Mr. A. A. Moreira, L.M.S., who had nine months' training under me, was permitted to treat patients during April, May and June, when the dental room is usually closed. This year's results prove, I think beyond a doubt, that there is real need at this hospital of a properly organized department for the treatment of dental cases all the year round.”

This year's report bears out that opinion, and shows that supply in the matter of dental treatment has created demand. The additional service available by the appointment of a second dental surgeon, allowing for the daily treatment of cases and the working of the department throughout the year, breaks entirely new ground, my own personal work not having been lessened.

No improvement, however, has taken place with regard to the administration of anaesthetics. A special and regular anaesthetist is still not available, and an Assistant Surgeon (who is often without special experience) has to be applied for to the R.M.O. whenever an administration is required.

The treatment reports show that Ethyl Chloride has been administered 188 times. A considerably higher ratio of administrations to extractions could be attained if the services of an Assistant Surgeon experienced in giving ECI for dental operations were regularly available.

The present accommodation will not of course permit of the provision of a waiting room or lavatory, for the use of anaesthetic patients, but I think it most desirable that a nurse should be in attendance on certain days to prepare female patients for the administration and to look after them afterwards.

GOVT. GENERAL HOSPITAL, MADRAS,
31st January 1920.

C. F. BADCOCK, L.D.S., R.C.S. (Eng.),
Dental Surgeon.

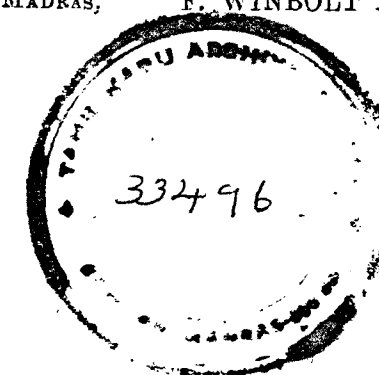
ANNUAL REPORT OF THE SECOND DENTAL SURGEON.

The following is the work done by me for the year 1919 :—

Deciduous extractions	...	...	...	...	...	...	...	...	113
Permanent extractions in the treatment of the following conditions :—									
Dental caries	...	...	...	...	...	...	...	...	463
Pyorrhoea alveolaris, etc.	...	...	...	...	...	...	...	...	436
Alveolar abscess	...	...	...	...	...	...	...	...	156
Epithelioma	...	...	...	...	...	...	...	...	11
Impacted lower third molar	...	...	...	...	...	...	...	...	8
Abrasion and attrition	...	...	...	...	...	...	...	...	12
Fractured and dislocated teeth	...	...	...	...	...	...	...	...	15
Irregularity	...	...	...	...	...	...	...	...	6
									Extractions ... 1,220
Fillings	...	...	...	...	...	...	...	...	68
Scalings	...	...	...	...	...	...	...	...	266
Incisions	...	...	...	...	...	...	...	...	67
Sequestra removed	...	...	...	...	...	...	...	...	4
Hammond and wire splints	...	...	...	...	...	...	...	...	2
									Total operations ... 1,627
Treatment of dental caries and periodontitis, etc.	...	...	...	...	...	...	...	...	329
Advice	...	...	...	...	...	...	...	...	59
Refusals	...	...	...	...	...	...	...	...	30
Cocaine injections	...	...	...	...	...	...	...	...	1
Chloroform administrations	...	...	...	...	...	...	...	...	3
Ethyl Chloride administrations	...	...	...	...	...	...	...	...	94

GOVT. GENERAL HOSPITAL, MADRAS,
28th January 1920.

F. WINBOLT LEWIS, L.D.S., R.C.S. (Eng.),
Second Dental Surgeon.



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