

Clinical and Other Notes.

THE SOLDIER'S HEALTH OVERSEAS.—A YEAR'S STATISTICS.

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THIS is the record of a year's health in an infantry battalion overseas. The battalion landed at Algiers in November, 1942, arrived at the Tunisian front on December 6, and first met the Germans on the 11th. Thereafter it remained in the line practically without interruption until the conclusion of the campaign five months later, fighting on every front and in every type of country. The battalion then took part in the expeditions to Pantelleria, and Lampedusa, after which the rest of the year was spent in reserve.

The year under review commenced on January 15, 1943, the date from which accurate records were once more kept after an interruption due to the early battles and to the loss of the Sick Book in transit to Tunisia (massive losses and thefts of kit at the Bases were distressing features of the early part of the campaign).

The strength of the battalion varied from 650 to 1,000, averaging 800 (including 35 officers). No claim is made that these statistics are free from inaccuracies. It is very difficult to keep exact records under battle conditions but, wherever a doubt has arisen, the higher figure has been chosen so that at least the statistics cannot be accused of flattery. Battle casualties are of course excluded; the figures relate only to sickness.

A good picture of the state of health of a battalion can be obtained from the following three data: (i) the number of new cases reporting sick; (ii) the number of men excused duty (i.e. marked "attend B," "attend C," or "Hospital"); and (iii) the number of men evacuated to hospital.

Daily averages of these figures for each lunar month are set out in Table I. The Index is an attempt to provide a single convenient indication of the general level of sickness. It is merely the sum of the other three figures divided by ten to the nearest whole number.

TABLE I.—DAILY AVERAGES PER 1,000 MEN.

Month.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Mean
New cases	10	9	10	8	11	10	8	7	11	10	9	7	5	9
Excused duty	8	5	6	4	14	17	15	12	18	27	31	26	22	16
Evacuated to hospital	2	2	2	1	3	1	1	1	2	3	3	2	2	2
Index	2	2	2	1	3	3	2	2	3	4	4	4	3	3

It will be seen that the new cases averaged 1 per cent of the battalion. In addition an average of 2 per cent reported daily at the R.A.P. (Regimental Aid Post) for inspection and treatment. There was therefore a total daily attendance for all purposes of 3 per cent.

Climatically the year fell into two well-defined halves; the cold and wet season (mid-November to mid-May) in which even snow was encountered; and the dry scorching summer. The period when the battalion was fighting (January-May) can also be distinguished from the rest of the year. Averages for these different periods are tabulated in Table II. They show that the battalion (mainly North-countrymen) stood up to the winter rather better than to the hot season and that sickness was rather lower during the fighting months.

TABLE II.—DAILY AVERAGES PER 1,000 MEN.

	Cold season	Hot season	Non-fighting cold months	Fighting months	Non-fighting months
New cases	8	9	6	9	9
Excused duty	12	19	24	6	20
Evacuated to hospital	2	2	2	2	2
Index	2	3	3	2	3

This relatively low sickness rate during active operations is no new observation. The following explanations are suggested:—(i) Under battle conditions wounded men (who might otherwise have fallen sick) are continually being replaced by healthy reinforcements. The unit receives repeated blood transfusions as it were.

(ii) Under battle conditions the medical officer keeps down to a minimum the number of men excused duty.

(iii) Most important of all, under battle conditions the soldier has less time to think of his ailments and moreover makes every effort to carry on. (An insignificant minority of course take the opposite view, regarding sickness as a heaven-sent avenue of escape from unpleasant responsibilities.)

Table III shows the relative incidence of sickness in the different companies throughout the year. The rate is approximately the same in all, Headquarter and Support Companies together being more than double the size of a rifle company.

TABLE III.

	Percentages		
	New cases	Excused duty	Mean
Headquarter and Support Companies	39	36	37.5
No. 1 Company	16	17	16.5
No. 2 Company	15	16	15.5
No. 3 Company	15	17	16
No. 4 Company	15	14	14.5

The relative incidence of different ailments is interesting. Ailments are classified as: Dental (including gingivitis, which was much less common than in the U.K.). Alimentary (mainly diarrhoea). Traumatic (from which war wounds are of course excluded). Skin (this includes boils, carbuncles, infected cuts and whitlow); and Remainder (which includes coughs, colds and sore throats).

This may strike many readers as a curious classification. It was inherited from my distinguished predecessor, Captain C. P. Blacker, and it is a good practical classification for a body of comparatively fit men. (This year a modification is in use, namely, alimentary, traumatic, skin, I.A.T., respiratory and remainder.)

Table IV shows the proportions of the different groups during the main periods of the year. It will be seen that diarrhoea is much commoner in the hot season (when flies are pestilential) and that traumatic conditions are commoner during active operations. All this is to be expected. The average for the year illustrates the high incidence of septic scratches, sores, boils and skin infections of all kinds, which were easily the principal scourge. This must be attributed to the impossibility of keeping clean on active service and (in summer) to the effect of the African sun upon the skins of fair-haired, blue-eyed individuals, of whom there were a majority in the unit.

TABLE IV.

	Percentages					
	Cold season	Hot season	Non-fighting cold months	Fighting months	Non-fighting months	Whole year
Dental	5	7	3	7	6	6
Alimentary	9	23	6	12	19	17
Traumatic	16	11	12	18	11	13
Skin	32	23	32	31	25	27
Remainder	38	36	47	32	39	37

The incidence of various important diseases is recorded in Table V. There were no cases of smallpox, enteric fever, tetanus or typhus (although these diseases are endemic in the civilian population of North Africa) because the battalion was protected against them by inoculation. The cases of diphtheria occurred in a small epidemic in which the disease was fortunately very mild.

The high incidence of infective hepatitis amongst officers is remarkable. Of the numerous explanations put forward two appear more convincing than the rest:—

(i) Except under battle conditions officers sleep in pyjamas, and may catch cold while

dressing and undressing. Chilling of the abdomen is a definite danger in Africa (it is an important factor in causing diarrhoea) and it is a pity that British troops are not issued with body belts as were the Germans and Italians.

(ii) Again, apart from active operations, officers feed together in a Mess and use communal utensils. This is probably much more important than (i).

TABLE V.—CASES PER 1,000 MEN PER ANNUM

Diphtheria	..	..	..	..	..	..	..	13
Dysentery	..	..	..	..	..	..	..	18
Infective Hepatitis	..	..	..	..	..	..	..	53 (includes 12 officers)
Malaria	..	..	..	..	..	..	..	35
Venereal Diseases	..	..	..	..	..	..	..	13

In the hot season bursitis, conjunctivitis and balanitis were common and, when sea-bathing was possible, there were many cases of otitis externa.

Among comparative rarities there were two cases of erythema multiforme and one case each of the following: battledress dermatitis, angioneurotic oedema (sensitivity to opium), heat-cramps, surgical emphysema of the eyelids of the right eye (after boxing), osteochondritis dissecans and spondylitis ankylopoietica. The highest temperature recorded in the R.A.P. was 105° F., in a case of malignant tertian malaria.

This account is submitted in the hope that similar units, perhaps in the other Services, will send their figures for comparison.

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THE CORRELATION OF MEDICAL SCIENCE AND PHYSICAL EDUCATION.¹

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AFTER pointing out that in Ancient Greece intellectual, spiritual, and physical culture went hand in hand, that athletics were intimately associated with the Arts, and that the ideal of the cultured citizen-soldier-athlete died with the Greeks, the lecturer said that since those times many efforts had been made by many countries on a national scale to improve physical welfare, but the motive had usually been immediate and objective and often undertaken for purely military purposes. One had only to cite the instances of Rome, Germany, and Japan.

In our own country the urge had not been lacking, but it had usually lacked Government assistance. From time to time isolated organizations—often voluntary—had appeared and struggled in a parochial way to promote physical fitness. They had usually lacked Government support and co-operation from the different sections of the community interested in the wider problems. In such circumstances their outlook tended to become narrow, their design sometimes faddish, and, like Herrick's daffodils, they tended to "haste away too soon."

It was urged that there was, therefore, a great need to bring together all those services without whose combined interest success was unattainable.

He suggested that medicine had placed too much emphasis on the cure of disease and too little on preventing it; education had placed too great an emphasis on academic and too little on physical distinction; industry, with the exception of certain large and enlightened firms, had failed to appreciate that the health of its employees was an asset and that ill-health yielded a poor economic return; and organizers of sport had been prone to cater for the

¹ From a Lecture delivered at the Royal Institute of Public Health and Hygiene, 28, Portland Place, London, W.1, on Wednesday, November 22, at 3.30 p.m. Mr. Percival P. Cole, M.B., Ch.B., F.R.C.S., in the Chair.