

of enteric cases, that a relatively large proportion of the cases of typhoid had occurred amongst the New Zealand troops. We found that the exceptional prevalence and severity of enteric amongst New Zealand troops was fully realized also in the hospitals at Mudros.

Returns have been kindly furnished us, at our request, by the Records Office of the New Zealand Forces relating to the incidence of enteric amongst their troops. These show that no fewer than 453 cases of enteric fever had been reported to have occurred among the New Zealand troops in Egypt, Mudros, and on the peninsula since their arrival in Egypt early in the year. The proportion to strength as compared to that in British Forces cannot here be given, but there is no doubt that the New Zealand incidence has been quite exceptionally heavy. Moreover, the enteric cases in question have shown an exceptional case-mortality—viz., 93 cases out of 453 cases, or a fatality of 20·5 per cent. This fatality-rate may be compared with one of 6·5 per cent. for the cases of enteric in No. 21 General Hospital, Alexandria, in which large numbers of enteric cases from British Forces generally have been received. It may be noted, though the figures are small, that among 240 New-Zealanders who had joined from England and been inoculated there only three had developed enteric fever.

We therefore strongly recommend that all troops coming from New Zealand should be inoculated before leaving or on their passage to Egypt with an Army strain of anti-typhoid vaccine.

As regards the troops already out, we understand that inoculations have been or are being carried out among the New Zealand troops now in rest camps in Mudros. It would be as well if the exact position in connection with this reinoculation could be ascertained, so that any gaps in the scheme for general reinoculation could be filled in as soon as opportunity permits.

At present the vaccine issued by the Army is, we believe, solely an anti-typhoid vaccine. Should it be decided to issue a vaccine prepared against paratyphoid fever as well as against typhoid, we think that the double protection should be given to all troops hitherto uninoculated or inoculated only with the New Zealand strain.

7. The diseases most prevalent on the peninsula (including Anzac) at the present time are those due to infections of intestinal origin (dysentery, enterica, diarrhoea, &c.). The bulk of the dysentery hitherto has been amœbic, the enterica cases have included a material portion of paratyphoid fever. The diarrhoea cases, when not incipient or mild dysentery or enterica, are attributable to a variety of infections. Any of the ordinary causes of spread of diseases of this group may operate at the front and have to be dealt with by suitable precautions (see in particular those referred to in section 3 above), and by the supply of necessary wood and other material for latrines and other sanitary requirements. Those against flies have been of special importance: under winter-conditions and with greater rainfall special care will be needed in regard to water-supplies.

In different reports the committee have drawn attention to other conditions contributing to the maintenance or prevalence of diseases of this group. These include the monotony of diet, need for ample supplies of bread, oatmeal, and other non-meat foods, and absence of sufficient canteens at which adjuncts, relishes, &c., can be obtained—*e.g.*, Worcester sauce, canned fruit, vinegar. They understand that action has been taken in some of these matters since their inquiries were made. The effect of dust, both as a mechanical irritant to the intestine and as a vehicle of infection, has also been discussed in their reports.

Other important questions affecting the resisting-power of the men are their employment on heavy fatigues in the gullies and beaches and the need for resting the troops. The committee has on health grounds strongly supported the introduction of the rest-camps off the peninsula. They considered it important that during this rest period means should be taken to provide real recreation and entertainment for the men, and so increase their power of recuperation.

Any action which the New Zealand authorities could take to supplement the Army arrangements at rest camps (on lines previously agreed with the Army authorities) should be very useful.

On the medical side it is important that medical officers should realize the importance of treating the diarrhoea and other intestinal disturbances thoroughly and at the earliest opportunity, with a view to prevent the development of dysentery. As dysentery is believed not to be common in New Zealand, reference may here be made to a useful account of this disease in "Manson's Tropical Diseases" (5th edition, 1915), which includes reference to the Emetine treatment essential for amœbic dysentery.

The committee consider that pyorrhœa due to defective teeth has had an important concern with the prevalence of diarrhoea (refer to paragraph 3 above).

8. Diseases specially associated with exposure to chill and cold had not become prevalent at the time of the committee's visits to the peninsula. It was understood that various steps were being taken to provide for clothing suitable for winter-conditions and for the protection of dug-outs, rest camps, &c., from the weather to the extent that military considerations allowed.

No doubt Lieut.-Colonel Rhodes, in his visits to Mudros and the peninsula, will have ascertained the present condition of this important matter so far as it affects New Zealand troops.

We have, &c.,

W. HUNTER, Colonel, A.M.S.

G. S. BUCHANAN, Lieut.-Colonel, R.A.M.C.

L. S. DUDGEON, Lieut.-Colonel, R.A.M.C.

Alexandria, 30th October, 1915.