BUSRA WALLAH.

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To those who regularly study the Journal of the Royal Army Medical Corps it must be quite obvious that a considerable diversity of opinion still exists as to what form a Medical Appreciation of a military situation should take, and further, the numerous articles and appreciations that have appeared from time to time clearly indicate that the time has come when a standard form of Medical Appreciations should be agreed upon and adhered to; until such time as a standard is arrived at we must expect the controversy to be continued, and this must be my excuse for a "still further appreciation." One cannot fail to sympathise with candidates for promotion to Lieutenant-Colonel, they hope against hope that their particular effort may fall in with the particular examiner's views, some are afraid to say too much, others that they may not say enough, and so on. My own view is that the appreciation should be very short; it should consist of conclusions; how these conclusions are arrived at constitutes the what may may be called academic knowledge, and may be elaborated in detail in the appendices; if the General Officer Commanding wishes for confirmation of how the conclusions are arrived at, he has but to turn to the appendices; if he accepts the conclusions the appreciation will not occupy too much of his already fully-occupied time. Speaking generally, I do not think we have yet clearly differentiated between a Military and a Medical Appreciation. For instance, it is very important for a General Officer Commanding to keep his object clearly before him, but it seems obviously superfluous to say the object of the Deputy-Director of Medical Services is to arrange for the care and evacuation of sick and wounded; this is an obvious fact. I have in mind seven appreciations written by candidates at recent examinations; it is interesting to study the diversity of the headings, no two are alike. I may say here for the benefit of future candidates that my experience is that examining boards are composed of reasonable beings hoping to be able to pass the harassed Major, Royal Army Medical Corps, and that they fully recognize his difficulties and give due credit for an appreciation even though it may not coincide in its form with their particular views providing it indicates study and a knowledge of the subject. Another point: it is the custom in setting a scheme to detail the Medical Units, and then expect the candidates to agree or disagree, as the case may be. I suggest in actual practice, except for a definitely prepared mobilization scheme to which medical units may be definitely allotted in accordance with war establishments, it would be left to the Deputy-Director of Medical Services to state his requirements after he has appreciated the situation; this also

gives him the opportunity of modifying his units both as regards numbers, type, transport, personnel and equipment. It would therefore in my opinion be better not to detail the Medical Units but to leave the choice to the candidate.

Now let us for a moment approach a Medical Appreciation from a practical point of view, and consider, if really faced with the problem of making the medical arrangements for a particular campaign, what would one really think out; obviously the first consideration would be, how many sick am I going to deal with?

(1) *Heading No.* 1.—*Estimate of Number of Sick.*—(*a*) During concentration; (*b*) during the campaign.

Now in estimating the number of sick academic knowledge comes in, as already stated, and can be dealt with in Appendix I.—How the estimate of sick is arrived at.

(2) *Heading No.* 2.—*Estimate of Number of Wounded.*

Appendix II.—How the estimate of wounded is arrived at.

(3) *Heading No.* 3.—*Total Number of Beds Required for Sick and Wounded.*

(4) *Heading No.* 4.—*Medical Units Required.*

Appendix III will give your reasons for any departure from war establishments, and your reasons for suggested alterations in transport, personnel and equipment.

(5) *Heading No.* 5.—*Order of Priority of Medical Units and where Required.*

Appendix IV.—Reasons for order of priority and the PLAN for utilizing these Medical Units for the clearance of sick and wounded.

(6) *Heading No.* 6.—*Recommendations for counteracting the factors concerned in causation of disease and sanitary recommendations for inclusion in Force Standing Orders.* These are included in Appendix V.

We will now proceed to consider the above in detail. For purpose of illustration each heading will be followed by its appendix:—

The appreciation will be marked SECRET, by . . . . . Map reference, place, date, and will read:—

(I) *Sick.* (*a*) *During mobilization.* Arrangements have been made for all sick during the concentration period to be dealt with by existing peace hospitals in accordance with mobilization scheme. Expeditionary force units will thus not be hampered.

(*b*) *During Campaign.*—"S" number beds will be required for sick.

APPENDIX I.

Estimation of Sick.—We know from experience the usual daily admission rate for troops serving under normal conditions is 3 per 1,000. But the following factors being considered will $\frac{\text{decrease}}{\text{increase}}$? this daily

admission rate. The troops have all been medically examined on mobilization and unfits rejected, they are fully protected against smallpox and the enteric group diseases.

Climate, topography, water supplies, food supplies, prevalent diseases[1] are such as to $\frac{\text{decrease}}{\text{increase}}$? the normal admission rate which I estimate will be X per 1,000. The strength of the whole force being Y thousands the daily admission rate will be X multiplied by Y = Z. We know by experience that at the end of twenty-one days the admission rate is stabilized by the discharges and therefore the maximum number of beds required for the force is Z × 21 = S. From this must be deducted the discharges during twenty-one days calculated at 40 per cent the daily admission rate from seventh to nineteenth day, 90 per cent from twentieth day, 10 per cent invalided from tenth day, the position of stability being thus reached on twenty-first day.

(**2**) *Wounded.*—I estimate we shall require " W " beds for wounded.

APPENDIX II.

We know from experience that the number of wounded is estimated at 20 per cent the force engaged, or at 20 per cent of three-fifths the total force (which is the force engaged); of these 20 per cent are killed or missing and do not, therefore, require hospital accommodation. The nature of the enemy's armament[2] is such as to expect a $\frac{\text{decrease}}{\text{increase}}$? in the above averages. Knowing the strength of the force a simple calculation gives the total beds required for wounded.

(**3**) *The total number of beds required for sick and wounded* will be S + W and allowing 10 per cent spare beds and considering the capabilities of expansion of the Base Medical Units I consider S + W + 10 cent. will be sufficient for my requirements and allow for sick and wounded prisoners of war.

(**4**) *I require the following Medical Units mobilized.*

N.B.—Leave out those not required and estimate according to strength of force and nature of operations.

Here also give any alterations you require in personnel, transport or equipment, according to the nature of the country and intended plan of operations.

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[1] The above are the usual factors to be taken into consideration as likely to affect the health of the troops and are usually given under headings, factors which influence me in attaining my object, i.e., clearing and caring for sick.

[2] Anything from modern artillery to bows and arrows and may include special arrangements for gas warfare.

(1) Cavalry Field Ambulances.
(2) Field Ambulances.
(3) Field Hygiene Sections.
(4) Hygiene Sections (lines of communication).
(5) Hygiene Sections (non-Divisional).
(6) Motor Ambulance Convoys.
(7) Ambulance Car Companies.
(8) Ambulance Trains.
(9) Hospital Ships.
(10) Casualty Clearing Stations.
(11) General Hospitals (600 beds).
(12) General Hospitals (1,200 beds).
(13) Convalescent Depots.
(14) Mobile Hygiene Laboratories.
(15) Mobile Bacteriological Laboratories.
(16) Advanced Depot of Medical Stores.
(17) Base Depot of Medical Stores.
(18) Red Cross Hospitals.
(19) Mobile X-ray Units.

Appendix III.

This will give the reasons for any departure from the normal allotment of Medical Units as laid down in War Establishments, and any reasons for additions to or subtractions from personnel, equipment and transport; they will obviously depend on the situation, intention and object of the General Officer Commanding, e.g., if the force is not proceeding overseas it is obvious no hospital ships will be required. If operating in a country where it was obvious the troops must deploy at some distance from roads a modification of transport must be recommended and may be donkeys, riding mules, pack mules, human carriers, camel cacolets, desert carts, light ambulance wagons, dandies and bearers, aeroplanes, &c. In estimating number of motor ambulance convoys and hospitals trains it will be necessary in this appendix to give data at which rate of evacuation may be carried out. It will be useful to remember one motor ambulance convoy = 75 cars, less 10 per cent under repairs; each car can carry 4 lying and 2 sitting, or 10 sitting, will travel on average 10 miles per hour and allow one hour for loading and one hour for unloading. A hospital train carries roughly 500 patients, will be delayed at unloading station about twelve hours, and usually owing to congested state of lines of communication only travels about ten miles per hour.

N.B.—The medical arrangements for the Shanghai Defence Force is a typical example of how Medical Units were modified in numbers, personnel and equipment to meet the expected requirements, and really illustrates and bears out arguments put forward in this article, especially in Appendix III above.

(5) *Order of Priority of Medical Units.*—I require my Medical Units at X places on Z dates. Here will follow list in order of priority and mobilization stations according to the situation.

APPENDIX IV

will give the PLAN for utilizing these Medical Units for the clearance of sick and wounded, and will also explain how the order of priority is essential for your PLAN.

(6) *Recommendations for counteracting the factors concerned in the causation of diseases and sanitary recommendations for inclusion in Force Standing Orders.* These are included in Appendix V.

APPENDIX V.

In making these recommendations we must not include routine matters which nowadays all officers are supposed to know, e.g., for camps of one night shallow trench latrines will be dug. But recommendations to counteract the special factors appreciated in your estimate of sick must be included in detail, e.g., in a country in which we know that diseases caused by sun, mosquitoes, sandflies, polluted water, milk and vegetables, tropical ulcer and beri-beri are prevalent, special instructions must be included in detail.

CONCLUSION.

When the columns of the JOURNAL OF THE ROYAL ARMY MEDICAL CORPS were first thrown open if I remember correctly criticism was not invited. I agree with two well-known writers that destructive criticism makes the perpetrator an unpleasant and unprofitable member of society, but constructive criticism may, in my opinion, be most useful and profitable, and personally I should welcome it if it would help in elucidating the problem under discussion. I may forestall a possible comment that my appendices are too long and my conclusions too short. In my opinion the method suggested helps to keep the situation clearly before you, it is after all the conclusions that matter and the appendices keep the reasons for the faith that is in you that your plan will succeed, concisely and clearly before your mind's eye.

N.B.—The figures, calculations, &c., in this article have been taken from various articles which have appeared from time to time in the Journal. The only originality in this paper may be the suggested arrangements of headings.