ASPECTS OF WAR MEDICINE IN THE R.A.F.

BY

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The first duty of the Service medical officer in war is to maintain the effective strength of his unit by every means in his power. This duty precedes his individual obligations to his patients even as those obligations precede his personal gain; moreover, it charges the medical officer of the Royal Air Force with a threefold responsibility. He must be a sound, responsible, and decisive clinician in both medicine and surgery; he must show an imaginative appreciation of the physiology and psychology of flying; and he must always concern himself not only with the physical welfare of his men but above all with their morale. Failure to recognize this underlies the fallacy that much of a junior M.O.'s work is exasperatingly trivial, whereas an intelligent grasp of this aspect of war medicine enables him to render unique and invaluable service.

Sick Parade

The morning sick parade is one example. On the average station of the Royal Air Force not more than 15 men and 3 or 4 women are likely to report sick on any normal morning. Yet even of that handful several may appear and reappear with melancholy and improbable tales of woe. The daily sick list admits of an immediate division: one section being a minute proportion, constantly changing, of the vast healthy majority who happen to have something wrong; the other a large and more consistent selection from the minority of feeble spirits and faint-hearts—some martyrs to a consuming self-pity, some hopeful scroungers, some simply malingerers, all essentially indifferent to the challenge of this war and unable to accept its reality. Their symptoms, as an escape from disagreeable duties, concern them far more than the purpose of those duties or the need for their performance. Even as neuropaths they are clinically insignificant—trivial in everything but the waste of man-power they represent and the sick-hearted spirit they display. Yet unless the M.O. succeeds with them their numbers may increase until the sick parade itself swells and the efficiency of the station begins to decline. Here the M.O.'s function is mainly interpretative. From the resources of his own conviction he can give them insight not only into the shallow inadequacy of their symptoms but also into the nature of their obligations. Simply, vividly, in a few words he can make them see that sick quarters exist to give help and encouragement but not sanctuary, to maintain or restore fitness rather than to excuse on grounds of ill-health. The reality of war needs emphasizing to many whose nearest approach to it was the sound of a bomb "in civvy street"; but the explanation must be crisp and vital, its implications focused on the job of each individual. After this "pep-talk" the relations of the patient and the M.O. are on firmer ground, a placebo if indicated becomes a tonic, and resolve may well be rekindled; without it, rebuke, no matter how just, may fail.

It is easy for an unreflective tradesman in the R.A.F. to imagine that he will never be called upon to fight for his life or his unit with his hands or a gun. That is the business of the Army—or the "Ground Defence," as the R.A.F. Regiment was previously called. He feels no thirst for battle; he is a rigger or a flight-mechanic, not a soldier: so runs his mind. So when he is included in the Emergency Reserve or sent on a "backers-up" course he is tempted to react by reporting sick. This is not his trade, not what he joined the R.A.F. to do; if he'd wanted to be a ruddy soldier he could have waited until he was called up for the Army.

At this point the M.O., faced by a querulous patient with his grievance thinly disguised as a vague ache or "terrible pains," has a chance once and for all to prise the scales from those unwilling eyes. Even the most skilled artisan is useless with a bayonet through his belly; and we may all share that fate unless each can help to avert it by his own efforts, as well as practise his specialty. The man who requests a chit excusing him from elementary combatant training may justly be asked to whom he intends to present it: to the German paratrooper who is about to kill him? Does he suppose that the trouble

of learning a soldier's job when he already has a trade warrants its evasion, even in his own interests? Might it not perhaps be better to learn all he can about how to fight on the ground? The enemy forces who will attack aerodromes will be the best-trained and best-equipped troops available. When they arrive, will ignorance then be bliss? The airmen who were massacred on the aerodromes at Crete learnt too late the answer to that question.

By this time the trivial ailment occupies a less prominent place in the airman's mind. Such essentially belligerent medicine is an inevitable daily routine with the Service M.O.

The M.O.'s Great Responsibility

But it is in his relations with his air crews that the highest degree of responsibility rests upon the M.O. He must be their friend, their adviser, and sometimes to the younger members of his squadron their elder brother. He must inspire their respect as a man as well as their confidence as a doctor. Apart from the preservation of their health, in itself a considerable undertaking, he must ensure that they fully understand the essentials of first aid in the air, the use of oxygen, the effect of pressure changes at altitude on their bodies, and the relevant facts about venereal disease.

To give his advice about first aid in the air a background of experience, to widen his own horizon, and to enter as completely as he can into the realities of their existence, he should take every available opportunity of flying with the crews in the squadron aircraft. If he is keen, willing, and unassuming about this he will not find such opportunities hard to secure. The familiarity that flying by day and night will give him with the problems of space and stowage in twin- or four-engined aircraft, the position and accessibility of first-aid outfits, and the difficulties of movement in full flying kit will sooner or later stand him in good stead: for after a crash with bombs on board, followed by fire—one of the most serious and urgent disasters that confront an M.O.—there is a space of minutes only in which to effect rescues before the bombs explode. The use which can be made of this period depends on the M.O.'s knowledge of the crews' positions in the aircraft and their ways of escape. The respect and confidence that an M.O.'s performance in such crises will command among the flying men in his squadron, coupled with the companionship gained from having had him fly with them, will equip him to fulfil his supreme obligation—the responsibility that he shares with the squadron and flight commanders for the maintenance of air crews' morale.

This is not the place to discuss the details of that responsibility or the problems of its fulfilment. It is enough here to say that the guidance and instruction so freely proffered to the young M.O. by the R.A.F. Medical Service are positive and intellectually acceptable; once understood, enriched by experience, and applied with courage, imagination, and common sense, they increase substantially his value as a doctor. His task is not easy, nor is it always pleasant. Decision and responsibility rest more heavily and more individually upon him than ever they did in his days as a house-officer. But in the indispensability of this special service lies its merit and its reward.

Another feature of the M.O.'s life is general medical instruction. Apart from his lectures to air crews, he is responsible for the training of his staff in sick quarters and for the guidance of airmen in simple hygiene and first aid. Under present conditions it is not practicable to give all the airmen on a station an extended course of medical lectures. Postings overseas, courses, and the usual changes of station personnel preclude this even if it were desirable. But it should be possible to tell airmen all that they need to know about first aid in one lecture, of which the recognition and treatment of shock are the keystone. Haemorrhage, fractures, burns, penetrating wounds, and unconsciousness can all be introduced and related to the central theme, in diagnosis and treatment. The men will probably then know at least enough to do as little as possible to a gravely injured man without forsaking common sense for rule of thumb. The idea that first aid is a special subject with a literature and academic tradition of its own has always seemed to me to be a dangerous presumption. A course of lectures with apparently detailed and separate instructions for various types of injury may rob men of their precious

natural humility in the presence of physical disaster without really equipping them to relieve it. It is not in the patient's interest that the partly trained should feel a surgical confidence.

Training of Medical Orderlies

The training of medical orderlies calls for a different approach. They make up a small but essential section of the station, directly under the command of the M.O. They are recruited largely from completely untrained and inexperienced civilians, and, apart from an initial six-weeks course, are wholly dependent upon the M.O. for their instruction, the interpretation of their duties, and the inspiration to perform them to the utmost of their ability. He in turn is dependent upon their loyalty, efficiency, and enthusiasm for the smooth running of his department and its reliability under all conditions; for he will have no highly trained sisters or nurses to appreciate the immediate medical implications of an emergency or anticipate his needs in a time of stress. His staff will reflect the value of his teaching and his example; it behoves him always to remember that. The very obligation is stimulating: to teach as well as to treat, to explain as well as to diagnose. This involves both lectures and demonstrations. In practice it is a sound plan to include teaching rounds in the ward whenever there are suitable cases, as this not only stimulates interest and accustoms orderlies to observation at the bedside but also gives them a feeling of studentship which they enjoy and which fosters discipline and loyalty to their officer.

He must display leadership and a capacity for organization as well as professional ability, for the grouping and handling of medical resources in men and equipment are also among his responsibilities. Practical schemes for dealing with casualties from land or air attacks, from crashes, or from aircraft returned with wounded on board demand constant practice and revision. Simplicity cannot be too highly prized in such schemes. Under the impact of extreme crisis—for example, collision of two bomber aircraft on a runway while landing at night, with perhaps eight seriously injured men in urgent need of trained attention—the simple, easily remembered routine with its scope for elasticity and improvisation under the immediate orders of the M.O. will steady the orderlies, whereas a more elaborate organization delegating complex individual duties to each member of the staff may break down.

Every orderly can, however, be trained in the essentials and rationale of anti-shock treatment, including the administration of morphine by tubulin ampoules, in the control of haemorrhage, the utmost gentleness in handling fractures, the preparation of a trolley for intravenous injection or anaesthesia, and the technique of sterilizing instruments and assisting at minor surgical operations. Above all they can be imbued with enthusiasm and a feeling of confidence and pride in their performance as a team under the guidance and leadership of their M.O.s.

Conclusion

Because of all this the M.O.'s job in the R.A.F. is an extremely important and responsible one. His knowledge of general medicine and surgery is by no means doomed to decline on a station; rather will he gain a breadth and background to his judgment, increased by the necessity for independent action and decision in many cases. He will encounter the special psychological problems of modern flying, and may gain personal experience of flight in modern operational aircraft. No matter how young he is, his position in the community of his brother officers is established; to them he is "the Doc."—to be consulted at all times and in all places. He is expected to advise his commanding officer on all matters relating to the hygiene and health of the unit—advice to which a good commanding officer attaches considerable importance and upon which he acts.

To the unit as a whole, the M.O.'s capabilities and attitude to his job are equally important. Service life has meant changes and sacrifices for them far more fundamental than those he has to accept—the diversion of his career and the severance, at any rate for some time, of his hospital connexions. He is bound still to follow his vocation; the least he can do is to display the utmost energy and enthusiasm for its every aspect.

The aspects that have been stressed here are perhaps less obvious than the more material and generally recognized responsibilities for the care of the sick and injured, the super-

vision of sanitation, and the keeping of medical records. But they are no less exacting; moreover, they are vitally important, because indifferent morale can rot the fittest body of men. The influence of a medical officer on the morale of his unit—the inescapable obligation for its upkeep that he shares with his senior officers—inspires with an Aesculapian touch his first duty: to maintain the effective strength of his unit by every means in his power.

AN INVESTIGATION INTO THE STANDARD OF MILK SUPPLIED TO CHILDREN

BY

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The British Paediatric Association recently organized an inquiry into the standard of milk supplied to children throughout the country. It is felt that the findings would be of interest to the medical profession and should be made more widely known. This article is based on information so received from eight separate areas in England, Wales, and Scotland, representing a London borough, a Scottish city, a West of England city, a South Wales urban area and a South Wales rural area, two Northern industrial towns, and a Midland county. As the reports received were in the nature of confidential comments the areas are subsequently designated by the initial letters A to H.

Results of Questionaries

A questionnaire was sent to each area and the following is a summary of the replies received:

1. Is there any Evidence of an Increase in Bovine Tuberculosis in Children Since the War?

Area	Non-pulmonary Tuberculosis			
	1938	1939	1940	1941
A*	—	—	—	—
B†	120	126	107	143
C	30	36	29	54
D	No increase			
E	" "			
F	" "			
G	" "	527	—	664
H	No increase			

* Double the number of cases of meningitis in 1938 as compared with 1941.

† From P.M. material: 1935-9, 15.7% primary abdominal; 1940-1, 58.3% primary abdominal.

Accurate evidence on this point has been difficult to obtain owing to the shifting population. Some observers report a clinical impression of an increase, especially of tuberculous glands in the neck.

2. Is there any Evidence of an Increase in Tuberculous Cattle Since the War?

Area A.—Samples of milk containing tubercle bacilli:

1938, 8%; 1940, 5.3%; 1941, 6%

Areas B, C, and D.—No evidence

Area E.—Cases dealt with by Ministry of Agriculture and Fisheries:

1939, 267; 1940, 192; 1941, 164

" F.—No evidence

" G.—Samples of milk containing tubercle bacilli:

1939, 9.4%; 1940, 6.3%; 1941, 6.0%

" H.—No evidence

Evidence on this point has been difficult to collect, as tuberculin testing has been reduced, slaughterhouse statistics are no longer reliable owing to different allocation of carcasses by the Ministry of Food, and there is a shortage of inspectors.

3. Is there any Evidence of an Increase in Milk-borne Infections, other than Tuberculosis, Since the War?

Area A.—No evidence

" B.—Increase in notification of undulant fever

Areas C, D, and E.—No evidence

Area F.—? Increase in gastro-enteritis due to milk?

Areas G and H.—No evidence

In a personal communication Prof. G. S. Wilson of the Emergency Public Health Laboratory Service states that in the area covered by that service there have been two small outbreaks of undulant fever, three outbreaks of dysentery due to the Sonne organism (one of them involving over 1,000 people), two outbreaks of diphtheria, and one of typhoid fever, all due