

# Medicine at war a century ago

One hundred years ago, in 1917, the ‘Great War’, as it was then called, was dragging itself into its fourth year of bloody and apparently never-ending conflict. The United States had now joined the Allies, and the first American troops were arriving in Europe, but to counter this, the 1916 revolution in Russia had seen the collapse of the Eastern Front, with the transfer of vast numbers of German troops to the west.

We think of medical services in wartime as being principally concerned with the surgery of wounds, but it is important to remember that in wars up to the 1914–1918 conflict, for example, the Crimean war and the Boer war, illness and deaths from medical diseases, such as cholera, the dysenteries and typhoid fever, far outnumbered those from enemy shot and shell.

A vivid picture of medical conditions and their treatment among the troops is given by turning the pages of the bound volumes of the *British Medical Journal* of 1917, 100 years ago. Of course, many articles came from surgeons recounting their experiences with the antiseptic treatment of war wounds, techniques of the splinting and transfer of compound fractures, and management of the devastating head, chest and abdominal wounds produced by high velocity missiles. In passing, there were also long sad lists of deaths and wounded among young medical officers at the front, and reports of the many decorations for bravery awarded to doctors dealing with casualties under fire in the trenches and in no-man’s-land.

However, there are also numerous papers, reports of conferences and leading articles on purely medical problems of warfare, not only from the UK and its allies, but also from the German and Austrian medical journals (readily obtained from neutral sources, especially from Switzerland).

For example, there is an abstract of a lecture by a German Professor L Mann, published in *Berlin Klinische Wochenschrift*, which surveys the treatment of war neuroses, which by now had become a major medical problem. In the early days of the war, standard treatment was conservative – bed rest, sedatives and a good diet, together with gentle electrotherapy and hydrotherapy. Mild cases responded reasonably well, so that after weeks or months, these patients could usually

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return to garrison duty or even active service. However, severe cases, with well-defined psychogenic or hysterical phenomena, such as paralysis, contractures and tremors, scarcely benefited; only 5% became fit for active service. He quoted the good results of hypnosis, claimed by Nonne of Hamburg, who claimed a 50% cure rate. However, there were few experts in this field. Mann quotes the work of Kaufman, using severe electric shocks, who claimed good results. However, the treatment amounted to torture and had indeed resulted in deaths. (Of course, on the allied side, there were numerous studies of ‘shell shock’ from the special centres set up to treat these sad psychiatric cases.)

The *British Medical Journal* regularly featured ‘Articles from the countries at war’. Among them was an interesting report of a medical meeting in Italy which included a review entitled ‘cutaneous pantomimicry’, a study of 100 soldiers with self-inflicted skin lesions. These included scars and ulcerations, eczematous dermatoses, suppurative skin lesions, bullae and traumatic oedema. These were produced by chemicals, heat (especially boiling water) or trauma applied to the exposed surfaces of the feet, face and hands.

A review from France detailed the techniques used by army malingerers. Inflammation of the throat was induced by gargling with irritants; unlike tonsillitis, the lesions were not confined to the tonsils. ‘Diarrhoea’ was simulated by diluting the faeces with water or urine or adding pig’s fat or fragments of raw meat to the stools. Soldiers infested with tape worms drove a trade in the segments of *Taenia solium* that they expelled in their stools, and which were then swallowed by their clients. ‘Haemoptysis’ was simulated by pricking the back of the throat with a pin, oedema of the legs by tight bandaging.

The *British Medical Journal* quotes an interesting paper by Dr Kurt Singer in the German journal *Medizinische Klinik* on the symptoms of ‘nervous heart’ in soldiers. The most common are paroxysmal palpitations, sharp pains in the left chest and an irregular pulse. The heart sounds are normal. Other symptoms include insomnia, fainting and dizziness. The systolic blood pressure may be below 90 mmHg or even 70 mmHg. A feature of diagnostic importance, first described by Sir Henry Head, is hyperaesthesia to pin-prick over the region of the heart, which is rarely if ever found in organic heart disease. Other common findings are tachycardia, arrhythmias, flushing of the face and sweating. Treatment was not discussed in this review.

A leading article in the *British Medical Journal* of 1917 notes that medical students who had enlisted in the armed forces, either voluntarily or under the Military Services Act, and who had completed the second year of their medical course, could, if they wished, be allowed to return to their medical studies and be regarded as third year students. If the student failed to pass his examination in anatomy and physiology within 6 months he would be recalled to the colours.

I was a medical student during World War II; failure in any of our exams meant immediate call-up into the armed forces – a powerful inducement to intensive studies! **BJHM**

*Conflict of interest: none.*

**Professor Harold Ellis** is Emeritus Professor of Surgery, Guy’s, King’s and St Thomas’ School of Biomedical Sciences, London SE1 1UL