

## 2.6. Defence Medicine II

### The History of Blood Transfusion in War

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Historically, the needs of those wounded in war have led to many major advances in blood transfusion. Probably the most important of these, is the ability to draw blood in one location and transfuse it, at a later time, to a distant location. Another important lesson, is the need for meticulous planning, especially with regards to donor organisation and the logistics of blood transport and storage. On the other hand, war has not led to many innovations in the clinical use of blood transfusion, and military medicine has tended to reflect the advances in civilian practice, rather than take the lead in developing new techniques.

In the 19th century, blood transfusion was used for the treatment of disease rather than resuscitation, and its use to combat shock only appeared in the First World War, when many of the techniques already had been developed in civilian hospitals. The Second World War saw the introduction of the type of transfusion service with which we are familiar today, and with the advent of the cold war, led to research in frozen blood techniques. Thus, in the clinical area, war has acted as a spur to the wider use of techniques rather than being the cause of their invention. In addition, the increased availability of financial resources has allowed research to progress at a much faster rate than has been the case during peacetime.

**Keywords:** blood; blood transfusion; disease; military; planning; resuscitation; war

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## 2.7. Symposium: Issues in Disaster Management

### Recovery Goals and Priorities

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The goals and priorities during the initial, emergency relief phase of any major disaster, such as an earthquake, are clear-cut: to save lives and limbs, and to provide victims with the basic life-sustaining necessities of food, water, shelter, sanitation, etc. After the acute phase, when the media attention turns elsewhere and the high-profile international relief teams depart, the disaster continues. Lives and livelihoods remain disrupted. The arduous, longer-term phase of social, economic, and physical reconstruction begins. The new priorities include the reconstruction of

safe homes, schools, and community centers; the restoration of safe water supply, sanitation and electricity; and the rebuilding of lives. The latter include the generation of employment opportunities and training in skills that might be needed during reconstruction, like masonry and carpentry. Health and psychosocial issues need to be addressed and include the repair/reconstruction of damaged health facilities, the reduction of communicable disease risk, the establishment of community level health care including stepped-up health education, home nursing and rehabilitation of the disabled, and continuing psychosocial support. Coordinating and harnessing the work of different agencies committed to this task—government, nongovernmental, and private—is a major challenge. Broad-based community participation is essential, if the reconstruction and rehabilitation process is to be an opportunity for developing self-reliance and sustainability.

**Keywords:** community; health care; psychosocial support; reconstruction; rehabilitation

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### Evolution of Civil-Military Cooperation in Complex Emergencies

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The decade of the 1990s brought much confusion and uncertainty in the role of the military in complex emergencies (CEs). Initially, CEs were interpreted as short-term, post-Cold War events that required only neutral and impartial humanitarian assistance. A military presence and role in the relief process was discouraged by non-governmental (NGOs) and international organizations (IOs). Peacekeeping forces under Chapter VI of the UN Charter suffered increasing numbers of casualties, as did NGOs. Eventually, CEs were accepted as being prolonged, highly volatile and dangerous internal wars that greatly threaten regional and international stability. As such, military tools for security and protection, under Chapter VII (Peace Enforcement), now are required for the humanitarian relief process. This change has brought about both increasing opportunity and risks for deployed military forces. Forces are required to provide a wider scope of protection, responsibility for cessation of human rights abuses, and for the immediate decline of mortality and morbidity. This presentation will discuss the evolution of these changes and the responsibility of military and civilian medical and public health assets in these operational decisions.

**Keywords:** civilian; complex emergencies; humanitarian; military; public health; relief

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