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Civilian Applications of Military Medicine: the St. John Ambulance¹

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THIS PAPER WILL DEMONSTRATE how military medical principles have been effectively applied to organising and training medical teams in the civilian setting of the St. John Ambulance, and how the experience gained from this can, in turn, be utilised by the military sector.

HISTORICAL BACKGROUND TO ST. JOHN AMBULANCE AUSTRALIA

The Order of St. John was founded in the eleventh century for the care and protection of pilgrims travelling to the Holy Land, although its origins go even further back, to about 600 AD. The modern organisation, known as the St. John Ambulance, which still has ties to the ancient Order, was founded in England in 1831, and first established in Australia in 1883. The initial function of the organisation was to teach first-aid and related subjects, and later to provide trained volunteer first-aiders. The black and white uniforms of St. John are a familiar sight at sporting events and public gatherings throughout Australia.

FIELD MEDICAL TEAM

The Field Medical Team is a more recent concept, and has only evolved over the last decade.

For many years, professional ambulance officers, nurses and doctors have played a role in St. John, both in training and on public duties. In 1986, Dr Barry Collins, an orthopaedic surgeon with extensive military experience, who was at that time the St. John Ambulance NSW District Surgeon, put forward the idea of forming specialised teams of St. John Ambulance medical professionals and first-aiders with extra training and equipment to provide a level of care over and above basic first aid in circumstances where this might be needed. Such circumstances would include large public events where crowd size delays ambulance access, disasters, etc.

These teams were originally known as Medical Cardio-Pulmonary Resuscitation (MCPR) Teams and, as their name suggests, their objectives and training (which were developed by Dr Collins and Dr Doug Gow, an anaesthetist), were directed solely towards advanced cardio-pulmonary resuscitation. Since 1986, changing public demands have brought about a broadening of the original role to include advanced resuscitation of a wide range of medical emergencies and some types of trauma, and a change of name to Field Medical Team.

FIELD MEDICAL TEAM AND THE MILITARY

The St. John Ambulance has always had a close relationship with the military. A large number of the medical professionals in St. John are serving or retired military personnel. This has meant that there has been a wealth of experience to draw on in organising both St. John Ambulance and the Field Medical Team.

The major areas where military principles have been applied have been the organisation, training and equipment.

ORGANISATION

The organisation and rank structure of St. John Ambulance is based on that of the military, and the Field Medical Team is no exception. Whereas most of the equivalent civilian medical teams (other than professional rescue and retrieval teams), have a fixed composition and rely on outside agencies for communications and administrative support, the Field Medical Team has a flexible composition and integral support elements.

The basic unit is a team consisting of a medical officer, a nurse or ambulance paramedic, and two first-aiders. These teams are designated either centre based or mobile. The composition of the centre-based teams may vary according to the number of medical officers available. The teams and ancillary staff come under the direction of a senior medical officer, who may also be the triage officer. The triage officer role is sometimes filled by a nurse or ambulance paramedic, depending on relative experience levels. Two teams can combine to form the equivalent of a hospital disaster team if required.

TRAINING

Many civilian medical teams have a response plan, but do not have the opportunity to train together, relying instead on the teams' members having worked together at their respective hospitals, in roles which are not necessarily the same as their medical team roles. FMT brings together medical personnel from widely differing clinical backgrounds and skill levels, and conducts specific training of the teams in resuscitation. This training is then exercised not only in mock casualty exercises but in real mass casualty situations such as the City-to-Surf run, and outdoor rock concerts.

FMT members also receive training in a number of non-medical skills. Anyone who may fill a command role can undertake leadership training through St. John. All team members receive basic radio communications training, and those in an instructing role undertake instructor training. These aspects of training allow FMT to be more self-sufficient. All team members must have a high standard of basic first aid skills including basic life support and patient transport: how many civilian medical officers are there who can perform a stretcher or hand carry?

EQUIPMENT

In the area of equipment, durability, portability and ease of use are the prime concerns, as in the military. Being a voluntary organisation funded by donations, cost is also a factor, and low cost alternatives are always sought. Rather than attempt to recreate exactly a hospital setup, demountable equipment which can be adapted for use in either purpose-built facilities or in tents is used. Protocols for treatment are developed (in consultation with civilian organisations such as the Australian Resuscitation Council and the NSW Ambulance Service) so that while still conforming to established standards of medical treatment the range of drugs and equipment needed is kept to a minimum.

APPLICATION

The application of military medical principles has resulted in teams who can work effectively and to high standards of medical care in a wide variety of conditions.

The approach taken by organisations such as St. Vincent's Hospital at the "Concert for Life" in 1992 to "recreate the normal emergency department staffing, layout and function" is unrealistic. Teams must train in the conditions they will face in the real mass casualty situation. It should not have to come as a shock to discover that resuscitation in the pouring rain, kneeling in the mud with a large crowd looking on and possibly getting in the way, using unfamiliar equipment, is a totally different proposition to a familiar warm, dry and controlled emergency department.

MILITARY APPLICATIONS

The experience of the FMT can be used to military advantage in several ways.

First, association of military medical personnel with organisations such as the FMT allows them to practise the skills of triage and mass casualty management on real patients in real settings. This realism is difficult to simulate in exercises as one is always aware in the back of one's mind that the patients are not really in any danger.

Secondly, the circumstances of training faced by the FMT have many similarities to the military scenario of rapid call-up and deployment of reserve or civilian medical personnel. Whilst individuals may be expert in their fields, they still need rapid and effective training in how to use that expertise under field conditions and how to function

effectively as part of a team. Training such as FMT provides, which is demonstrably effective, could easily be used in the setting outlined above.