

OBSERVATIONS

ETHICS MAN

The medical ethics of the battlefield

Technological advances in the treatment of combatants raise new ethical issues

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Athena, goddess of war, gave Asclepius two vials of the Medusa's blood. The blood from Medusa's left side could raise the dead; the blood from her right side could kill instantly. The descendants of Asclepius—the thousands of medics who today grace the battlefields of the world—rarely use the right sided blood. Battlefield euthanasia, in which death is hastened to avoid prolonged suffering, is a controversial practice; but it is as old as war itself and, whatever laws or rules prohibit it, will doubtless continue until wars cease. In this column, however, I wish to focus on the dilemmas associated with the left sided blood. When should it be used and when forgone? And who should benefit from it?

The ability to maintain the wounded alive is nothing less than astounding. Medical advances, combined with improved body armour and rapid evacuation, have resulted in lives saved that would have been unsalvageable only 20 years ago. A recent visit to Headley Court, the Defence Medical Rehabilitation Centre, brought home to me the remarkable recoveries of soldiers who, weeks before, were lying on the battlefield on the brink of death. Yet, as in the civilian setting, the power to revive the dying has brought with it a host of ethical difficulties.

In one scenario, a member of the local Afghan security forces has suffered massive injuries from an improvised explosive device. He has lost both his legs and both his forearms. The blast has removed his entire face. Tourniquets are controlling the bleeding from the legs. He is still alive. If he can be saved by use of the coalition forces' state of the art medical services, what of his future once he is transferred to a local health centre, whose facilities pale in comparison?

One Canadian paramedic working in Kandahar, Afghanistan, in 2007 described the transfer of patients to the local hospital as a "death sentence."¹ The hospital had no ventilators, resuscitation equipment, laryngoscope, or monitoring devices. Kevin Patterson, a Canadian doctor also posted to Afghanistan, recalls a mass casualty incident involving a mixture of coalition personnel and Afghans.² The doctors were told not to intubate any of the Afghans with burns exceeding 50%. Without a burns unit, those patients would be doomed. The coalition patients, on the other hand, could be repatriated to their home countries to obtain high quality burn care. Such divergent treatment is

hard to bear and highlights the need to develop local healthcare infrastructure, but what are the immediate alternatives?

Athena's vials are exhaustible, and resources problems can also plague the military medic. Beds, staff, and stocks are limited. Our patient might singlehandedly drain the hospital's blood bank, leaving nothing in reserve for future casualties. The third revision of the US Department of Defence's manual *Emergency War Surgery* states that "the decision to commit scarce resources cannot be based on the current tactical/medical/logistical situation alone."³ Such decisions should be made with an eye to the future.

If our Afghan patient is treated and survives to discharge, what kind of life awaits him back in his village, where the realities of survival and attitudes to profound disability may be a far cry from our own? This question cannot be answered without an understanding of the local culture, religion, and outlook. It is morally dangerous to uniformly impose our interpretation of when it is desirable to live or die, dismissing the patient's views as backward, barbaric, or misguided.

If the decision to treat is made, the patient will need to be evacuated. A medical emergency response team (MERT) helicopter can arrive within minutes to provide advance life support and whisk our patient off to intensive care at a state of the art "role 3" medical facility. Yet, there is another consideration. Every excursion by the MERT carries risk. The helicopter is vulnerable and prone to enemy ground fire, and this additional danger must be factored into the decision.

There is another factor, relevant in this context but seldom encountered in civilian medical ethics: morale. Dwight Eisenhower called morale the "greatest single factor in successful wars."⁴ Allowing the soldier to die on the battlefield can damage the morale of the troops. It smacks of abandonment. The fact that the patient is Afghan provides an added reason to evacuate him, for not doing so may cause other Afghans to lose faith in the commitment of their fighting partners.

In October 2010 the Defence Medical Services organised a day long meeting to discuss some of the ethical issues facing medical personnel in the field, including scenarios such as the one set out in this column. This was a significant step, a recognition that pre-deployment training should include an appreciation of

the ethical challenges that can otherwise startle the unwary medic. When Athena gave Asclepius the vials, she did not provide advice on their use. The Defence Medical Services are working to fill that gap. I cannot remember the last time I left a conference with so many unanswered questions swirling in my mind.

The literature in military medical ethics is growing but still pitifully small. My hope is that experts from relevant fields will devote more attention to one of the most challenging, important, and fascinating areas of medical ethics.

Competing interests: DKS is a member of the Ministry of Defence's research ethics committee and was involved in the development of the ministry's medical ethics clinical guidelines for operations.

- 1 Kondro W. Malaise in Marwais. *CMAJ* 2007;177:134.
- 2 Patterson, K. "Talk to me like my father: frontline medicine in Afghanistan." *Mother Jones* . <http://motherjones.com/politics/2007/06/talk-me-my-father-frontline-medicine-afghanistan?page=2>.
- 3 US Department of Defence. Emergency war surgery. 3rd US revision, 2004, chapter 3.
- 4 Charlton J. The military quotation book. St Martin's Press, 1990:144.

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