Article

The ethical and medico-legal issues of trauma care

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Ethical issues confront trauma clinicians on a daily basis. This article highlights the similarities of trauma ethical dilemmas to those faced by other emergency care providers and takes the reader through the inpatient aspects of trauma care.

Ethics is the application of moral principles that are accepted appropriate behaviour, such as trust between a doctor and his/her patient.[1] Although the interpretation of universal ethical principles may differ within different cultures and peoples, they follow a common trend across most cultures, namely beneficence, justice, non-maleficence and the dignity of persons.

Most commonly, laws are a set of written proscriptions guiding the behaviour of society and setting moral principles.[1] Not all laws are ethical and not all breaches of ethics are illegal, and therefore the mitigation of breaches of one may not result in prosecution via the courts, yet professional organisations may discipline members who breach their ethical principles.

Trauma care seeks to ensure optimal management of the injured. This requires rapid decision-making and procedural skills. Most importantly, trauma care requires the performance of these skills often without having the opportunity to truly obtain the informed consent of the individual patient. This is due to the patient's condition at the time of first interaction with the emergency caregiver.

In South Africa, trauma is the leading cause of unnatural death across all age groups.[2] Because trauma is so common, ethical and medico-legal aspects of the care of the trauma patient are essential for the practising medical officer, emergency physician or trauma surgeon.[3] This applies not only to the provision of care but also to the evidentiary process, including medical report-writing, and the need for audit and review. The latter is undertaken through morbidity-mortality meetings and formal clinical audits, which may lead to publications.

This review of ethics and legal issues in trauma seeks to broaden upon a recent article in this journal[4] by addressing the issues specifically in relation to the trauma patient. In addition, I address some aspects of trauma research and clinical dilemmas that extend beyond the emergency centre to the operation room and the intensive care unit (ICU).

What makes the emergency centre a unique ethical environment?[4]

The patient seldom chooses the venue or caregiver in an emergency, thus increasing the frustration of the patient and the family if they are not in a venue they would prefer.

Prior conditions and medical history are not often available to the emergency care provider, complicating the care and increasing the chance of error. Because there is no prior health care provider-patient relationship, establishing rapport is more difficult.

Providers of care have little choice but to treat the patient, whether or not they have a reasonable chance of reimbursement, and must provide life-sustaining, often expensive treatment without prejudice to all who present to their institution. Transferring the indigent patient to a public facility also has a number of complex issues outside the scope of this discussion.

What makes the emergency centre a unique medico-legal environment?

The patient may not be able to provide consent to treatment, as treatment is often required to be life-saving without time for formal consent processes. Furthermore, the patient may not be in a sound frame of mind to allow for ethically and legally valid consent. Because multiple providers of care may be required, especially in the case of polytrauma, the patient's autonomy is further reduced. In addition, the risk of missed injury is increased because of loss of information at handover in situations of multiple transfers of care.[5]

Access to the emergency centre is a guaranteed constitutional right (Section 27.3), thus leading to the corollary that inadequately equipped or staffed units may be subject to legal sanction, should service delivery be inadequate or should a patient be refused initial assessment and appropriate resuscitation.[1,3] Adding to this stressful situation, specific medical conditions that carry a medico-legal obligation are often treated in the emergency centre, such as sexual assault, interpersonal family violence, drug-related injuries[6] and elder abuse.[7]

Certain injury mechanisms (motor vehicle collision) carry a legal duty to undertake certain investigations, such as blood alcohol tests, when requested by appropriate authorities.[8]

Appropriate documentation of the clinician's actions are essential, firstly for one's own record keeping, and secondly to enable completion of medico-legal documents at a later stage (J88 or affidavits). Memory may be poor after a stressful resuscitation, and certain elements of the clinical process may unwittingly be excluded from the notes.

What makes the trauma patient unique from a medico-legal and ethical perspective?

As mentioned earlier, the patient is in unfamiliar surroundings, possibly in a facility not of their choosing, with injuries that may include a spectrum from minor to life-threatening. In addition, the patient usually does not disclose or may not disclose the presence of risks to the health provider due to diseases (such as HIV) that existed prior to the injury – thus necessitating the use of extensive

personal protective devices and making the experience even more unpleasant for the patient.

The trauma may have occurred during commission of an offence, in which case the patient may be under guard, or may even be concealing weapons or contraband. This could necessitate an 'invasion of privacy' to identify or remove such items.

The severity of the injury may be such that ongoing care of the individual patient is futile, and this can lead to disagreement with the family or friends of the patient with regard to further treatment. Patient capacity or ability to participate in the informed consent process may be compromised and the patient is therefore managed by the clinical team on the basis of the best interests principle, with clinicians relying on proxy consent or substituted judgement.[1,9] It follows, therefore, that because of the circumstances highlighted above, the risk of liability and more importantly vicarious liability[1] always hangs over the head of the clinician like the sword of Damocles.

What is the standard of care and when may it change?

The standard of care is per the 'reasonable practitioner' approach[1] in the light of the severity of the injury and the facilities at the disposal of the health care provider.

A comprehensive handover from prehospital providers should be received, and the doctor should independently assess and appropriately manage the initial resuscitation with early referral to an appropriate co-ordinating discipline, which would ideally be a registered sub-specialist trauma surgeon subsequent to the recognition of that sub-speciality in 2007.[3]

The standard of care may have to be modified to do the 'most for the most' in so-called 'disaster' situations when patient numbers outstrip facility resources. In South Africa, this is the situation in many facilities every weekend because of the trauma load on our public health system. For this reason the National Department of Health has adopted the Major Incident Medical Management and Support system (MIMMS) as the new national major incident management system, with a ruthless but rapid triaging system.[10]

In addition there are triage systems that can be utilised for the care of individual patients on a day-to-day basis, such as the South African Triage Score, to optimise the timing of patient care and allow for rational resource utilisation. These are of particular relevance on busy weekends in our public hospitals.[11]

The SA Triage Score allows patients to be treated ethically yet scientifically, with reasonable access to care based on the urgency of their underlying injury or condition, thereby utilising the principles of non-malificence and justice in the management of the emergency patient.

Rational resource use in these circumstances has been an accepted part of South African ethics and law.[1] Comfort care for the unsalvageable should always be offered.[12]

What about care beyond the emergency centre?

Modern trauma care is largely a mix of operative and non-operative care, with many patients requiring admission to an intensive care or high-dependency unit environment. These sections of the hospital have their own ethical and medico-legal issues for the trauma patient and the treating clinician. The standard of care required is the same as for the emergency centre, however, namely a reasonable practitioner and facility standard.

Although the Trauma Society of South Africa has set standards[13] that may be complied with in order to ethically offer this reasonable standard of care, these are not currently enforceable.

Many of our public hospitals are staffed by foreign-qualified doctors, some of whom are in training positions. The ethical dilemma this situation produces includes different cultural and philosophical outlooks,[14] often with a different level of skill or experience that leads to doubts and confusion in the mind of the clinician.[15]

The concept of damage control surgery for both general and orthopaedic injuries[16] has led to staged and repeated operative procedures, the need for and complex nature of which patients are often not able to comprehend. This leads to frustration on the part of relatives and patients and often to lack of co-operation from the patient.

It may become evident, often only after some of these procedures have been performed, that because of the severity of injury, treatment is futile. Again the international literature can provide guidance in the institution of palliative care principles in the trauma patient in the ICU[17] after suitably informing the family of the prognosis. Withholding or withdrawing life-supportive care is a medical decision, and in terms of South African law the family cannot insist upon continuing futile support.[1,18]

What about research in emergency scenarios in South Africa?

Research in South Africa was previously not governed by legislation. However, the National Health Act No. 61 of 2003 for the first time brought all research under the ambit of statutory law. There are specific clauses in the regulations[19] governing research in emergency situations that allow research ethics committees to waive consent if this is justified by the protocol submitted, or to allow for delayed consent from the next of kin (section 5.9). The same regulations, however, limit this research to 'minimally invasive observational research' (section 5.14), both in the emergency centre and in the intensive care unit. This certainly hampers the research of new therapeutic modalities and necessitates a re-think of this aspect of the regulations, especially with regard to new devices and procedures in the surgical field.

The need for formal ethical approval for retrospective case series and audit reviews has also led to a decrease in the research output of both South African and international researchers, as they are frustrated with the processes for ethical approval for low-risk retrospective academic research. The reason for the frustration is that many research ethics committees require formal good clinical practice-type processes, even for non-interventional anonymised data assessment.[20-22]

Part of this frustration stems from the multiple steps in obtaining final consent in some facilities, where first a university ethics committee then the hospital management must approve the protocol; then final approval from the university is obtained, and after this approval from the provincial health services is still required. Streamlining this process to one committee with broad representation would encourage research. In a situation where there is a dire necessity for clinical research in trauma settings, it is unethical for

bureaucratic processes to delay or obstruct research. A research ethics committee should do what it has been set up to accomplish: facilitate ethical research!

What are some of the controversies in the international trauma and emergency literature that may be relevant to South Africa?

The high prevalence of HIV among the trauma population is well known in South Africa, yet testing without informed consent is considered unethical in this country. It may be time to consider the American Centers for Disease Control guideline for HIV opt-out testing in emergency centres[23] to provide clinicians with the knowledge to address less common organisms when treating the septic complications that commonly follow severe trauma, particularly when there is ICU admission. This would also serve to improve clinician safety.

There are a number of novel therapeutic products designed for use in the injured patient in the developed world that are not yet available in South Africa. Many of the newer haemostatic devices and products are not yet registered by the Medicines Control Council, while patients are compromised due to a lack of currently available suitable alternative therapeutic strategies. The lengthy time delays associated with registering a new drug or device result in obstruction to access of necessary medical care. The ethical dilemma faced by the treating clinician in this situation is immense, especially in light of beneficence and non-maleficence. Acting in the best interests of the patient would require use of the proven new and better treatment option, an option that is denied to the patient because of regulatory hurdles blocking access. Streamlining the processes for the introduction of novel modalities is required for products that can be life-saving in emergency situations.

Conclusion

Trauma is an aspect of emergency care that extends far beyond the emergency centre, with many additional medico-legal and ethical concerns. This brief overview has sought to highlight some of these dilemmas and to encourage the consideration of alternative methods to address these issues. In addition, much-needed research in this field is requisite and should be encouraged.

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