Guest editorial

Emergency medicine

L Wallis, MB ChB, MD, DIMCRCSEd, Dip Sport Med, FRCSEd (A&E), FCEM (UK), FCEM (SA), FIFEM

Head, Division of Emergency Medicine, University of Cape Town; Head, Division of Emergency Medicine, Stellenbosch University; Head, Emergency Medicine, Western Cape Government

Professor Wallis was trained in the UK, and was employed by the British Navy. He emigrated to Cape Town in 2002. He is president of the African Federation for Emergency Medicine. His interests include emergency care systems, triage and pre-hospital care.

Correspondence to: L Wallis (leewallis@bvr.co.za)

'Emergencies occur everywhere, and each day they consume resources regardless of whether there are systems capable of achieving good outcomes.'

Low-income countries suffer the highest rates of every category of injury - from road traffic injuries to drowning; the highest rates of maternal death from acute complications of pregnancy; and the highest rates of acute complications of communicable diseases, including tuberculosis, malaria, and HIV.2 The rapidly growing prevalence of non-communicable diseases (such as cardiovascular and diabetic disease) has only increased the burden of acute illness, as patients with chronic disease in lowincome countries also have the highest rates of mortality from acute complications.3 The World Bank's Disease Control Priorities in Developing Countries project estimates that 45% of deaths and 36% of disability in low- and middle-income countries could be addressed by the implementation of effective emergency care systems.2

While definitive specialty care will never be available at all times in all places, several studies suggest that emergency care is a clinically and cost-effective means of secondary prevention: prioritising an integrated approach to early resuscitation and stabilisation of acutely ill patients greatly reduces the morbidity and mortality associated with a range of medical, surgical, paediatric, and obstetric conditions.^{4,5} In addition, many acute conditions can be mitigated by primary prevention, and disease surveillance at acute and emergency care facilities has been shown to increase preparedness and disease control capabilities.4 In general, analysis of acute disease patterns and the distribution of mortality across the acute care continuum is a crucial part of identifying the preventive and training initiatives most likely to impact on outcomes.⁶ Facility-based and pre-facility emergency care are essential components of a continuum ranging from prevention, through primary and chronic care, to inpatient critical care and surgery. With Resolution 60.22, the World Health Assembly has called for all its member states to develop 'formal, integrated emergency care systems'.⁷

There remain four foundational challenges to properly integrating effective emergency care into the health system in South Africa:

- The burden of acute disease is severely under-documented. Data exist on the distribution of inpatient diagnoses, but the actual range of acute and emergent presentations to health facilities is almost completely unknown. Headcounts supplied to the National Department of Health lack standardisation, and are often combined with out-patient data; data on acuity and disease profile are almost completely missing. In the absence of accurate data, it is almost impossible to plan for effective services.
- Healthcare facilities often lack an integrated approach to triage, resuscitation, and stabilisation of acutely ill patients. Even at large centres of excellence, acutely ill patients may be cared for by several different departments, depending on age, pregnancy status, and specific disease states. In smaller hospitals, 'casualty' departments are staffed by rotating personnel with no dedicated emergency care training. Lack of a standardised

approach adversely affects patient outcomes.

- Essential components of emergency care have not been determined, and there is no consensus on how to define success. To date, there has been no systematic analysis of the emergency care delivery systems most appropriate to our context. While there are scattered examples of successful interventions, little is known about what makes these centres effective or how others might replicate their success. Impact is often quantified by the number of providers trained, rather than by any measure that incorporates patient outcome, quality or performance assessment.
- There is no current advocacy plan for placing emergency care on the national health agenda. Despite the essential role of effective early resuscitation and stabilisation in averting morbidity and mortality, emergency care is conspicuously absent from planning discussions, such as those around National Health Insurance.

Urgent and significant intervention is needed to address the challenges facing emergency care delivery. We should be very encouraged by the appointment by the Minster of Health, Dr Motsoaledi, of an EMS review committee to try to address some of the shortcomings in pre-hospital care. However, we cannot simply turn to government to fix the problems: we each have a responsibility to improve emergency care delivery. We can start by improving our knowledge and skills, and I hope that this issue of *CME*, with a wide range of content, will help you to take that first step.

References available at www.cmej.org.za

References

- Kobusingye OC, Hyder AA, Bishai D, et al. Emergency medical systems in low- and middleincome countries: recommendations for action. Bull World Health Organ 2005;83(8):626-631.
- Jamison D, ed. Disease Control Priorities in Developing Countries – NCBI Bookshelf. http://www.ncbi.nlm.nih.gov/books/ NBK11728/ (accessed 15 November 2012).
- 3. Desta T. Diabetic ketoacidosis in an Addis Ababa children's hospital. Ethiop Med J 1992;30(1):7-11.
- 4. Anderson PD, Suter RE, Mulligan T, et al. World Health Assembly Resolution 60.22 and its importance as a health care policy tool for improving emergency care access and availability globally. Ann Emerg Med 2012;60(1):35-44.e3.
- Razzak JA, Kellermann AL. Emergency medical care in developing countries: is it worthwhile? Bull World Health Organ 2002;80(11):900-905.
- 6. Mock CN, Jurkovich GJ, nii-Amon-Kotei D, Arreola-Risa C, Maier RV. Trauma mortality patterns in three
- nations at different economic levels: implications for global trauma system development. J Trauma 1998;44(5):804-812; discussion 812-814.
- 7. World Health Organization. Sixtieth World Health Assembly. Resolution WHA 60.22: Emergency-care systems. Geneva: World Health Organization, 2007. http://www.who.int/gb/ebwha/pdf_files/WHA60/A60_R22-en.pdf (accessed 15 November 2012).