CME: Paediatric palliative care

July's CME deals with the topic of paediatric palliative care and comes from Patricia Lück and a team of dedicated palliative care specialists. Coping with death at any age is difficult, but most people find it even more difficult when it is a child who is dying. However, research shows that terminally ill children are generally aware of the severity of their illness and need to be included in clinical decisions regarding their care. A report released last year by the International Children's Palliative Care Network and the United Nations Children's Fund (UNICEF) estimated that more than 800 000 children in South Africa (SA) are in need of generalised palliative care and more than 300 000 in need of specialised palliative care. It is likely that only 5% of the children in need are being reached. Among the reasons for this poor reach is 'lack of knowledge and adequate understanding among health professionals'.

Children's palliative care is not yet a specialty in SA, and this issue of CME offers a practical approach to the ethics of end-of-life decisions, basic counselling skills and talking to children, breaking bad news, pain control, and coping with your own potential burnout.

National expenditure on health research in SA

Against the background of the Ministry of Health's commitment to allocate at least 2% of the national health budget to research, the National Health Research Committee has performed an audit[1] to establish the extent to which SA has historically invested in health research, judged by: (*i*) health research expenditure as proportions of the gross expenditure on research and development and the gross domestic product; and (*ii*) the proportion of the national health budget and the Department of Health budget apportioned to research.

While the total investment in health research in SA from the aggregated public, private and foreign sectors has increased steadily in real terms in recent years, and represents a 2.6-fold increase in real terms since 1991/2, only 0.73% (amounting to R403 million) of the Health Vote of R114.1 billion in 2011/2012 was spent on health research in that year; data from other recent years are similar. As the authors of the audit point out, by any metric the SA government's current allocations to health research are far below the aspirational target of 2% allocation of the national health budget to health research. They recommend that a new set of realistic, transparent, internationally accepted and clearly defined targets be adopted forthwith as a means of ensuring adequate future government investment in health research in SA, and that an efficient monitoring mechanism be developed to track the level of expenditure on health research by governmental and non-governmental funders in the national health research system, so that performance against new benchmarks can be assessed accurately.[1]

Smoking cessation after acute coronary syndrome

Good evidence exists to support the use of key secondary prevention medications (a four-drug combination of aspirin, statins, beta-blockers and angiotensin-converting enzyme inhibitors or angiotensin receptor blockers) and smoking cessation in patients after acute coronary syndromes (ACSs). Little is known about adherence to medication and smoking behaviour after discharge in SA.

The study by Griffiths *et al.*[2] provides valuable insight into prescribing practices, medium-term adherence patterns after an ACS, and smoking cessation rates beyond 6 months, areas for which there are currently no published data in the SA setting. Three findings were of particular importance: prescribing of secondary prevention medication at discharge was high (70.7% for the four-drug combination), but some 20% of patients were discontinuing medication within a 6 - 9-month period (23.5% for the four-drug combination), and a large proportion (68.6%) of patients who were active smokers on admission to hospital continued to smoke. Given the importance of smoking cessation in improving short- and long-term outcomes, more focused strategies to help patients quit are required.

Traumatic brain injury

Traumatic brain injury (TBI) is the term used for any injury of the intracranial structures and cerebral parenchyma resulting from trauma to the head. Included in this definition is the cascade of pathophysiological events that lead to progressive worsening of the initial injury, such as intracranial haemorrhage and cerebral oedema.

According to the National Institute for Occupational Health, as estimated in 2009, ~89 000 (180/100 000) new cases of head injury (of any severity) are reported in SA each year. Of these, 50% are due to road traffic collisions (bicycle, vehicle or pedestrian), 25% to falls and a further 25% to violence.

TBI may result in altered brain function and present with confusion, altered consciousness, coma, convulsions and/or focal neurological signs.

It is possible to predict outcome in severe TBI, and aid clinical decision-making in the emergency setting.

Sobuwa *et al.*[3] show that in the prehospital setting, bilateral pupil reactivity, a Glasgow Coma Score (GCS) of 6 - 8 and oxygen saturation ≥90% predicted a positive outcome following severe TBI. The initial GCS at the scene appears to be the most sensitive of these variables … the higher the GCS, the better the outcome.

JS

1. Paruk F, Blackburn J, Friedman IB, Mayosi BM. National expenditure on health research in South Africa: What is the benchmark? S Afr Med J 2014;104(7):468-474. [http://dx.doi.org/10.7196/SAMJ.6578]
2. Griffiths B, Lesosky M, Ntsekhe M. Self-reported use of evidence-based medicine and smoking cessation 6 - 9 months after acute coronary syndrome: A single-centre perspective. S Afr Med J 2014;104(7):483-487. [http://dx.doi.org/10.7196/SAMJ.7798]
3. Sobuwa S, Hartzenberg HB, Geduld H, Uys C. Predicting outcome in severe traumatic brain injury using a simple prognostic model. S Afr Med J 2014;104(7):492-494. [http://dx.doi.org/10.7196/SAMJ.7720]