



## There but for the grace ...

The story of Vic McKinney coming to terms with his tetraplegia following an extraordinary road accident involving a falling tree that killed his Irish national footballer father, recorded by Chris Bateman,<sup>1</sup> challenges many of our prejudices and stereotypes of 'disability'.

McKinney is highly critical of 'the medical model' – and of some doctors, whom he acknowledges for their contribution to his recovery, but says often fail to hear the voices of disabled people, especially when they question a doctor's opinion. This view is reinforced by a study by Steyn *et al.* on the management of hypertension and diabetes at community health centres:<sup>2</sup> 'No matter what we as health professionals do or say, patients are in control ...'. But it is societal attitudes that get in McKinney's way more than anything.

His achievements and contributions to society are remarkable.

## Historic marathon collapse

The dramatic collapse of Jim Peters, the world record holder for the marathon and leading runner in the 1954 British Empire and Commonwealth Games in Vancouver, Canada, has been the subject of much speculation. Tim Noakes, Jackie Meckler (who competed in and came second in the race) and Dan Pedoe examine the evidence of why Peters collapsed, whether he developed heatstroke (and if not, what other explanation for his collapse there could have been), and what relevance this has for present marathon runners.<sup>3</sup>

Jim Peters collapsed repeatedly during the last 385 metres of the race that he had led from the start. He was taken off the track, lost consciousness and was taken to hospital.

Peters' rectal temperature was 39.4°C, whereas heatstroke is usually associated with rectal temperatures in excess of 42°C. The fact that Peters chose not to drink during the race has been used as evidence that he had heatstroke, but the extent to which athletes drink during exercise does not predict their post-exercise temperatures.

The authors propose that Peters' collapse was probably due to a combination of hyperthermia-induced fatigue which caused him to stop running; exercise-induced postural hypotension as a result of low peripheral vascular resistance; and combined cerebral effects of hyperthermia, hypertonic hypernatraemia associated with dehydration, and perhaps undiagnosed hypoglycaemia. His unconsciousness might have been due to a transient encephalopathy.

## Gram-negative bacilli XDR

South Africa has extensively drug resistant (XDR) tuberculosis, and the Gram-negative bacilli are rapidly heading the same way, according to Brink and colleagues.<sup>4</sup> In a study conducted in 2007 they tested 1 241 blood culture isolates: *Escherichia coli*, *Klebsiella pneumoniae* and *Enterobacter* spp.

Their findings included high levels of resistance to key 'workhorse' antibiotics in the hospitals studied, a significant prevalence of broad-spectrum antibiotic-inactivating enzymes (in particular extended-spectrum  $\beta$ -lactamases (ESBLs)) in some centres, and considerable differences in the prevalence of resistance and ESBL production between centres.

Apart from the considerable impact on financial resources, clinical outcome in bacteraemic infections caused by ESBL-producing *K. pneumoniae* appears to be worse than that of patients with non-ESBL-producing isolates.

As private institutions in South Africa do not employ the doctors who provide services in their hospitals, they are unable to influence their prescribing habits. The fact that the antibiotic-prescribing fraternity has not yet accepted stewardship of the merging problem of XDR Gram-negative bacilli gives rise to an ethical dilemma. It may now be appropriate to challenge the right of doctors to prescribe any antibiotic they wish. The authors conclude that a formal strategic programme of sustained reduction in consumption of antibiotics of all classes over the long term in hospitals nationwide, as in Sweden, is urgently warranted.

## *Pseudomonas aeruginosa* bacteraemia

*Pseudomonas aeruginosa* bacteraemia (PAB) is still primarily a nosocomial infection, but the numbers of community-acquired cases are increasing, especially in patients with AIDS. Perovic and colleagues found that PAB is a major problem at Chris Hani Baragwanath Hospital.<sup>5</sup>

In their study the most common underlying conditions were burns, HIV infection, trauma and haematological malignancies. More than a third of episodes were catheter related. In 91 bacteraemic episodes the mortality rate was 46.8% for the 79 patients whose outcome was known.

For organism-directed therapy, appropriate treatment was significantly associated with reduced mortality. Combination therapy is not necessarily more advantageous than monotherapy.

The presence of multidrug-resistant (MDR) strains and evidence of transmissions in specialised ICU facilities at the hospital suggest that the extensive use of antimicrobial agents may have played a selective role, while prolonged stay created opportunities for selection of MDR strains.

## JPvN

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