



Backs and bowlers

It is said that there are two kinds of people — those with backache and those who will get it. Given the complexity of the structure and function of the lumbar spine, it is perhaps surprising that more persistent back problems do not present clinically. The lumbar spine supports our upright posture, it protects the spinal cord and nerves, and it has considerable mobility.

Cricketers may present to their medical practitioners with backache. If a radiological diagnostic examination is considered necessary, what would be the appropriate test(s)? Dr Stretch from the Sport Bureau of the University of Port Elizabeth and his colleagues examined back injuries in young fast bowlers to address this question (p. 611).

Bowling has been found to be the major cause of cricket injuries, with younger players tending to be most at risk. The literature reports that between 38% and 47.4% of schoolboy bowlers were found to have sustained back injuries, while 50% of fast bowlers had been diagnosed with a stress fracture of a lumbar vertebra. Spondylolysis is a defect in the pars interarticularis believed to be a stress fracture, secondary to low-grade trauma from repetitive spinal hyperextension and rotation. A high incidence of pars interarticularis defects was found in young fast bowlers. In their study Stretch *et al.* found that radiographs were frequently normal while isotope bone scans and CT scans were positive. They therefore conclude that when a young fast bowler presents with backache after bowling, it would seem appropriate to use all three modalities to make a diagnosis.

Of their patients with proven spondylolysis, all but one had achieved complete healing at 12 months.

Chronic conditions and obesity

In South Africa we have been so overwhelmed by the sheer scale and seriousness of the AIDS pandemic that other components of the big picture are often overlooked. Two timely contributions draw our attention to the importance of chronic conditions, which are also increasing dramatically in many developing countries (p. 585), and obesity (p. 598).

Epping-Jordan, Bengoa and Yach (p. 585) note that globally chronic conditions are on the rise and will increasingly present a major public health challenge in the 21st century. An estimated 90 000 people die daily from chronic, non-communicable conditions such as cardiovascular disease, diabetes and asthma. Another 8 000 people die daily from HIV/AIDS. More than 24 million people are coping with schizophrenia and over 150 million are clinically depressed. Although these conditions have different causes, the demands they place on patients, families, health care systems and government are remarkably similar. From a health care

perspective all can be considered chronic conditions in that they persist across time and require some degree of health care management. Most health systems are not equipped to meet these challenging demographic patterns and resultant health care demands. By shifting services from the acute care model towards one that emphasises co-ordinated, planned care, health care systems can maximise their effectiveness and efficiency. Where large-scale reform is not feasible, small changes are often more practical and can have a dramatic effect on health outcomes.

The press has been alive with reports that activists are targeting McDonalds and other fast-food suppliers for litigation in the USA for being responsible for the pandemic of obesity. Obesity in the USA, now deemed 'the fattest nation on earth', results in 300 000 deaths annually. In South Africa, too, obesity is increasing. The mean prevalence among black women in North West province, predominantly rural dwellers, has risen to 28.6%, in women in Cape Town to 34.4% and in women in Durban to 22.6%. A puzzling feature in the occurrence of obesity in African populations is that the proportion of men affected is much lower, for example 2.9% in North West, 7.9% in Cape Town and 3.7% in Durban.

Unfortunately most populations have little sustained concern about the commonness of overweight and obesity, and measures of control have been largely unsuccessful.

Exposure to blood in medical students

Hazardous blood exposure in health care settings carries both physical and emotional risks. The article by Jennifer Rabbitts (p. 621) reporting on occupational exposure to blood in medical students arose out of a student project and was written while she was a final-year medical student.

During a 15-week period, 19 incidents were reported; the majority occurred while students were on call, almost half occurred after hours, and a disproportionate number occurred in three departments. The majority (16 of 19) were sharp injuries, 14 of them involving hollow needles filled with blood. Occupational exposure risk of seroconversion is low compared with sexual transmission conversion rates. However, occupational blood exposure in health workers is still a significant cause for concern, with many indirect costs. Education programmes and universal precaution guidelines can significantly reduce occupational exposure to blood. Drug prophylaxis immediately after exposure can also provide significant protection.

Occupational exposure to blood has had a significant effect on students and such incidents may have significant effect on career decisions.

JPvN