



Deaths unabated

A variety of statistics have been published which have shown increased mortality rates in South Africa. For sheer impact, few emphasise the severity of the problem as graphically as the letter by Bradshaw, Laubscher, Dorrington, Bourne and Timaeus, because of its compelling numbers and arresting figures (p. 278). The *SAMJ* was pleased to approve pre-release of the letter on the MRC website because of the importance of the findings and because some of the data had already entered the public domain and there was a clamour for more.

The number of registered deaths on the population register shows a steady increase in the number of adult deaths between 1998 and 2002. There are also continuing shifts in the age distribution of the deaths, with a large increase in the number of young adult deaths particularly marked for women. Taking into account the possible effects of population growth and improved registration, there has been a real increase of more than 40%!

The authors conclude that such rises in the mortality should renew Government's resolve to implement the comprehensive plan to prevent and treat HIV/AIDS as rapidly as possible. All the more distressing when the media continue to expose the influence of inappropriate beliefs in dietary fads and the nature of HIV/AIDS.

Mind and matter

In the latest edition of his classic *The Lore of Running*, Tim Noakes emphasises the importance of the brain in influencing athletes to improve their sporting performances.

Simon Whitesman and Roger Booth (p. 259) take this further in their review of the presence and importance of mind-brain immune interactions. The study of psychoneuroimmunology expands the understanding of disease, recognising that psychological phenomena and social context can influence the aetiology and progression of and recovery from disease.

The extension of the mind/brain relationship to include the immune system is predicated on the presence of multiple neuropeptides and their receptors in cells of the immune system, where they are produced and expressed *de novo* with homology to their neuroendocrine relatives as well as structural links between lymphoid organs and noradrenergic and peptidergic nerve fibres.

The neuroendocrine and immune systems share a common molecular language, which serves to integrate the two systems primarily involved in systemic homeostasis, providing a network of communication between 'mind', brain and body. Of significance in humans is the extensive literature linking emotions, psychological stress and immune function. Negative mood adversely affects immune markers that may contribute to poorer health.

The debate continues on whether psychological interventions can improve clinical outcomes in organic disease. Psychological interventions also offer a means to modify unhealthy lifestyle behaviours such as smoking, poor nutrition and lack of exercise.

Inhuman shields

Child abuse is a worldwide scourge. This often takes the form of physical, sexual and psychological maltreatment of children. The dire consequences of physical abuse on the child's brain have been documented in the literature.

Fieggen and colleagues (p. 293) reviewed 68 children presenting to the Red Cross Children's Hospital trauma unit with a diagnosis of non-accidental head injury (NAHI). They were able to define two sub-groups; 37 children (53%) were the intended target of the assault, while allegedly 33 (47%) were not.

Recent studies have shed new light on possible mechanisms of brain injury in abused infants. These are now thought to be the result of hypoxic-ischaemic injury. A particular point of interest in the present study was the observation that in nearly half (47%) of all cases the injured child was not the intended target of the assailant. The assailant was invariably male and his intended adult victim female in the vast majority of cases. Although the mechanism of shielding is widely recognised in social practice in their hospital, it has received little attention in the literature. The high numbers reported in this series possibly reflects a high rate of interpersonal violence, the domestic nature of which is underscored by the fact that fully 80% of the injuries occurred in the child's own home.

The authors conclude that this presents a particularly poignant challenge in a nation where the rights of the child are enshrined in the Constitution and call for concerted action to protect the most vulnerable members of society in the very place that they should be safest.

Probiotics

The *SAMJ* has come under considerable pressure after publication of an article questioning the validity of advertising claims concerning probiotics. For the record a respected medical scientist refereed the article before it was accepted for publication. The *SAMJ* has further acted according to its editorial policies by accepting and publishing several rebuttals.

One useful result from the publication is that it has brought the use and potential value of probiotics to the attention of the profession. Readers are referred to the editorial by Professor Koornhof (p. 272), which brings some clarity to a subject that is often clouded by exaggerated or unsubstantiated claims.

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