### **EDITOR'S CHOICE**



#### **Trees**

The cover of the *SAMJ* has attracted controversy on many occasions with its several changes of appearance and name changes during its 120 years. Pictures were introduced on the cover for the first time in 1985 to the disquiet of some parties. At first there were attempts to match the cover picture to the clinical contents, and indeed this has been the theme most consistently followed over the years. Specific themes were also tried, such as medicinal plants (February - June 1985), historical medical



instruments (July - December 1985) and tribal costumes/regalia (January - June 1986).

Browsing through the beautifully illustrated book *Bushveld Trees* by a medical colleague, Dr Malcolm Funston, inspired the editors to run a cover theme again for a while. Malcolm kindly agreed to provide us with pictures from his book, the first gracing this month's cover.

# Why identify acute HIV infection?

Preventive efforts are having a limited impact on the HIV epidemic. Motloung and colleagues (p. 531) therefore suggest that it is crucial that imaginative and novel interventions are explored.

Most adult HIV infections in South Africa are acquired through heterosexual contact. Sexual transmission risk is closely correlated with escalating viral load. It is now recognised that acute HIV infection is the most infectious stage of the disease, significantly more so than advanced AIDS. Risk of transmission is greatest during the initial acute HIV infection when viral load is highest, with up to 50% of heterosexual transmission occurring within the first 5 months following seroconversion. Co-infection with sexually transmitted infections is significantly associated with HIV transmission. Among women, high maternal viral load is also recognised as a strong risk factor for mother-to-child transmission of HIV.

The authors propose that as an important factor in tackling the HIV/AIDS epidemic, identifying this group may become a public health priority.

#### Insulin and obesity

Pathology laboratories in South Africa and elsewhere have been experiencing an increase in requests for serum insulin measurements for the assessment of insulin resistance. Crowther (p. 519) examines the clinical relevance of fasting serum insulin levels in obese subjects.

Some health workers, who claim that insulin resistance causes obesity, have unfortunately misinterpreted the strong association between insulin resistance and obesity. Insulin resistance is in fact a direct effect and not a cause of obesity and is a physiological response to reduce further weight gain. The main function of insulin within the adipocyte is to inhibit triglycericide breakdown (lipolysis), and therefore insulin leads to increased lipolysis and a

slowing down of triglyceride deposition within the adipocytes.

The current opinion is that there are many factors involved in how obesity causes insulin resistance. Primarily the adipocyte is the source of a number of factors that affect insulin sensitivity, including free fatty acids, tumour necrosis factor, alpha interleukin 6 and adiponectin. Obesity, via its ability to increase insulin resistance, is thought to play a prime role in the causation of the metabolic syndrome, in which the best method for improving insulin sensitivity remains weight loss.

Measurement of insulin is clinically important only for the detection of insulinomas and rare genetic defects that lead to severe insulin resistance or defective insulin secretion. The measurement of insulin resistance in obese subjects is not warranted.

## Sexual behaviours and knowing someone with HIV/AIDS

Behavioural risk interventions are a central part of continuing efforts to stem the spread of the HIV epidemic. Interventions have been developed and tested in different populations within South Africa. These seek to lower individual risk of HIV infection by discouraging sexual relations with multiple partners and increasing levels of condom use. To date they have met with mixed success, and understanding the determinants of high-risk sexual behaviour remains a major concern in addressing HIV/AIDS.

Several studies have reported that knowing someone with HIV/AIDS may be an important predictor of decreased risk behaviour. In this issue Ijumba *et al.* (p. 522) suggest that levels of condom use may be increased among individuals who know someone living with HIV. This provides further evidence of the futility of the climate of denial among many individuals, communities and leaders in this country.

#### C Louis Leipoldt

Professor Kay de Villiers provides us with a fascinating glimpse of the vast medical and other contributions of C F L Leipoldt, including his editorship of the *SAMJ*, for which he is best remembered (p. 552).

Leipoldt was fluent in German, Dutch, English and Afrikaans and had a reasonable grasp of French. He read widely, had a remarkable memory, was a gifted writer and had a tremendous capacity for hard work. He was responsible for school medical inspection in the then Transvaal and Cape Province and indirectly in Natal. His independent mind and fearlessly expressed opinions resulted in crises in his various appointments. Differences with the Medical Association led to the termination of his editorship of the *SAMJ* after 17 years during which his sharp intellect and wideranging interests had shaped the journal.

He was an accomplished amateur botanist, had trained and worked as a journalist before and after graduating in medicine in London and was an author of popular and serious works (see the review by Jonathan Spencer Jones, p. 526).

**IPvN** 



487