



## South Africa's disease burden

Doctors tend to be more turned on by the immediate health problem of an individual, which can be analysed and a course of logical action mapped out, than by population studies, which we tend to leave to the public health people, actuaries, statisticians and the like. Just such a group has just completed the first national burden of disease study for South Africa (p. 682). We had better take note of this important study, as it provides startling data that will significantly influence health care provision in the near future.

The authors note that burden of disease information is an important component of health information required for health planning, as it can be used to identify the health gaps in the population that need to be addressed to improve health status. Earlier analysis of South African mortality data identified an unusual triple burden of disease, comprising pre-transitional diseases and conditions related to poverty and under-development, emerging chronic diseases, and injuries. This pattern is changing to a quadruple burden as a result of the HIV/AIDS epidemic.

There is a striking loss of years of life from HIV/AIDS (38%), which is proportionately higher for females (47%) than for males (33%). After HIV/AIDS (30%), cardiovascular disease (16.6%), infectious and parasitic diseases (10.3%), malignant neoplasms (7.5%), intentional injuries (7%) and unintentional injuries are the leading cause-of-death categories. Males have a higher proportion of injury deaths. South Africa's injury rates are higher than anywhere else in the world, due mainly to very high rates of intentional injuries.

The study highlights that the already high disease burden due to HIV/AIDS can be expected to grow rapidly in the next few years unless interventions that delay mortality and morbidity become widely available. Although additional money for HIV/AIDS has been allocated in the budget, this needs further attention as the almost 40% of premature mortality due to HIV/AIDS in 2000 can be expected to increase to 75% by 2010.

Interventions that are likely to reduce premature mortality significantly in South Africa include:

- Reduce HIV transmission and delay mortality from AIDS in adults by improving treatment of sexually transmitted infections, improving voluntary counselling and testing services, providing antiretroviral treatment to pregnant HIV-positive women and HIV-positive patients, and promoting safe sex.
- Improve TB control.
- Promote healthy lifestyles, including a prudent diet, physical activity and reduced smoking, alcohol and substance abuse.

## Lung cancer and the adrenals

Medical students learn that the adrenals provide fertile ground for the growing of metastases from some cancers. Ross *et al.*

(p. 695) aimed to determine the prevalence of primary hypoadrenalism in patients with stage 3 and 4 lung cancer.

Lung cancer is the leading cause of cancer mortality in most countries. The adrenal glands are common sites of metastases, as proven by autopsies, which reported adrenal metastases in more than 40% of patients with bronchogenic carcinoma. This high prevalence may be due to the rich sinusoidal blood supply and high local concentration of glucocorticoids, which may promote implanting of metastases. Despite the high frequency of adrenal metastases in patients with bronchogenic carcinoma, the prevalence of hypoadrenalism is poorly documented, although there have been reports of adrenal insufficiency as the sole manifestation of cancer and of malignancies initially presenting as Addisonian crises.

The authors studied biochemical and clinical predictors of hypoadrenalism and found that clinically relevant hypoadrenalism is distinctly uncommon. Furthermore, electrolyte disturbances and basal cortisol concentrations are of limited use in identifying the occasional patient with mild hypoadrenalism.

## Renal transplantation — impact of gender, age and race

The *SAMJ* has a policy of carefully considering articles that purport to find differing results of treatment on the basis of race. Many of these in fact turn out to be due to other factors such as socioeconomic status. Gratuitous mention of race, which has no bearing on the clinical problem, is unacceptable. The article by Moosa (p. 689) was accepted because there were findings in the world literature that appeared to implicate race in the outcomes of renal transplantation.

In common with other developing countries, South Africa has limited resources and only a fraction of patients with irreversible renal failure receive treatment. In order to make optimal use of these limited resources it is necessary to ensure that all factors that can improve outcome are considered. The study therefore looked specifically at the influence of demographic factors on both patient survival and the survival of renal allografts by studying the data of 542 patients receiving primary renal allografts over a 23-year period.

The study showed that age is an important determinant of outcome after renal transplantation but that race is not! The data demonstrated the superiority of patient and graft survival in younger patients. Gender does not influence graft survival, but females do have a higher overall mortality rate following renal transplantation at the University of Stellenbosch Renal Unit, Tygerberg Hospital.

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