On 24 March it is World TB Day. With the high incidence of TB in southern Africa one could be forgiven for thinking that every day should be TB day. At the time of writing, among communicable diseases, TB is the second leading cause of death worldwide, killing some 2 million people each year. The main burden of disease is, as always in communicable diseases, among less developed countries. In the past 10 years the incidence of TB has increased in sub-Saharan Africa, which is ascribed mainly to the rise of HIV infection. The incidence in sub-Saharan Africa is 290 per 100 000 population, although Asian countries, with their large populations, have the most cases. India, China, Indonesia, Bangladesh and Pakistan together account for more than half the global burden, with 80% of new cases occurring in high-burden countries. The former Soviet Union is another region in which TB has risen inexorably during the past decade, due to general economic decline and the failure of TB control along with other health services since 1991.

Looking back, TB has probably killed 100 million people over the past 100 years, although a cure was available by the second half of the 20th century. There are some aspects of the current state of TB diagnosis, treatment and control which are noteworthy. New diagnostic methods have been developed, and the widespread application of control measures has increased the number of patients diagnosed and treated effectively annually from 696 000 in 1995 to 2.4 million in 2001. The past 10 years have seen more than 10 million patients treated, and TB control is both inexpensive and effective. However, the mainstay of diagnosis remains sputum smear and culture — techniques which are 100 years old. There have also been no new first-line drugs developed for TB for several decades and, sadly, two-thirds of patients who develop TB are not effectively diagnosed, treated or monitored. It is to be hoped that increased access to antiretroviral drugs in sub-Saharan Africa will decrease the burden of disease to some extent, but this will take time. In the meanwhile, TB continues to be a killer.

Another killer is chronic renal disease, the prevalence of which is increasing worldwide. From 24 to 30 March it is National Kidney Awareness Week in South Africa. One of the biggest problems with chronic renal disease is that people are often not aware that they are ill until they have progressed quite far in the disease, and most chronic nephropathies lack a specific treatment, progressing relentlessly to end-stage renal disease. This progression is a result of functional adaptations by the kidney after the original disease process has caused a critical loss of nephron units.

The concept of renoprotection, however, has developed into a combined approach to renal disease. The main measures are pharmacological, using ACE inhibitors and angiotensin II receptor antagonists, control of blood pressure and reduction of proteinuria. Tight glucose control in diabetics, stopping smoking and lowering blood lipids all contribute to renoprotection. The current available treatments, if applied timeously, can lead to delay in starting dialysis for many patients, but the real goal is less dialysis. Having said that, another goal may be even more important, and that is identifying patients with early chronic renal disease, so that these interventions can take place.


Bridget Farham

### SINGLE SUTURE

**OUT OF AFRICA**

African populations are more genetically diverse than those in other countries, which corroborates the prediction that all races are derived from a founder one in Africa. Subsequent migration has spread populations across the rest of the globe, and because only small groups of individuals are thought to have moved out of Africa, these early migrants established populations who were far more similar to each other than to their relatives who stayed.

This genetic diversity has far-reaching implications for the vast amount of research pouring out of gene-disease association studies. For example, using single nucleotide polymorphisms to identify genes which have a role in disease may be difficult because of the variation in the frequency of such polymorphisms across populations. Disease phenotypes are also probably far more affected by socio-economic and environmental factors than most laboratory geneticists realise.