The number of deaths from non-communicable diseases (NCDs) has been rising globally, and NCDs are currently among the leading causes of death in many countries.[1] The mortality profile in the African region is currently dominated by communicable, maternal, nutritional and perinatal conditions. However, changes are taking place and the World Health Organization has projected that by 2030, NCDs will be the biggest cause of death in this region.[2] The Burden of Disease Research Unit at the South African Medical Research Council recently analysed mortality levels and trends for NCDs over a 14-year period as part of its second National Burden of Disease Study for South Africa (SA).[3]

Our study shows that NCDs are already among the top causes of death in SA [3] By 2010, NCDs accounted for 39% of total deaths in the country. More than a third (36%) of these deaths occurred before the age of 60 years. In 2010, the number of deaths due to NCDs was similar to the number from HIV/AIDS and tuberculosis (TB) combined. However, the age-standardised death rates (ASDRs) for NCDs were higher than those of other broad cause categories (namely HIV/AIDS and TB combined; and other communicable diseases, plus maternal, perinatal and nutritional conditions).

We found that the overall NCD mortality rate decreased over time, but that there was a mix of increasing and decreasing trends for specific diseases (Fig. 1). This highlights the changing lifestyle and risk factor profiles of the SA population. The increase in mortality from diabetes mellitus, renal disease and endocrine/nutritional and blood disorders is concerning and is probably a result of lifestyle changes, urbanisation[4] and more South Africans falling into the overweight and obese category.[5] Effects of the tobacco control interventions[6] can be seen in the decrease in mortality rates from ischaemic heart disease, lung cancer, chronic obstructive pulmonary disease and asthma. The substantial decrease in mortality from oesophageal cancer may be due to changing socioeconomic status, urbanisation and resultant dietary changes, including shifts from consuming home-grown to commercial maize.[7]

Fig. 1. Trends in ASDRs for diabetes mellitus, cardiovascular diseases, cancers and chronic respiratory disease by specific cause by sex, SA 1997 - 2010.[7]

(IHD = ischaemic heart disease; COPD = chronic obstructive pulmonary disease.)

Persistent burden from non-communicable diseases in South Africa needs strong action
Cardiovascular diseases were the leading category of NCDs. However, population groups are in different stages of the cardiovascular transition,\[1,9\] as shown in Fig. 2. In 2010, Asians had distinctively high ASDRs for ischaemic heart disease (IHD) and renal disease. The ASDRs for IHD were almost twice as high as in the other population groups. In contrast, black Africans are in the midst of a cardiovascular epidemic with relatively high ASDRs from cerebrovascular disease, hypertensive heart disease, diabetes mellitus, IHD and cardiomyopathy. Marked declines were observed for cardiovascular disease and diabetes mellitus among coloureds and Asians, while there was an increase among black African males. Fig. 2 also reveals population group differences in diabetes and renal diseases, which may be associated with access to medical care.

Our study showed that ASDRs from NCDs declined by 0.4% per annum over the 14-year period. However, this is much lower than the recommended goal of 2% per year.\[10\] The SA government has recognised the need to address NCDs and has developed a strategic plan with an ambitious goal to decrease premature NCDs and has developed a strategic plan to address NCDs. Preventing and delaying the epidemics of NCDs is an essential step in meeting the goals of the NCD strategic plan.

Continued effort and political will must be directed towards preventing, delaying the onset of or treating and managing these conditions.

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Fig. 2. ASDRs for cardiovascular diseases, diabetes mellitus and renal disease by population group, SA 2010.\[12\]
