Non-infectious diseases pose an economic threat to healthcare

No country can afford the economic burden placed on its health system by the rise in non-communicable diseases – not even the rich ones – proclaimed Minister of Health Aaron Motsoaledi at the launch of the results of the South African National Health and Nutrition Survey (SANHANES-I). He was referring to the rise in the prevalence of cardiovascular diseases and diabetes among South Africans. *Demetré Labadarios*, *Olive Shisana* and *Lucinda Dalais* explain further.

In that assumption the minister is not alone. The World Economic Forum's 2009 Global Risks Landscape Assessment Report claimed that NCDs were 'the most significant threats facing global and local economies.' South Africa is no different.

In terms of the national strategic plan, NCDs include cardiovascular diseases, diabetes, chronic respiratory conditions, cancer, mental disorders, oral diseases, eye disease, kidney disease and musculoskeletal conditions.

The good news is that much can be done to prevent or improve the management of these conditions by addressing the underlying causes of NCDs through focusing efforts on reducing smoking, alcohol consumption and overweight among South Africans while increasing exercise frequency, and eating a wider variety of foods.

This is where the comprehensive SANHANES study comes in; it provides policy makers and programme managers with critical information on emerging epidemics of NCDs, and the underlying social, economic, behavioural and environmental factors that drive these diseases in the South African population.

Two non-communicable diseases

Selected findings of SANHANES-I on cardiovascular disease and diabetes in relation to some risk factors are summarised in this issue of *HSRC Review*.

In relation to these two NCDs and their risk factors, this study determined the non-modifiable risk factors, such as family history, as well as modifiable risk factors such as blood pressure, body weight, blood cholesterol and blood sugar.

In terms of family history, during the interviews, respondents were most likely to report a family history of high blood pressure (30.9%), followed by high blood sugar (20.7%), while fewer respondents reported a family history of stroke (8.9%) and heart disease (heart attack, angina, chest pain: 7.6%).

High blood pressure

High blood pressure is associated with high stress, smoking, high salt intake, diabetes, older age, cholesterol, physical unfitness and overweight.

This study found that the South African population had high rates of post-traumatic stress disorder, diabetes, overweight and obesity, cholesterol, and lack of exercise, suggesting that the population was at increased risk of non-communicable diseases. At the provincial level, the Free State, followed by North-West and Gauteng, had the highest occurrence of hypertension (Figure 2). The reasons for these findings require further investigations.

The study's clinical examination confirmed the high occurrence of pre-hypertension and hypertension as shown in Figure 1. Overall, 10.4% of participants aged 15 years and older were pre-hypertensive (blood pressure between 120-139/80-89mmHg) and a further 10.2% had hypertension (blood pressure ≥ 140/90mmHg).

Figure 1: Prevalence of pre-hypertension and hypertension by age, SA 2012