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Cardiovascular medicine in South Africa

South Africa has a population of approximately 60 million, though unofficial estimates are much higher when accounting for the numbers of undocumented immigrants. The country, like the rest of the sub-Saharan African region, is experiencing an epidemic of cardiovascular disease (CVD) attributable to economic, social, nutritional, demographic and epidemiologic transitions.⁽¹⁾ Moreover, rapid urbanisation, socioeconomic development and the embrace of free-market policies contribute to the expanding epidemic of CVD in South Africa.⁽²⁾ Hypertension, cardiomyopathy, rheumatic heart disease, infections, and congenital heart disease contribute significantly to the burden of heart failure in the region.⁽³⁾ In addition, lifestyle changes, genetics, and traditional risk factors (including hypertension, obesity, diabetes mellitus, dyslipidaemia, alcohol and smoking) contribute to rising burden of atherosclerotic cardiovascular disease - with complications of myocardial infarction, stroke, peripheral arterial disease, vascular dementia, and chronic kidney disease.⁽⁴⁾

Currently, more South Africans die of CVD than of all cancers combined.⁽⁵⁾ 215 people die daily from CVD in South Africa.⁽⁶⁾ Every hour, 5 people have heart attacks, 10 people have strokes in the country, and of those events, 10 people will actually die from them.⁽⁶⁾ Hypertension is the leading risk factor for stroke in South Africa, responsible for 50% strokes and 42% heart attacks.⁽⁷⁾ 1 in 3 South Africans 15 years and older have high blood pressure.⁽⁸⁾ More than 50% of people with high blood pressure are unaware of their condition; of those diagnosed with high blood pressure, only a third is on treatment, and of those, only a third has adequate control of their blood pressure.⁽⁹⁾ South Africa has the highest rate of high blood pressure reported among people aged 50 and over for any country in the world, at any time in history, with almost 8 out of 10 people in this age group being diagnosed with hypertension.⁽¹⁰⁾

In the 2021 Statistics South Africa report, while deaths in the country have been declining since 2007 following the HIV peak, diabetes, cerebrovascular disease, other forms of heart disease, hypertension and ischaemic heart disease dominate the list of top 10 causes of natural death in the country, based on all death notification forms maintained by the Department of Home Affairs (Table 1).⁽¹¹⁾ Diabetes and all forms of CVD are important causes of death in all ethnic groups in South Africa.⁽¹¹⁾

TABLE 1: Top 10 leading causes of natural death in South Africa in 2021.

1.	Tuberculosis
2.	Diabetes mellitus
3.	Cerebrovascular disease
4.	Other forms of heart disease (including cardiomyopathy, rheumatic heart disease and congenital heart disease)
5.	Human immunodeficiency virus (HIV) disease
6.	Hypertension
7.	Influenza and pneumonia
8.	Ischaemic heart diseases
9.	Chronic lower respiratory diseases
10.	Malignant neoplasms of digestive organs

In this issue of the Journal, we have reports that reflect a potpourri of CVD prevalent in our region. Ojji, et al. report on the safety and tolerability of single pill combination in management of hypertension in Nigeria.⁽¹²⁾ Sangziri, et al. report on the clinical profile of heart failure in β -thalassemia major in India.⁽¹³⁾ Tabane, et al. present an interesting case of a patient with multiple traditional cardiovascular risk factors, presenting with a stroke, and who underwent carotid endarterectomy.⁽¹⁴⁾ Esmail, et al. discuss a rare and instructive presentation of infective endocarditis related to microbiologically confirmed infection with *Erysipelothrix rhusiopathiae*.⁽¹⁵⁾ Hassan, et al. present a compelling case series of parvovirus B19 myocarditis.⁽¹⁶⁾

There is an urgent need for improved management of CVD in South Africa.

Funding

Dr Ntusi gratefully acknowledges support from the South African Medical Research Council, National Research Foundation and the Lily and Ernst Hausmann Trust.

Conflict of interest: none declared.

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