Trends in cardiometabolic diseases and their risk factors in South Africa 1998-2017

(P1_E6)

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South Africa has experienced mixed trends in cardiometabolic diseases and their risk factors, with notable gender differences. The overall trend is influenced by males, who have a higher prevalence of drinking and binge drinking. Despite this, premature mortality from cardiovascular diseases, began declining in 2003, possibly due to reduced tobacco and alcohol use, increased physical activity levels, reduced sodium intake and some improvement in the control of hypertension. However, diabetes mortality has risen, likely linked to increasing obesity rates. Timely population-based data are needed to track the country's efforts to prevent and control non-communicable diseases (NCDs).

BACKGROUND

Cardiometabolic conditions are among the leading causes of non-communicable diseases in South Africa. The South African National Strategic Plan for Prevention and Control of NCDs 2013-2017 (1) holds significant promise to address the rising tide of cardiometabolic diseases. By focusing on prevention, early detection and health system strengthening, the plan aims to reduce the incidence and impact of NCDs. South Africa has committed to reduce premature NCD mortality by 30% by the year 2025. The purpose of this study is to estimate trends in cardiometabolic conditions and evaluate if South Africa is on track to reach the NSP targets by 2025.

METHODS

Estimates of premature mortality from cardiovascular disease and diabetes were obtained from the Rapid Mortality Surveillance from 2000-2017 (2) and meta-regression statistical models were fitted to data from multiple national surveys to estimate trends in risk factors related to cardiometabolic conditions (3).

DISCUSSION AND CONCLUSION

Although some progress has been made towards achieving the SDG 3.4 target of a 30% reduction in premature mortality from NCDs, South Africa is not fully on track to meet this goal by 2030. To make meaningful progress, there is a need for accelerated action, stronger implementation of policies, and expanded public health interventions as outlined in the National Strategic Plan for NCD Prevention and Control 2022-2027. Monitoring population trends in risk factors such as sodium intake and levels of blood sugar control among diabetics, is crucial to track progress and assist in setting priorities to address cardiometabolic conditions and reduce premature mortality.

REFERENCES

1. National Department of Health. Strategic plan for the prevention and control of non-communicable disease 2013- 17. 2013.
2. Dorrington R, Bradshaw D, Laubscher R, Nannan N. Rapid mortality surveillance report 2019&2020. . Cape Town: South African Medical Research Council; 2021.
3. Bradshaw D, Pillay-van Wyk V, Neethling I, Roomaney R, Cois A, Joubert J, et al. Second Comparative Risk Assessment for South Africa (SACRA2) highlights need for health promotion and strengthened surveillance. South African Medical Journal. 2022;112(8b):556-70.
4. National Department of Health. Strategic Plan for the Prevention and Control of non-communicable disease, 2020-2025. Pretoria: National Department of Health; 2022.

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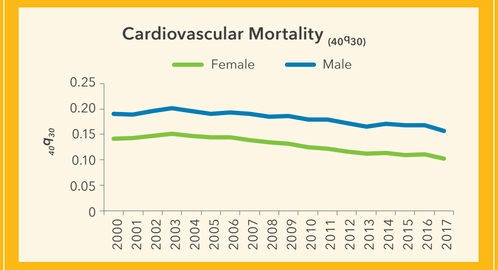
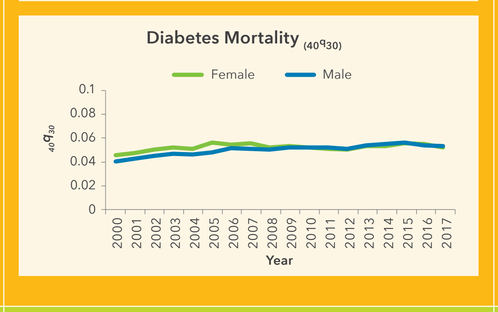
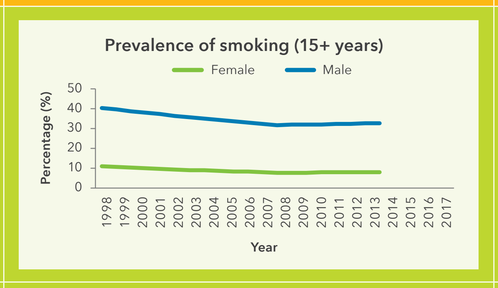
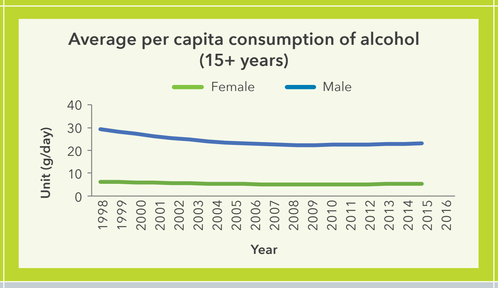
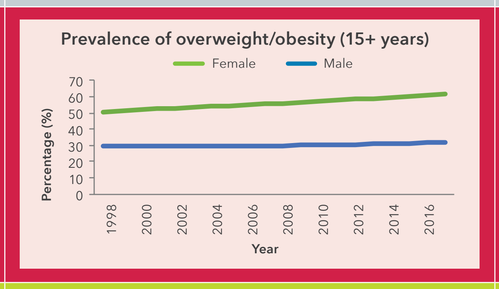
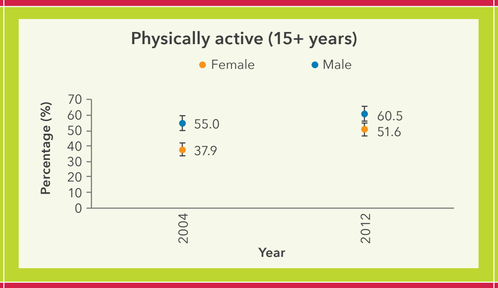
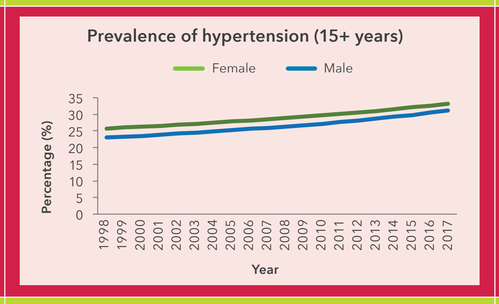
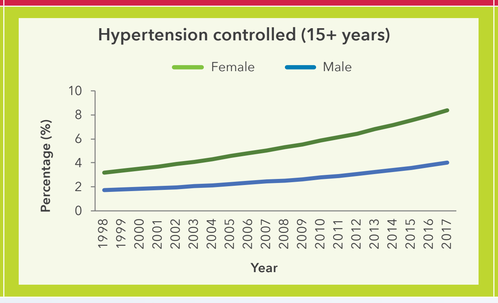
Funding Source: SAMRC
Conflicts of Interest: None
Acknowledgements: Victoria Pillay-van Wyk and the SACRA 2 team

NSP TARGET	PROGRESS	COMMENT
1. Reduce premature deaths (i.e., < 70 yrs as in SDG and not 60 yrs as in NSP) from non-communicable disease by 25%	 	Cardiovascular disease mortality peaked in 2003 and declined thereafter. Diabetes mortality is slowly increasing.
2. Reduce levels of tobacco use by 20%		Prevalence declined from 25.2% in 1997 to 19.6% in 2017, after plateauing in 2010. Male prevalence much higher than female.
3. Reduce per capita consumption of alcohol by 20%		Current drinking has not changed (+36%) but prevalence of binge drinking (51.4%-44.4%) and consumption among drinkers (42.1-34.2 g/day) declined between 1998 and 2017.
4. Reduce the average salt intake of population to <5g/ day	Only one national data source.	Sodium intake decreased from + 9 g per day in 2005 to 7.2 g per day in 2017.
5. Reduce the prevalence of obesity/overweight by 10%		Prevalence of overweight/ obesity increased from 43.1% to 50.3%.
6. Increase the prevalence of sufficient physical activity (defined as 150 minutes of moderate intensity physical activity per week) by 10%		Proportion of sufficient physical activity has increased from 45.2% in 1998 to 55.9% in 2017.
7. Reduce the prevalence of hypertension by 20% through lifestyle modification and medication		Proportion of hypertensives who are treated has increased from 23.9% to 39.2% in 1998 to 2017.
8. Increase the percentage of people controlled for hypertension and diabetes* by 30%		Proportion of treated hypertensive who are controlled has increased from 42.6% to 49.6%.

* No national data available to track diabetes control