## Non-communicable diseases in South Africa: A challenge to economic development



The economic development of a nation depends in part on the health of its population. Addressing the non-communicable disease (NCD) epidemic is critical to a virtuous cycle of improved public health outcomes and better economic growth. Decreasing premature

mortality from NCDs is now on the post-2015 development agenda. The accumulated losses to South Africa (SA)'s gross domestic product between 2006 and 2015 from diabetes, stroke and coronary heart disease alone are estimated to cost the country US\$1.88 billion.[1] Employers face additional costs in the form of high staff turnover and absenteeism, because these conditions are not only a source of morbidity but a leading cause of death in our working-age population.<sup>[2]</sup> Obese workers cost their employers 49% more in paid time off than their non-obese colleagues. [2] Workplace wellness programmes are growing and show promise, but the urban poor, who are particularly vulnerable, have little access to them. Families of the deceased suffer catastrophic costs, with two-thirds of poor households being underinsured against funeral costs, and are dependent on either a regular wage earner or a grant recipient. [3] The NCD epidemic in SA is an even greater burden because it is occurring concurrently with an ageing HIV-positive population.

By 2030, NCDs will account for five times as many deaths as communicable diseases in low- and middle-income countries.<sup>[4]</sup> The World Health Assembly has agreed to aim to reduce premature mortality from cardiovascular and chronic respiratory disease, cancer and diabetes by 25% by 2025. [5] This '25  $\times$  25' strategy embraces six risk factors and their social determinants. By tackling tobacco use, harmful alcohol use, salt intake, hypertension, raised blood glucose and diabetes, and obesity, mortality in SA could be reduced by about 20%, but more importantly, premature disability and death could be significantly delayed. [5]

A balance between population-based alongside individual-level strategies is well recognised in the SA National Department of Health (NDoH) Strategic Plan for the Prevention and Control of Non-Communicable Diseases 2013-17. [6] Preventing and postponing NCDs is appreciably more effective and considerably less costly than treatment of those who become sick.<sup>[7]</sup> Worldwide, governments support an array of levers that include regulatory, fiscal and legislative options.

In SA the NDoH has promulgated mandatory salt regulations, beginning in 2016. This will save a total of 6 400 lives from stroke, 4 300 from non-fatal stroke, and cut hospitalisation costs by ZAR300 million annually. [8] Similarly, a potential SA tax on sugary drinks would cut the number of obese people by 220 000 in 3 years.  $^{[9]}$  Occasionally, industry and not government sets the precedent  $\dots$  Tesco, a leading food retailer in the UK, has banned junk food from its checkout aisles.[10]

Targeting patients with multiple lifestyle risk factors by secondary prevention is another tactic, but even under the best of circumstances, efficacious behavioural or drug interventions involve complex implementation challenges. Shifts are needed to counter the marketing of calorie-dense and nutrient-poor products. Healthy messaging, targeting discretionary intake of salt and sugar and encouraging regular physical exercise, especially for girls and women, is needed. Responsible government interventions must create an environment in which rich and poor alike are empowered to make healthy choices. With fewer sick people to support, our health system could focus on providing better-quality care. Several new institutional models might be considered to promote prevention. One is a multi-stakeholder national health commission that engages other sectors, including trade and industry, agriculture, education, sports, and arts and culture.[11] Margaret Chan, director of the World Health Organization, says: 'Governments cannot assume that NCDs are a health problem and that the health sector can manage on its own. We cannot'. A second might involve the creation of an independent-of-government health promotion foundation (HPF) -

such organisations have successfully impacted on population health in many countries from Australia to Thailand. [13] HPFs work in collaboration with government, research institutions and civil society by using media campaigns, raising social awareness and providing support to families. Finally, we need a priority-setting agency that assesses cost-effectiveness, acceptability and feasibility of a range of interventions; the UK National Institute for Health and Care Excellence (NICE) and counterparts in South Korea and Thailand are examples. [13]

Ultimately, to successfully reduce premature mortality from NCDs, accurate monitoring of the burden and the outcome of interventions is critical. This is reinforced by Day et al.[14] in this edition of the SAMJ. According to Health Minister Dr Aaron Motsoaledi, 'Health budgets will break because of the cost of amputations, artificial limbs, wheelchairs and cardiac surgery. [15] To ensure that social and human development indicators in SA are not further compromised, more funding must be allocated to expand robust health and costing data to include NCDs. In addition to facilitating transparency and accountability, regular, updated quality metrics that are readily accessible and comprehensible will enable the provincial health departments to accurately plan, budget and evaluate their activities.

Such institutional and policy interventions have the potential to harness public health as the basis of inclusive economic growth. Given the huge divide of health and inequality that characterises our current development trajectory, addressing the NCD epidemic could not be more urgent.

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