

## **Non-communicable Diseases: reframing the conversation on health**

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The UN general assembly summit in September helped focus the world on the threat posed to economic development by four conditions - cancer, heart disease, diabetes and chronic lung disease. This is surprisingly true even in a middle income country like South Africa (SA). The economic impact of chronic conditions on the workforce and their productivity, and the cost to the health system is already enormous and without serious attention is set to balloon. The advent of significant resources to address this burgeoning epidemic seems unlikely. In an era when donor funding is shrinking, the envelope for non-communicable diseases (NCDs) could even decline as the SA government assumes greater fiscal responsibility for HIV/TB. It is therefore significant that Minister of Health, Dr Aaron Motsoaledi, noted in his opening address at the SA NCD summit in Gauteng, tackling NCDs cannot be done by the health sector alone - all relevant partners will need to combine forces.

### *Burden of disease and disability*

Deaths from HIV in SA still exceed that of the four NCDs. However, if one considers a combined measure of both morbidity and mortality represented by the DALY (disability adjusted life year) NCDs and HIV now each account for 35% of the burden (1). These facts reflect a dynamic and complex health transition in SA.

Most of these NCD deaths occur before the age of 60. Premature deaths caused by cardiovascular diseases in SA in the economically productive age group of 35 – 64 are expected to increase by 48% between 2000 and 2030 (2). Heart disease is frequently thought to be related to increasing wealth, but in SA, stroke resulting from hypertension is more strongly linked to poverty. One of the reasons is that much of the premature mortality and severe disability occur in greater numbers in rural and informal urban areas where many individuals remain undiagnosed and untreated. For example, the risk of an untreated hypertensive patient having a stroke is tripled. The ensuing disability further erodes household resources and impacts on income security.

### *Risk factors*

To tackle this epidemic, we will need to address the common risk factors. These include poor diet, lack of physical activity, smoking, the harmful use of alcohol and most importantly poverty. Close to one quarter of all school children in SA are now overweight (this despite persisting under-nutrition in some communities), many of them are poor and the majority are female. The role of social determinants, often beyond the control of individuals in generating this epidemic, cannot be underestimated. For most poor people, choices of cheap, nutritious foods and safe areas to exercise, walk, bike or play are in short supply. Recreational centres and swimming pools are off the radar entirely. We already have a good understanding of what the “vectors” are in this epidemic. Some can be purchased in supermarkets and in fast food outlets; others are viruses such as HPV and Hepatitis B that cause cervical and liver cancer respectively and can be prevented with a vaccine.

### *Interventions*

To reach its life expectancy goals over the next few years, SA must prioritize in terms of allocating scarce health care resources. One approach is to be strategic and use known “best buys” in primary care and prevention for those at risk of NCDs as well as for patients themselves that can be promptly delivered and that are known to be effective (3, 4). Achieving individual behaviour change is also important but this is more challenging to implement. While proven interventions can vary widely from one country to another, the cost-effectiveness of an intervention will increase as programmes get scaled up. Another tactic is to engage proactively using legislation to address this growing epidemic. This has the judicious effect of limiting reliance on public health systems. SA has been a world leader when it comes to tobacco control; effective legislation over the past decade has already led to a significant decrease in smoking with concomitant reductions in illness and premature death. More recently however, taxes have not kept pace and in SA today 25 % of the 15-25 age range smoke (2).

### *Learning from others*

Successful policies in other countries have included a ban on food advertisements that target children, nutritious food policies in schools and a gradual reduction in fat, salt and sugar in processed foods. In 2011 Denmark imposed a "fat tax" on fatty foods in an effort to convince Danes to eat more healthily (5). The tax is a complex one, in which rates will correspond with the percentage of fat in a product. Multi-sectoral approaches are needed to consider what policies and legislation will ensure that future generations of South Africans, rich and poor, live longer and are not placed at undue risk for NCDs and have healthy, affordable food choices. One possible approach is the notion of subsidizing nutritious foods to make them affordable in a climate of growing food insecurity and rising prices. To accomplish some of these aims, the health sector will need to engage with the food and other industries, the parents of school going children and with civil society. These approaches to prevention are already on the minds of health policy makers and must be “sold” to other sectors.

*If you can't measure it - you can manage it*

It is important to address the information gaps that will allow us to improve surveillance and strengthen care for those at high risk or already suffering from these conditions. This knowledge will also enable strategic decisions in terms of resource allocation. We must learn from the successful models of HIV care to provide integrated approaches to healing. This is crucial not only for health systems but because we also know that there are many relationships between the pandemics. For example, HIV positive women have a high risk of getting cervical cancer; and at least 10% of the HIV population is now over age 50 and are at higher risk of diabetes and stroke.

### *Affordability*

In the shift towards National Health Insurance in SA, we can learn from other countries and even from the private sector about approaches to financing effective and affordable care. India for example has developed models of entitlement packages for conditions that cause most of the premature deaths from NCDs (6) . Capitation models in SA that have been effectively used for diabetes in the private sector may be adaptable (7) .With a raging HIV/ TB epidemic and high rates of child and maternal mortality, SA policymakers will face tough choices in terms of how to invest scarce resources. The price tag for population based measures will cost SA approximately ZAR 150 million per year. This is a mere fraction of the estimated annual ZAR 1,125 billion, for individually targeted “best buys”(8).

Compared with other middle income countries and the BRICS (Brazil, Russia, India, China and SA) in particular, resources for health are ample, but SA today gets little value for money in terms of health outcomes. This is especially true for NCDs. Analytic work to address some of these issues has begun through an initiative called PRICELESS SA [www.pricelessa.ac.za](http://www.pricelessa.ac.za) (Priority Cost Effective Lessons for Systems Strengthening) based at the Wits School of Public Health [www.pricelessa.ac.za](http://www.pricelessa.ac.za). The main goals are to:

- Ensure that priority setting for health care is based on good evidence and takes equity into account
- Provide data on how best to use existing /scarce resources so that health systems work more effectively, efficiently - in other words provide good value for money

Among several ongoing analyses related to NCDs, the PRICELESS secretariat is conducting economic evaluations to understand the number of “lives saved” by decreasing salt in food and by providing low cost, effective diabetes care.

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