Population health in South Africa: a view from the salt mines

In sub-Saharan Africa, South Africa is at the forefront in the use of fiscal and legislative instruments to manage population health. Mandatory regulations passed in March, 2013, to begin in 2016, will affect the salt content of processed food and will be a key weapon in the fight against the rising burden of hypertension. A first for Africa, the regulations could potentially affect population health regionally, as relaxation of tariff agreements enables South African retail chains to sell processed foods across the continent. At the UN Non-Communicable Diseases summit in 2011, the South African Minister of Health, Aaron Motsoaledi, noted: “We have been very ambitious in our targets...we cannot afford to let people die early”. Just beginning to turn around its life expectancy, with increasing numbers of patients with HIV now taking antiretrovirals, South Africa has a mounting burden of disease, with 40% of the population aged 35–44 years hypertensive. Salt consumption in South Africa is close to double the WHO-recommended maximum of 5 mg per day, with the major source of non-discretionary dietary salt from bread, a staple food.

The process of academic engagement with the South African Government about salt regulations could potentially avert premature deaths from other chronic disorders. Experience suggests that three features were key in this engagement process. First, engagement with policy makers at the beginning of the short, 18 month research process was crucial to our understanding of the cost evidence needed. South African research had been mounting for some decades on the feasibility of implementation and the effect of salt reduction. This research formed the basis of our work and provided a starting point for policy makers. Second, communication of results as they emerged was constructive. The Minister of Health began publicly using data about the burden averted, the resources consumed, and the costs, before promulgating the draft legislation. Finally, although information from other countries is useful, context-specific, domestic costs and outcome indicators proved crucial.

Population-level prevention of high-burden disorders can have a substantial effect. Most South African people with hypertension are not diagnosed; of those who are, medication adherence is not optimal. As a consequence, a third of cases result in premature death or disability, and two-thirds of stroke victims are permanently disabled. The resulting poverty spiral is substantial, so prevention of deaths and disability can potentially secure livelihoods and provide sizable economic savings. Our research suggests that by decreasing daily salt intake by 0·85 g per person, mostly by reducing salt in bread, South Africa could avert 7400 cardiovascular deaths (2900 from stroke) and save 4300 lives from non-fatal stroke. The savings from reduced numbers of hospital admissions of patients with non-fatal strokes alone could save ZAR300 million per year.

Some momentum for passing the salt regulations was related to timing and the fact that the policy makers were able to leverage the global context to bolster their case, exploiting international examples as motivational evidence. By 2011, strong evidence, including both voluntary and mandatory regulation, was already in place in 37 countries worldwide. The synergy between political will, clear dietary guidelines, product reformulations, and effective communication to consumers can change behaviour. Changes in salt consumption have now been reported in five countries that are part of the Organisation for Economic Co-operation and Development, resulting from broad salt reduction initiatives. International champions and advisers to South Africa included the director of World Action on Salt and Health. Evidence also came from country campaigns including the UK Consensus Consumer Action on Salt and Health. The UN summit stimulated intense interest within South Africa, and created an opportunity to prepare its own goals.

Bridging the research-to-policy interface is complex and highly context dependent; even with sound evidence, recommendations are not always adopted. Our experience provides grounds as to why adoption of salt regulations was likely to occur. First, although not essential for all research, for analyses that show value for money, academics should allow policy makers to inform their research questions. Second, interaction with government took place while the idea of salt regulation was being debated, and policy makers were willing to share their concerns. Finally, context-specific evidence about burden of disease, costs, and lives saved could be contributed. In a setting of constrained
resources, the Minister knows that population-based interventions can complement the proposed National Health Insurance system, by providing excellent value for money. He frequently states that he is the Minister of Health rather than the Minister of Disease.

Much time was devoted by the Ministry of Health to understand the concerns of industry, including the risks and perceived costs of salt regulation. Although industry is adamant that individuals should take personal responsibility for their eating habits, most South Africans have low nutritional literacy and disparate living conditions, so behaviour change is challenging. For example, differences in salt use in urban informal communities and rural settings are poorly understood. Appropriate voluntary action might have forestalled the need for mandatory regulations. However, with some exceptions, most companies had not adjusted local processed food recipes, and evidence suggests that voluntary regulations are not sufficient to ensure compliance.11

Academics were invited to a series of government-industry consultations. These consultations began with the baking industry, but expanded to a range of products. Draft regulations were published with a 3 month comment period. After review, the Ministry made adjustments to timelines and salt content. With publication of draft regulations, media education became important to understand the larger context, especially in terms of the hypertension burden and its effect on the macroeconomy. Some media outlets sought to polarise the objectives of the Minister and industry response. In other instances, appeals were made in the press to refrain from turning South Africa into a so-called nanny state.

The compelling evidence provided to senior policy makers that salt reduction in processed food is highly effective and economical was important in the process towards regulation. Restricting salt in processed food is an example of why using regulation is inherently more equitable, because it provides an opportunity for an entire population to attain their full health potential rather than individual use of overextended health services. Monitoring the effect of regulations on future hypertension rates and population salt intake could be important. The effect of these regulations on life expectancy and the economy will only be realised in future decades. To ensure maximum bearing on population health, efforts will still be needed to shift individual behaviour regarding discretionary salt. Clear labelling and public education campaigns are essential. Although questions remain and enforcement of regulations could prove difficult, the Ministry should be recognised for having taken a bold step and providing leadership on the continent.

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