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The implementation of salt reduction strategies should be sped up in Africa: a shout from Morocco

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Editorial

Cardiovascular disease (CVD) remains the leading cause of mortality and a major contributor to disability globally [1]. High dietary sodium is one of the most important risk factors for CVD. It is associated with hypertension and increased risk of stroke and heart disease [2]. According to the Global Burden of Disease study, in 2019, high dietary sodium accounted for an estimated 1.7 million cardiovascular deaths worldwide, representing ~10% of the overall cardiovascular mortality [2]. In view of the huge burden of high dietary sodium, salt reduction has been identified by the World Health Organization (WHO) as one

the most efficient and cost-effective measures that can improve population health outcomes [3]. The WHO recommends that adults consume less than 2 g of sodium per day which corresponds to less than 5 g (just under a teaspoon) of salt per day [3]. The Global Burden of Diseases Nutrition and Chronic Diseases Expert Group (NutriCoDE) estimated the global mean sodium intake at 3.95 g per day in 2010, almost twice the recommended maximum level of intake [4]. The WHO projected that nearly 2.5 million deaths could be prevented each year if global salt consumption were reduced to the recommended level [3].

In May 2013, the 66th World Health Assembly endorsed the WHO Global Action Plan for the Prevention and Control of Noncommunicable diseases 2013-2020. This initiative adopted a global target of a 30% reduction in mean population salt intake by 2025, as one of nine targets to achieve a 25% relative reduction in premature mortality from non-communicable diseases by 2025 [5]. Key strategies to reduce salt intake include (i) creating a legislation framework to mandate food labelling and compliance to recommended levels of dietary salt in processed foods; (ii) establishing appropriate fiscal policies to ensure the availability and affordability of low-salt products; (iii) raising population awareness on the need to reduce salt consumption; (iv) monitoring of population salt intake, sources of salt in the diet and consumer knowledge, attitudes and behaviours relating to salt to inform policy decisions [3].

A systematic review of progress towards the global target of salt reduction defined by the WHO showed that 75 countries had developed a national salt reduction strategy in 2014 [6], compared with 32 countries in 2010 [7]. Across these 75 countries, the most common components of their strategies were consumer education (n = 71 countries), industry engagement to reformulate products (n = 61), interventions in public institutions (n = 54), legislation to support salt reduction actions (n = 33), and front-of-pack labelling schemes (n = 31) [6]. As a result,

reduction in population salt consumption was reported in 12 countries, reduced salt content in 19 countries and improved consumer knowledge, attitudes and behaviours relating to salt in 6 countries [6]. Unfortunately, at the time, only South Africa and Morocco had developed a salt reduction strategy among African countries [6].

In their study published in this volume of the Pan African Medical Journal, Bouhamida and colleagues examined the knowledge about the national strategy of salt reduction, and the implementation of the recommendation of salt reduction in bread among bakers in Morocco [8]. A total of 432 bakeries from all administrative regions of Morocco were surveyed using a questionnaire. They found that most bakers (73%) were not aware of the recommendations on the progressive reduction of the salt content in bread. Worse still, none of the bakers was informed about the process of gradual reduction of the level of salt in bread, and of course, none of them was implementing it. Furthermore, up to 60% of bakeries were not compliant to the national recommendation of 10 g of salt per kg of flour. However, the large majority of bakers (90%) were willing to implement the recommendations on the progressive reduction of the salt content in bread [8]. These findings in bakeries in Morocco, one of the first country to develop a salt reduction strategy in Africa, are suggestive of a worse situation in other African countries.

Interventions targeting bakeries are vital for a salt reduction strategy. Indeed, bread is one the most consumed foods and a major source of dietary sodium in most populations worldwide [9-14]. In South Africa, bread accounts for up to 40% of sodium intake [10]. In Morocco, bread is the most consumed food, with an average daily consumption of half a kilogram per individual [11]. Furthermore, with a mean of 8 to 9 g of salt per bread, most Moroccan adults reach the recommended maximum level of sodium intake only with bread consumption [12]. Other studies in Nigeria and Mozambique have shown that the sodium content of bread from bakeries and

traditional markets was far above the recommended daily allowance [13,14]. Therefore, bakeries should be a central target in salt reduction strategies. Beyond a legislation to mandate compliance to recommended levels of salt in bread, bakers should be educated and trained on the process of gradually reducing the salt content in bread, and the implementation of this intervention should be rigorously monitored.

South Africa has achieved significant success in sodium regulation. In 2013, South Africa put in place a sodium legislation setting mandatory restrictions of sodium content across a wide range of commonly consumed processed foods [15]. The regulation was enacted to reduce sodium levels in the target foods in two waves; the first came into force in June 2016 and the second, with lower sodium targets, in June 2019 [15,16]. A study assessed the sodium levels of packaged foods in South Africa during the one-year period preceding the mandatory implementation date of this legislation [17]. It showed that two-thirds of foods covered by the sodium legislation already met the sodium target during early stages of policy implementation. However, almost three-quarters of breads, the major source of non-discretionary sodium intake in South Africa, did not meet legislated limits, highlighting the need to give a special attention to bakeries in the salt reduction process [17]. In fact, the decision by the South African government to enforce mandatory regulation on food industries was mainly informed by a modelling study that suggested that a 0.85 g reduction of daily sodium intake per individual could prevent 7400 cardiovascular deaths; 6400 of which would be due to lowering the sodium content of bread alone [18].

Considering the increasing burden of hypertension and CVD in African populations [1,2,19-21], governments should strongly commit to the implementation of a salt reduction strategy. This is particularly crucial in sub-Saharan Africa, as black populations are more sensitive to salt, i.e., more susceptible to sodium-related increase in blood pressure and to its adverse impact on health

outcomes [22,23]. The achievements of South Africa in implementing a mandatory sodium regulation should inspire other African countries.

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