A call to action: advocating for the integration of oral health promotion and public health via sugar sweetened beverage taxation

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Key points

Sugar sweetened beverage (SSB) taxes can reduce sugar intake, thus potentially reducing the incidence of dental caries.

SSB taxes could be an effective method of integrating oral health into general health promotion.

Revenues from SSB taxes must be invested to promote oral health in addition to general health promotion.

Abstract

We call on dental health professionals to advocate for the integration of oral health promotion into public health, and argue that a campaign for revenue from SSB taxation to be used for oral health promotion is a good place to start. The impact of sugar on health centres on obesity, diabetes and dental caries; these also have a disproportionate impact upon low income communities. Sugar sweetened beverages (SSB) are recognised as a universal major source of sugar, and it has been recommended that the amount and frequency of intake of SSBs should be limited. SSB taxes are a possible way of reducing sugar intake, as well as an effective method of integrating oral health (OH) into general health promotion. There is widespread support for these taxes from PH professionals as they have the potential to improve diet and nutrition, and by OH professionals since nutrition is an integral component of OH, and sugar reduction can reduce the incidence of caries. SSB taxes can also generate revenues which can be reinvested in healthcare to further health improvement. Despite the self-evident benefits for integration, few countries have made a concentrated effort to integrate. We argue that revenues must also be invested to promote OH through an integrated public health and dental public health approach.

Current burden of oral disease globally

Globally, substantial progress has been made toward reducing mortality,¹ and improving oral health (OH) of populations; however, problems still remain. Dental caries is one of the greatest OH burdens, affecting between 60–90% of children, and the majority of adults across the world. In support, the Global Burden of Diseases study (2015) revealed that dental caries of the primary dentition was the 12th most prevalent disease (560 million children) in all ages combined.¹

In many developing countries, dental caries can lead to severe oral complications and disease because access to OH services is limited, and teeth are often left untreated. Tooth extraction is often the only solution as a result of pain

or discomfort. In developed and developing countries, the greatest burden of caries and total oral disease occurs in the most under-privileged groups.² This is of particular concern since poor OH not only impacts physical health, but can also negatively impact on daily life due to reduced chewing performance, constrained food choice, weight loss, impaired communication, low self-esteem and wellbeing.³

Sugar sweetened beverages taxes

Sugar sweetened beverages (SSBs) are recognised as a major source of sugar in most populations.⁴ Sugar consumption is considered a particularly important risk factor for obesity and diabetes, and also for dental erosion and dental caries.^{5,6} As a result, it has been recommended that the amount and frequency of intake of SSBs should be limited,⁷ with the World Health Organisation (WHO) Guideline on Sugars Intake for Adults and Children including recommendations that free sugars should be limited to no more than 5% energy intake.⁴

To aid reduction of free sugar consumption, both upstream and downstream approaches are needed.⁴ However, the WHO has emphasised the role of national policies and local interventions to

reduce sugar consumption (amount, frequency of intake, types), with SSB taxes, described in the joint #beatNCDs and WHO publication 'Why implement a sugar tax'⁸ being particularly supported. In support, SSB taxes can reduce sugar consumption which can reduce the incidence of obesity, caries,⁹ and the need for dental care, improving quality of life (QoL) and saving money.¹⁰

As SSB taxes can reduce sugar consumption, which can improve both PH and OH, this policy has been considered as a possible method of integrating OH into general health promotion. Support for these taxes comes from PH professionals and OH professionals since nutrition is an integral component of both HP and OH.¹¹

Examples of countries that have implemented an SSB tax

Mexico was one of the first countries to implement a tax on SSB purchases, implementing a tax of 1 peso/l in 2014. Following implementation, a 6.3% reduction in the purchases of SSBs was observed as compared with the expected purchases for 2014 based on previous trends.¹² Similar positive changes have been observed in other countries where taxes on SSBs have been implemented.

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For example, in France a 6.7% reduction in the demand for SSBs was observed after an excise tax on soft drinks was introduced.¹³

A slightly different approach was taken in the UK where a levy on soft drinks (SDIL) was introduced in April 2018.¹⁴ The SDIL works indirectly, thus rather than targeting consumers the levy is imposed on industries importing or manufacturing SSBs, encouraging reformulation to reduce sugar content.¹⁴ Although no evaluations have yet assessed the health outcomes of the SDIL due to its recency, modelling studies have estimated that reformulation could reduce incidence of obesity, diabetes and dental caries. Additionally, over 50% of manufacturers cut sugar content of their products following announcement of the SDIL in 2016 which, if current purchasing trends continue, will result in reduced consumption of sugar from SSBs and may help to improve health.¹⁵

Other countries are considering SSB taxes, but there are challenges that must be overcome. Such challenges include: low public acceptability which has been ascribed to a perception that such taxes are unlikely to achieve significant behaviour change or public health benefit,¹⁶ and that they are potentially regressive;¹⁷ strong industry opposition including direct lobbying and media campaigns that seek to shift the blame away from SSBs¹⁸ (as was seen in relation to tobacco and alcohol policies); and political reluctance.

Due to the potential OH and general health benefits of SSB taxes, learning from countries that have successfully implemented fiscal policies to reduce sugar consumption from SSBs is essential. In line with this a number of reports have been written about country specific taxation in order to share lessons learnt.^{19,20} Such information can assist countries to design effective and robust SSB tax measures and counter opposition.²¹

SSB tax revenue

SSB and sugar taxes have been introduced in over 30 countries.²² Although such taxes are not a silver bullet to improving population health, and instead should be considered as part of a package of policies aimed at altering consumers' choices, SSB taxes do have the capacity to not only reduce sugar consumption but also generate revenue. For maximum health benefits from such taxes, revenue must be reinvested in healthcare, with João Breda, programme manager for nutrition, physical activity and obesity in WHO's Regional Office for Europe, saying: 'We need to try to find ways to guarantee that the revenue from taxing unhealthy products is reinvested in health-related initiative',²³ it is

not guaranteed that revenues are reinvested in this way. Revenues could be spent on efforts to improve healthcare systems, encourage healthier diets, increase physical activity, or build capacity for effective tax administration.⁸ Some countries have reportedly reinvested revenues in school sport (UK) and health-related projects (Hungary), but not all countries are reinvesting revenue for health purposes with many not reporting where revenues are being spent. We argue that not only must revenues from SSB taxes be reinvested in healthcare, but that reinvestment must go further, and must also be invested to promote OH to ensure overall public health and QoL is improved.²⁴

Conclusion

Chronic diseases such as dental caries, obesity and diabetes are increasing globally with widespread implications on overall health, OH and QoL. Oral and other chronic diseases have determinants in common, and as such integration of OH and physical health policies is warranted. A major benefit of this is the focus on improving health conditions for the whole population and ensuring that groups at high risk receive the treatment they need, thereby reducing social inequalities. SSB taxation is one example of a policy that integrates physical and oral health by encouraging the reduction of sugar consumption from SSBs, highlighting the feasibility of integration. Revenues from such taxes should also be reinvested into both physical and oral health to ensure that the taxes have the large impact that has been theorised. Further investment and concentrated attention on improving OH globally has been called for. By integrating OH into strategies for promoting general health, OH and population QoL will be enhanced. SSB taxes with effective revenue reinvestment plans will pave the way for successful integration. We implore dental health professionals to act, and campaign for integration of OH into PH, and for revenues from SSB taxes to be, at least in part, directed to OH.

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