TBM

PRACTICE AND PUBLIC HEALTH POLICIES

Society of Behavioral Medicine (SBM) position statement: Enact taxes on sugar sweetened beverages to prevent chronic disease

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Abstract

The Society of Behavioral Medicine (SBM) encourages stakeholders to implement a sugar sweetened beverage excise tax. Sugar sweetened beverages are the largest source of added sugars in the USA and have detrimental effects on population health by increasing risks for chronic diseases. Based on existing research evidence, SBM supports an excise tax equivalent to at least 20% to meaningfully affect consumption patterns. As evidenced by research studies in Mexico and the USA, sugar sweetened beverage taxes can have positive impacts on population health and can raise significant tax revenue. To avoid potential unintended consequences that may arise from taxes to improve diet-related behaviors, it is important to monitor industry and consumer behavior in response to the tax.

Keywords

Sugar sweetened beverages, Tax, Policy, Public health

Implications

Research: Researchers should continue to evaluate the health and financial impacts of all new sugar sweetened beverage taxes using rigorous study designs (e.g., quasi-experimental). Researchers should evaluate potential unintended consequences (e.g., industry responses and unhealthy consumer behaviors) that might result from such taxes and should develop and test interventions to reduce these unintended behavioral consequences (e.g., replacing sugary drinks with other unhealthy dietary options) that may lead to higher energy intake.

Practice: After sugar sweetened beverage excise taxes are implemented, promote nontaxed healthier alternatives and/or develop and implement clinic- and/or community-based interventions to encourage consumption of nontaxed alternatives.

Policy: Policy makers should prioritize implementation of excise taxes on sugar sweetened beverages to improve population health and these taxes should apply to beverages that contain added caloric sweeteners and should not include taxes on non-nutritive sweeteners.

INTRODUCTION

The Society of Behavioral Medicine (SBM) supports sugar sweetened beverage taxes to reduce excessive sugar consumption, prevent chronic diseases, and reduce health disparities. The taxes would apply to beverages that contain added caloric sweeteners, not including artificial sweeteners; at minimum, the tax should include carbonated soft drinks, sports drinks, fruit drinks, energy drinks, sweetened teas and coffees, and syrups and powders used by businesses to make sweetened beverages.

In response to the mounting research evidence that suggests a causal link between excess intake of added sugars and increased risks for chronic diseases [1–4], some countries and U.S. states have implemented taxes on sugar sweetened beverages. In the USA, sugar sweetened beverages are the largest source of added sugars and account for almost half of added sugars consumed [5]. Modeling studies indicate that modest declines (e.g., 10%) in consumption and taxes (e.g., penny per ounce) on sugar sweetened beverages may improve population health and reduce health care costs associated with excess intake of added sugars [6–10]. The long-term impact of taxes may be even greater if tax revenue is invested in evidence-based disease prevention programs.

BACKGROUND

Consumption of sugar sweetened beverages has a detrimental effect on population health by increasing risks for chronic diseases such as obesity, type 2 diabetes, coronary heart disease, and fatty liver disease [1–4]. Sugar sweetened beverages are the largest source of added sugars in the USA and account for almost half of the added sugars consumed in the USA [5]. Average sugar intake has increased substantially over time and, despite a recent decline,

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intake still exceeds federal recommendations to limit added sugars to less than 10% of daily calories [5, 11].

Excessive sugar sweetened beverage consumption and associated health risks are of even greater concern among low-income communities and some racial/ethnic minority groups. Industry data indicate that Black, Hispanic, and low-income populations tend to drink more soft drinks, and data from the Centers for Disease Control and Prevention also indicate racial/ethnic disparities in sugar sweetened beverage consumption [12, 13]. Research findings demonstrate that beverage companies target Black and Hispanic communities with intensive sugary sweetened beverage marketing. In 2013, Black children and teens saw more than twice as many TV ads for sugar sweetened beverages compared with White children and teens [14]. Sugar sweetened beverage advertising on Spanish-language TV increased by 44% from 2010 to 2013 [14]. Also, sugar sweetened beverage brands spent $62 million on Spanish-language TV advertising in 2013 [14].

Sugar sweetened beverage taxes are a potential method of reducing consumption and associated chronic diseases, similar to how tobacco taxes reduced smoking rates in the USA [15]. Excise taxes can increase the price of sugar sweetened beverages and encourage consumption of untaxed, healthier alternatives such as water. These taxes may also incentivize companies to create and promote healthier products. Finally, they may provide local governments with a source of revenue that can be used to fund health and education programs, as recent examples in Berkeley, CA and Philadelphia, PA illustrate.

Evidence of short-term effectiveness of sugar sweetened beverage taxes

Recent studies in Mexico and Berkeley have demonstrated the positive impact that sugar sweetened beverage taxes can have on dietary behaviors. Colchero et al. reported that Mexico's 1-peso-per-liter sugar sweetened beverage excise tax reduced purchases of taxed beverages by 6% and increased purchases of untaxed beverages (e.g., bottled water) by 4% in 2014, its first year of implementation [16]. The effect of the tax also increased over time during the first year, reaching a 12% decline in purchases by December 2014. Importantly, the decline in taxed beverages was greater in low socioeconomic status (SES) households (17% decline by December 2014) [16].

Berkeley, CA implemented a penny-per-ounce tax that increased prices of sugar sweetened beverages in Berkeley more than in neighboring Bay Area cities [17, 18]. Falbe et al. also found that after the tax was implemented, self-reported consumption of sugar sweetened beverages declined 21% more among residents of low-income neighborhoods in Berkeley, CA compared with residents in Oakland and San Francisco, CA [19].

Finally, the City of Berkeley raised $1.5 million through tax revenue in the first year. This revenue has been used to fund community groups such as the YMCA and Healthy Black Families to provide health and nutrition education and to make fruits and vegetables more available to low-income communities.

Evidence of long-term effectiveness of sugar sweetened beverage taxes

Changes in consumption, as reflected by the data in Mexico and Berkeley, CA, can have a substantial impact on population health if they are sustained. Several modeling studies, described below, have projected that national sugar sweetened beverage taxes would reduce disease rates, mortality rates, and health care costs, while improving quality of life. A 10% decline in sugar sweetened beverage consumption in Mexico, for example, would prevent 189,300 cases of type 2 diabetes, 20,400 strokes and heart attacks, and 18,900 deaths over 10 years [10]. In the USA, a national penny-per-ounce tax would reduce disability-adjusted life-years by 101,000, increase quality-adjusted life years by 871,000, and save $23.6 billion in health care costs over 10 years [6].

The long-term impact of sugar sweetened beverage taxes may be even greater if tax revenue is invested in effective disease prevention programs. The Mexican government planned to allocate a portion of tax revenue to increasing access to drinkable water, which could promote further healthy dietary changes.

Industry counterarguments

Beverage companies, armed with substantial funds, employ many tactics to defeat tax proposals. Many of these tactics mimic strategies used by tobacco companies in the past.

Two of the most common counterarguments are claiming that sugar sweetened beverage taxes will cost jobs and that taxes are regressive (i.e., low-income people will pay more tax). However, several studies have contradicted these claims:

- Mexico's sugar sweetened beverage tax had a bigger impact among low-SES households, who reduced their purchases more than high-SES households [16].
- The effect of sugar sweetened beverage taxes in Illinois and California was projected to have no net impact on jobs [20].
- The financial cost of sugar sweetened beverage taxes is approximately equal in high- and low-income households (a difference of less than $5 per person per year) [21].

RECOMMENDATIONS FOR POLICY MAKERS

Sugar sweetened beverage taxes can be implemented in the form of a sales tax or excise tax. Experts recommend an excise tax because it is imposed directly on businesses and is designed to increase the shelf price [22]. Figure 1 summarizes suggested implementation methods for a sugary drink excise tax.

At minimum, the tax should include carbonated soft drinks, sports drinks, fruit drinks, energy drinks, sweetened teas and coffees, and syrups and powders used by businesses to make sweetened beverages. There is no consensus on the "best" rate, but experts agree that a tax equivalent to at least 20% is necessary to meaningfully affect consumption patterns [22].

Fig 1 | How to create a sugary drink tax.

Beyond these basic principles, there is no one-size-fits-all approach; policy makers should consider local circumstances when designing a tax (e.g., how to use tax revenue). Policy makers may also consider taxing beverages based on the amount of sugar, as the UK proposed in 2016, instead of purely volume-based taxes that have been used in the USA and Mexico.

To avoid unintended consequences, it is important to monitor industry and consumer behavior in response to the tax. Businesses may respond with aggressive in-store marketing of sugar sweetened beverages or not passing the full tax through to customers, or consumers may compensate with other unhealthy food purchases.

SUMMARY AND POLICY RECOMMENDATIONS

Increases in morbidity, mortality, and health care costs resulting from sugar sweetened beverage intake are critical challenges to public health. Despite federal recommendations, added sugar intake still exceeds federal recommendations. Taxation of added sugars, specifically sugar sweetened beverages, may substantially reduce intake and improve population health. Combining the research evidence and evaluation of the impact of sugar sweetened beverage taxes in several countries and U.S. states, SBM encourages policy makers to implement sugar sweetened beverage taxes.

Recommendations for policy makers

1. Sugary drink taxes should be utilized to reduce sugar consumption, which is currently one of the biggest public health problems in the USA.
2. Evidence from Mexico and Berkeley, CA, combined with modeling studies worldwide, suggest that such taxes can have a positive impact on public health and raise significant tax revenue.
3. Arguments against sugary drink taxes come largely from beverage companies, who clearly have a conflict of interest on this topic because they risk losing revenue if sales go down.
4. Based on the available evidence, SBM commends local jurisdictions that have already implemented a sugary drink tax and recommends that additional local and state policy makers pursue a sugary drink tax.

Compliance with Ethical Standards

Primary Data: On March 29, 2017, a shorter version of this manuscript was posted, in policy brief format, on the Society of Behavioral Medicine, the International Society of Behavioral Nutrition and Physical Activity, and Preventive Cardiovascular Nurses Association's Twitter and Facebook pages and/or websites. This manuscript is not being simultaneously submitted elsewhere. The authors have full control of the entire content of this manuscript and allow the journal to review the information and sources.

Conflict of Interest: Daniel R. Taber, Akilah Dulin-Keita, Megan Fallon, Frank J. Chaloupka, Tatiana Andreyeva, Marlene B. Schwartz, and Jennifer L. Harris declare that they have no conflict of interest.

Ethical Approval: All procedures were conducted in accordance with ethical standards. This article does not contain studies with human participants performed by any of the authors. This article does not contain any studies with animals performed by any of the authors.

Informed Consent: For this type of study, formal consent is not required.

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