Increased tax on tobacco, alcohol, and sugary beverages to save millions of lives

April 11 2019

Credit: CC0 Public Domain

Low-and-middle income countries continue to face a growing burden of morbidity and mortality attributable to the consumption of tobacco, alcohol and of sugar sweetened beverages (SSB). In 2017, tobacco and alcohol use were responsible for 175 million and 88 million years of life lost (YLL), respectively. While taxation has been shown to decrease consumption of tobacco, alcohol, and SSBs, rates of taxation vary by country and are low in parts of the world that would benefit most.

To simulate the expected effects of a tax increase on tobacco, alcohol, and SSBs, researchers used mathematical models, incorporating country-level data on years of life gained, premature deaths averted, change in consumer spending, and change in tax revenue. Models compared the health and economic effects of a tax producing a 20 percent and 50 percent price increase on products, as well as an absolute dollar increase per serving over a 50-year span.

"CDDEP was supported by Bloomberg Philanthropies to support the work of the Task Force on Fiscal Policy for Health lead by Michael Bloomberg and Larry Summers," according to Dr. Ramanan Laxminarayan, Director and Senior Fellow at CDDEP. "Fiscal policies are useful to simultaneously decrease health burden while making resources available to fiscally-constrained governments."

Using epidemiologic, demographic, and consumption data presented across the four World Bank income group classifications (high income, low income, lower-middle income, and upper-middle income), researchers estimated country-level health outcomes and revenue gains using consumption projections from Euromonitor and the World Health Organization. Economic outcomes were estimated using country-level consumption levels and patterns in 2018 USD. Overall, results indicate that middle-income countries would have the greatest health gain from the interventions. High-income countries would account for the smallest health gains from the tobacco and alcohol taxations, yet benefit the most from the SSB tax.

Globally, the 20% retail price increase from the taxes would produce a gain of 212.0, 238.9, and 23.6 million life years over the 50-year span if levied on tobacco, alcoholic beverages, and SSBs, respectively. The 20%

price increase would result in tax revenue gains of $1.4 trillion, $8.88 trillion, and $700 million. Low-income countries specifically would see a revenue gain of $44.44 million for a 20% retail price increase on tobacco, $103.3 million for alcohol, and $54.5 million for SSBs over 50-years. Lower middle-income countries would see a revenue gain of $199.16 million for an increased tax on tobacco, $1.71 trillion for alcohol, and $246.9 million for SSBs. Additionally, the interventions would increase consumer expenditure by $693 billion and $2.86 trillion if levied on tobacco and alcoholic beverages but would decrease consumer expenditure by $216 million if levied on SSBs.

"The estimated increase in life years reflect the tremendous potential of increased taxes to save lives from non-communicable diseases, many of which can be linked back to some combination of tobacco and alcohol use and consumption of sugary beverages," said Amit Summan, CDDEP Research Associate who worked on the study. "An additional benefit is the potential reduction in overall consumer expenditures when taxes are levied on sugary beverages".

Provided by Center for Disease Dynamics, Economics & Policy