



ELSEVIER

Contents lists available at ScienceDirect

The Lancet Regional Health - Europe

journal homepage: www.elsevier.com/lanepe

Commentary

Sobering evidence that higher taxes will mitigate alcohol-related cancer harms

Francis M. Finucane^{a,b,*}, Norah Campbell^c^a Department of Medicine, School of Medicine, CMNHS, NUI Galway^b Galway University Hospital, Saolta University Health Care Group, Galway, Ireland^c Trinity Business School, Trinity College Dublin, Dublin 2, Ireland

ARTICLE INFO

Article History:

Received 27 September 2021

Accepted 27 September 2021

Available online xxx

Even though fewer than half of the world's adults drink, the burden of harmful alcohol use is enormous, with well documented complications ranging from liver and cardiovascular disease to violence and injury, tuberculosis and HIV/AIDS [1]. In 2016, alcohol accounted for 5.3% of deaths globally, killing more than three million people [1]. Every day, 261 American adults die from alcohol harm, typically losing 29 years of life each [2]. Globally, 741,300 or 4.1% of all new cancer cases are attributable to alcohol, most notably breast, oesophageal and liver cancer [3]. Reducing the harmful use of alcohol is a public health priority and a "keystone in sustainable development" according to the WHO [1]. In addition to comprehensive restrictions on exposure to alcohol advertising and the availability of retailed alcohol, increasing taxes on alcoholic beverages is seen as a "best buy" public health intervention to mitigate alcohol harms [1].

In this issue, Kilian et al. [4] describe a modelling study of the number of alcohol related cancers in the WHO-European region that could be prevented with increased alcohol taxation. Specifically, they found that a doubling of current excise duties would lead to a reduction in alcohol related cancer incidence of 5.9%, equivalent to 10,716 fewer cancer cases. Alcohol related cancer mortality would decrease by 5.7%, equivalent to 4,846 lives saved. Overall, 11.6 cancers and 5.2 deaths per year per million population would be prevented. The authors note that half of all cases of alcohol-attributable female breast cancer occur in women with light to moderate consumption – there is no "safe" level of drinking. Doubling excise duties would prevent 1,086 female breast cancer deaths, every year.

By necessity, the authors have made some estimates and inferences in their modelling exercise. They assume that higher taxes will increase the retail price and that this in turn will reduce consumption, and that there will be less elasticity of demand in heavy drinkers

or for the most popular drink categories. They haven't taken account of any "unrecorded" alcohol consumption, and they have estimated that people spill or discard a fifth of the alcohol they purchase, thus their estimates of intake are probably conservative. They note that 23 of 53 member states of the WHO-European region (and most EU states) have no excise duty on wine, even though it constitutes a third of per capita alcohol consumption in the region. If a "100% increase" in excise duty under consideration here seems like a lot, it is notably still lower than the current rate in Finland.

The idea of taxing harmful commodities to improve population health is an old one. In his conceptualisation of modern economics, Adam Smith wrote that "sugar, rum and tobacco are commodities which are nowhere necessary for life, which have become objects of almost universal consumption, and which are therefore extremely proper subjects of taxation." [5] Over 200 years later, the epidemiologist Geoffrey Rose articulated the "two-pronged" approach necessary to address any public health issue, be it smoking, unhealthy diet or excess alcohol consumption: treat individuals already affected by disease, but also introduce population-wide preventive strategies [6] By necessity, these often need to be deployed on the basis that they are likely to do more good than harm, invoking the precautionary principle. This is because generating evidence for such interventions is difficult when they have a small effect at an individual level, even though their impact on "population attributable risk" is large. In this sense, the valuable insights that Kilian et al. have gleaned here [4] ought not to be a requirement for governments to act decisively to increase taxes on alcohol.

So why the legislative inertia? The effectiveness of the alcohol industry lobby in undermining public health interventions which threaten their commercial viability (such as taxation) is well established. It frames its marketing activity as socially responsible and creates corporate responsibly initiatives which are ineffective in reducing harmful drinking [7]. As with other health-harming industries such as tobacco and fast food, policy influence from corporate political activity is often subtle, indirect and designed to embed

* Corresponding author: Francis M. Finucane, Department of Medicine, School of Medicine, CMNHS, NUI Galway, Ireland.

E-mail address: francis.finucane@nuiigalway.ie (F.M. Finucane).

alcohol actors in a “partnership” with policy-makers, as “part of the solution” to alcohol related problems [8]. Such industry-led initiatives can absorb policy bandwidth and deflect from more effective, evidence-based interventions like taxation and advertising restrictions. Meanwhile, the industry works to make alcohol consumption salient, exciting, convenient, cheap, varied, normalised, and omnipresent in myriad ways.

The extensive misrepresentation of scientific evidence about the effects of alcohol on cancer risk by the alcohol industry has been well documented [9] and raises legitimate doubts about the partnership paradigm. In Ireland, where men drink an average of 20 litres of alcohol per year and have a prevalence of heavy episodic drinking of 58.5% [1], legislation first proposed in 2016 to introduce minimum unit pricing is perpetually delayed by industry lobbying [10]. Rose [6] and Smith [5] would wonder why substantive and impactful alcohol taxation is taking so long, even before the findings of Kilian and colleagues [4]. Instead, industry-cultivated drinking culture, allied with its lobbying, is still outpacing and outclassing alcohol harm mitigation strategies.

Author contributions

Francis M. Finucane peer reviewed the Kilian et al. paper, conducted a literature search and drafted and revised the manuscript. Norah Campbell conducted a literature search and drafted and revised the manuscript.

Role of Funding Source

The funding source (Saolta Group) had no role in any aspect of preparing or writing this manuscript. Neither author has been paid to write this article. The authors were not precluded from accessing any

data relevant to this commentary, and they accept responsibility to submit for publication.

Declarations of Interest

Francis M. Finucane is funded by a Saolta University Healthcare Group Clinical Research Career Development Award. He has no conflicts of interest to declare. Norah Campbell has no conflicts of interest to declare.

References

- [1] [Global status report on alcohol and health](#). Geneva: World Health Organization; 2018.
- [2] Esser MB, Sherk A, Liu Y, et al. Deaths and Years of Potential Life Lost From Excessive Alcohol Use - United States, 2011-2015. *MMWR Morb Mortal Wkly Rep* 2020;69(39):1428-33.
- [3] Rumgay H, Shield K, Charvat H, et al. Global burden of cancer in 2020 attributable to alcohol consumption: a population-based study. *Lancet Oncol* 2021;22(8):1071-80.
- [4] Kilian C. Modelling the impact of increased alcohol taxation on alcohol-attributable cancers in the WHO European Region. *Lancet Regional Health - Europe* 2021. doi: 10.1016/j.lanepe.2021.100225.
- [5] Smith A. An Inquiry into the Nature and Causes of the Wealth of Nations: McMaster University Archive for the History of Economic Thought; 1776.
- [6] Rose G. Sick individuals and sick populations. *Int J Epidemiol* 1985;14(1):32-8.
- [7] Mialon M, McCambridge J. Alcohol industry corporate social responsibility initiatives and harmful drinking: a systematic review. *Eur J Public Health* 2018;28(4):664-73.
- [8] Hawkins B, Durrance-Bagale A, Walls H. Co-regulation and alcohol industry political strategy: A case study of the Public Health England-Drinkaware Drink Free Days Campaign. *Soc Sci Med* 2021;285:114175.
- [9] Petticrew M, Maani Hessari N, Knai C, Weiderpass E. How alcohol industry organisations mislead the public about alcohol and cancer. *Drug Alcohol Rev* 2018;37(3):293-303.
- [10] Murray F. Ireland's Public Health Bill: crucial to reduce alcohol harm. *Lancet* 2017;390(10109):2222-3.