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COMMENTARY

The burden of alcohol on health care during COVID-19

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Abstract

Alcohol's impact on global health is substantial and of a similar order of magnitude to that from COVID-19. Alcohol now also poses specific concerns, such as increased risk of severe lung infections, domestic violence, child abuse, depression and suicide. Its use is unlikely to aid physical distancing or other preventative behavioural measures. Globally, alcohol contributes to 20% of injury and 11.5% of non-injury emergency room presentations. We provide some broad comparisons between alcohol-attributable and COVID-19-related hospitalisations and deaths in North America using most recent data. For example, for Canada in 2017 it was recently estimated there were 105 065 alcohol-attributable hospitalisations which represent a substantially higher rate over time than the 10 521 COVID-19 hospitalisations reported during the first 5 months of the pandemic. Despite the current importance of protecting health-care services, most governments have deemed alcohol sales to be as essential as food, fuel and pharmaceuticals. In many countries, alcohol is now more readily available and affordable than ever before, a situation global alcohol producers benefit from and have helped engineer. We argue that to protect frontline health-care services and public health more generally, it is essential that modest, evidence-based restrictions on alcohol prices, availability and marketing are introduced. In particular, we recommend increases in excise taxation coupled with minimum unit pricing to both reduce impacts on health-care services and provide much-needed revenues for governments at this critical time. [Stockwell T, Andreasson S, Cherpitel C, Chikritzhs T, Dangardt F, Holder H, Naimi T, Sherk A. The burden of alcohol on health care during COVID-19. *Drug Alcohol Rev* 2021;40:3–7]

Key words: alcohol, COVID-19, healthcare, mortality, policy.

Introduction

During the COVID-19 pandemic global, national and local infections and deaths have been tracked daily and communicated to us in real time via multimedia. Citizens of most countries have endured extraordinary restrictions to try and contain viral spread, reduce deaths and relieve the strain on frontline health-care workers. During this time, most governments have also taken steps to ensure continued and convenient access to alcohol, despite its demonstrated impacts on these same health-care services and it causing some 3 million deaths each year [1]. There are multiple intersections between the present crisis and alcohol policies. We focus here specifically on implications of alcohol policies for the delivery of health-care services and argue that their protection requires, at the very least, modest, evidence-based restrictions on alcohol prices, availability and

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marketing. We draw largely on data and news reports from North America, and Canada in particular.

Alcohol and COVID-19: special concerns

Alcohol use poses special problems in relation to the COVID-19 pandemic which have implications for public health and health care. Firstly, heavy drinking increases risk for severe lung infections (including both viral and bacterial pneumonia) and ensuing respiratory problems [2]. Secondly, there are many reports of domestic violence spiking around the world as people are required to spend long hours together in their homes [3]. Alcohol use increases the risk that interpersonal conflicts will result in violent behaviour [4]. Alcohol use in the home may also compromise children's welfare [5]. Alcohol is a significant risk factor for depression and suicide [6], which may be more prevalent during this time of enforced social isolation. Finally, it is implausible that being impaired with alcohol will do anything other than make it harder for people to attend to basic precautions for avoiding infection, such as physical distancing, hand washing and not touching one's face.

The impact of alcohol restrictions on health care

Many national governments have, explicitly or implicitly, deemed the supply of alcohol to be 'essential' and some have even argued that doing so prevents cases of alcohol withdrawal swamping hospitals [e.g. 7,8]. In fact, presentations to hospitals for alcohol withdrawal are only a small proportion of all those attributable to alcohol—and they would most likely be reduced if alcohol restrictions were introduced. In 2017, the Canadian Institute for Health Information identified 77 000 hospital admissions wholly caused by alcohol (which they noted as a higher number than for those due to heart attacks) [9]. Of these 100% alcohol-attributable admissions, 23% were attributed to alcohol withdrawal, but this estimate excludes the many more cases partly caused by alcohol, for example from cancer, road traffic accidents, violence and liver disease. In 2017, 100% alcohol-attributable hospitalisations accounted for 22% of all alcohol hospitalisations; thus cases involving alcohol withdrawal will involve only about 5% of the total [10].

The 20th century provides many examples where restricted alcohol supply led to substantial reductions in alcohol-related health problems and hence demand on health-care services. For example, alcohol monopoly strikes in Canada and the Nordic countries were associated with significant reductions in public intoxication, crime and demand for withdrawal treatment [11]. Wine rationing during World War II [12], Gorbachev era restrictions [13] and even US Prohibition [14] all led to improved health outcomes. It seems likely, therefore, that reducing not maintaining alcohol's availability is the best way to limit the burden on health-care services at this and any other time. Recent experience from South Africa bears this point out, where it was estimated that trauma units received 5000 fewer visits every week [15] as a result of the country's COVID-19 alcohol ban, with more lives saved from alcohol-related causes than lives lost to COVID-19.

Alcohol's impact on the delivery of health services is substantial. Over the last several decades over 100 emergency departments from 33 countries have contributed to a comprehensive study of alcohol's involvement in injury [16]. In most countries, alcohol's contribution is in the region of 20% of all presenting injuries, while alcohol's contribution to non-injury emergency department presentations averages 11.5%. It was estimated that in 2014 there were 4 976 136 alcohol-related emergency room presentations in the USA [17] (a rate over time not dissimilar to those of confirmed COVID-19 cases of any severity detected in the USA). We acknowledge that the COVID-19 lockdown measures, including closure of bars and nightclubs, have themselves reduced some kinds of emergency room presentations, for example road crash injuries [18]. Further, numbers of COVID-19 cases vary greatly over time as preventative measures are successively introduced and relaxed. Again, we only stress that the scale of alcohol-related impacts on health care are substantial and, in many countries, will be of a similar order of magnitude and, sometimes, more numerous than those from COVID-19.

In Table 1, we report data on outcomes for both COVID-19 [19] (for the first 6 months of 2020) and for alcohol [10] (for 2017) using Canadian data. These estimates are all subject to well-known limitations and uncertainties. We present them only to indicate that the scale of these two major health issues is of a similar order of magnitude, even at the height of the pandemic's first wave. We note further that the Canadian Substance Use Costs

Table 1. *A comparison of alcohol-attributable hospital stays and deaths with COVID-19 outcomes for Canada*

Condition type	Time period	Hospital stays	Deaths
COVID-19 [19]	1 February to 8 July 2020	10 521	8737
Alcohol-attributable [10]	All 2017	105 065	18 320

and Harms [10] study estimates of alcohol-attributable emergency room visits in Canada for 2017 (700140) exceeds by a factor of about 7 all the known cases of COVID-19 as of 8 July 2020 (100 818 [19]).

Why has the supply of alcohol not been restricted in more countries?

Given these reasons to restrict rather than enable the supply of alcohol in the present crisis, why have not more governments introduced sensible restrictions that would reduce consumption and related health harms? A handful of countries did introduce temporary alcohol bans during their COVID-19 lockdowns (e.g. South Africa [15], India, Greenland, parts of Canada). Alternatively, short of a complete ban, there a number of evidence-based policies available that would only require citizens to endure comparatively minor restrictions on convenient access to and affordability of alcohol that would still protect front line health workers and save lives. However, we suggest there may be four main reasons why the great majority of national and regional governments have done little to restrict alcohol sales during the present pandemic:

1. They falsely believed the health system would be burdened by alcohol-dependent people going into withdrawal [e.g. 7].
2. They are acutely aware that alcohol is a widely used, popular recreational drug and may have believed that restrictions on its availability would not be well received, especially when many other restrictions have already been imposed.
3. They need the revenue from alcohol, even though the economic costs of its use usually outweigh revenues to government from its sale [20,21].
4. The alcohol industry has been lobbying intensely and effectively to loosen restrictions, e.g. on home delivery [22] and to reduce taxes (e.g. suspend alcohol duty) [23].

The case for stronger alcohol policies

The alcohol industry has worked hard to increase its product's availability and affordability at this time [22,23], factors that have been shown to increase alcohol's burden on health-care and emergency services [24,25]. In many jurisdictions, regulations were rapidly modified to permit home delivery from multiple types of outlets. These deliveries are usually free of charge provided there is a minimum purchase amount [26]—and, of course, the deregulation may become permanent [27]. Western Australia, perhaps uniquely, set maximum upper quantities on home deliveries (up to 12 bottles of beer or 3 bottles of wine) with a view to limiting overconsumption [28].

An additional concern is that liberalised alcohol policies during the present crisis have not only contributed to increased consumption in some jurisdictions (as has been widely reported [e.g. 29–31]) but may also sustain higher consumption in the future. It may be hard to undo the recent relaxation of some alcohol controls, especially with current industry lobbying efforts (e.g. see UPI [23]). To the extent that the relaxed policy environment has boosted sales, alcohol producers and off-premise retailers are actually benefiting from the present crisis and, even in the best of times, do not pay their way in terms of revenues paid to government versus economic costs associated with the use of their products [20,21].

The World Health Organization [32] has recommended abstinence or only light consumption at the present time. To facilitate that advice being followed, we further recommend that governments take steps to restrict alcohol's availability and affordability, given strong evidence for the effectiveness of such policies [24,25]. In relation to home delivery, if this is the only option of providing alcohol for people in quarantine or while physical distancing, then sensible maximum quantities could have been introduced with no minimum quantities (i.e. the exact opposite of what has happened in many places).

So, if governments are largely unwilling to turn the taps of alcohol supply off completely, perhaps if the extent of alcohol-related harms and their impacts on health-care services were communicated clearly by governments (including comparisons with those from COVID-19), citizens might be willing to accept some comparatively minor restrictions on availability and affordability. There is also a growing financial imperative for governments to raise additional revenue. Given some early evidence of increased frequency of alcohol consumption in some populations during the COVID-19 crisis [30], it would be timely to consider taxation increases, especially given evidence for the effectiveness of these curtailing alcohol consumption and related harms [24,25]. Specifically, we recommend consideration of the following policies:

1. Alcohol excise taxes could be raised so that revenues match or at least cover a larger share of economic costs, with the level of taxes based on the alcohol content of drinks [20,21].
2. Minimum unit prices could be used to raise the prices of cheap alcohol that is particular sought out by the heaviest drinkers [33].

3. Impactful health warnings could be placed on alcohol containers with messages rotating to highlight less well-known risks such as cancer and the implications for COVID-19 risks, to provide low-risk drinking guidelines, and to specify the number of standard drinks in containers [34].
4. Upper limits could be placed on amounts of alcohol that may be delivered to a household, with no minimum quantities imposed (a standard delivery fee could be applied).
5. As bars and restaurants open, density restrictions and reduced hours of opening would reduce violent incidents [35] and late-night emergency room presentations [36], and help with social distancing.

We conclude with the suggestion that the COVID-19 crisis provides the perfect time to confront dysfunctional societal relationships with alcohol. Given the many negative effects of alcohol use during the present pandemic, current policies in many places imply that the right to unrestricted access to alcohol takes precedence over the need to reduce pressure on health-care services. While there has been universal support for front-line health-care workers, there has been virtually no public debate or attention to how our continued use of alcohol places a huge burden on their attention and resources. There is a strong case for evidence-based policies in the public interest—policies that would require public acceptance of just a little less convenient access to and ease of affordability of alcohol, especially during this historically challenging time. Such policies could reduce economic costs and minimise diversion of health-care services. As well, higher taxes could provide much needed additional revenue for cash-strapped governments [33].

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