

## COMMENTARY

## COVID-19 and alcohol in Mexico: A serious health crisis, strong actions on alcohol in response—Commentary on Stockwell *et al.*

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### Abstract

The present text comments on Stockwell and colleagues' paper documenting the high burden of alcohol use in COVID-19 related mortality in the USA and Canada in North America and the absence of a control policy in several countries of the world. This comment adds information about the third country in North America, Mexico. It describes alcohol use during the COVID lockdown and its consequences, highlighting the control efforts through public health policies and ponders the weaknesses of the current response to the health crisis and opportunities in the aftermath. [Medina-Mora M, Cordero-Oropeza M, Rafful C, Real T, Villatoro-Velazquez JA. COVID-19 and alcohol in Mexico: A serious health crisis, strong actions on alcohol in response—Commentary on Stockwell *et al.* Drug Alcohol Rev 2021;40:13–16]

**Key words:** COVID-19, alcohol problem, policy.

Tim Stockwell and colleagues [1] have written a very interesting paper that documents the high burden associated with alcohol in the increased risk of severe lung infections, of domestic violence, child abuse, depression and suicide, all associated with COVID-19, and the implications of drinking for physical distancing and other preventive behavioural measures. The authors use the case of Canada to examine the contribution of alcohol to mortality, which in 2017 was 7.3 times higher than that of COVID-19, and to argue that there is a disparity in policy and investment. They provide evidence showing that the protection of front-line health-care providers and public health personnel is essential and feasible through restrictions on alcohol prices, availability and marketing; and draw attention to the low priority that is given to alcohol policies.

### The Situation in Mexico

In Mexico, alcohol plays an important role in morbidity and mortality, associated with both the total amount of alcohol consumed and patterns of hazardous drinking. For instance, while a high proportion of people (47%) did not drink alcohol in the year prior to the 2016–2017 national representative survey, the proportion that consumes large amounts per occasion (5 or more drinks for males and 4 or more for females) was also high (19.8% of drinkers), and some met the criteria for alcohol use disorders (2.2%). Binge drinking and alcohol use disorders are higher among males (30% and 4.6%) than females (10.3% and 0.6%, respectively) [2].

In terms of alcohol use during the first months of the COVID-19 epidemic in Mexico, results from a

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national telephone survey conducted by the National Institute of Public Health during the lockdown showed 12% increased their alcohol intake, 39% decreased and 48% reported no change in their consumption [3]. An online survey, conducted by the National Institute of Psychiatry, showed an increase in frequency of daily alcohol intake during lockdown, particularly among females [4].

Mexico has been hard hit by the pandemic; the first case was registered on 27 February and lockdown measures were implemented on 23 March. As of August 2020, Mexico ranked third in the Americas after the USA and Brazil in COVID-19 related mortality (with 44 876 registered deaths from 13 January to 31 July 2020). This is 2.5 times higher than the annual number of alcohol-related deaths (an estimated 17 321 in 2017). Hospital admissions due to COVID-19 (402 697) are 6.3 times higher than estimated annual admissions for direct causes attributable to alcohol (63 689 in 2017) [5].

On the other hand, alcohol is a risk factor for other disorders, including heavy use for diabetes [6] and use for hypertension [6]. Alcohol [7], diabetes and hypertension [8] are also associated with increased mortality risk due to COVID-19 (39% of diseased persons in Mexico, confirmed with COVID 19, also had diabetes and 45% had hypertension). As in other countries, the highest burden of COVID-19 is observed among the poor. Mortality due to COVID-19 is higher than ordinary mortality among the population aged 30–69 years, more frequent among males (70%), among those with lower educational attainment than the national average (71% among those who had completed elementary school or less), and among those with no access to health care [9].

The health and economic costs of the COVID-19 pandemic are high. The United Nations Development Program has estimated a reduction in growth of 8.7% in Mexico [10]. Examples of these effects and how they relate to alcohol consumption are evident in a study of 1324 university students in online treatment for mental health and substance use problems during lockdown in March–July 2020, which show that those reporting economic problems in the family (38.6%) also reported harms such as domestic violence, and that 67.4% of those with economic problems in the family had engaged in heavy alcohol use as measured by the first three items of the Alcohol Use Disorders Identification Test, compared with 32.6% among those who did not report economic problems in the family [11].

Also, lockdown has been linked to unwanted consequences such as domestic violence, with 7% of the households interviewed in the previously mentioned national telephone survey reporting family violence during this period [3]. Almost half (43.7%) of the sample of university students previously mentioned

reported an increase in violence, a higher percentage than the violence rate reported by the total sample (32%) [11]. Alcohol has been associated with domestic violence as a negative coping mechanism of isolation and economic stressors that accompany the pandemic [12], enforcing the need for integrated alcohol policies.

## Alcohol Policies

Nationwide, several alcohol-related policies were implemented during lockdown, including dry laws and availability control, the rationale for these measures being the risk of drinkers failing to adhere to social distancing guidelines and of violence. Newspaper surveys (*El Financiero*) reported a 69% approval rate of these measures [13].

During the lockdown, beer factories were not allowed to produce alcohol, as it was not considered an essential activity, with Modelo and Heineken closing in April. According to Nielsen, in Mexico beer prices rose by an average of 7%, tequila by 12%, and rum and brandy by 1%, while the price of whiskey fell by 5% [14].

Twenty-one states passed total or partial dry laws; in four states, these restrictions were implemented throughout the state, whereas in 17 they were implemented at the municipal level (52 municipalities). In another six municipalities, restrictions were imposed on the days and times when alcohol could be purchased. Limitations on the number of places permitted to sell alcohol were also considered [15]. An initiative to increase tax on sugary beverages, tobacco and alcohol is currently in the House of Representatives [16].

The Ministry of Health coordinated a network of institutions and experts on mental health and treatment centres. Actions encompassed in the mental health plan include interinstitutional cooperation, training for first responders and continuous training for persons providing care, a telephone line for screening, online psychosocial interventions and reference to different levels of care pending on the severity of disorders. By the end of July, 78 598 persons had been screened; the main concerns of the persons that accessed the online service were mental disorders, mainly depression, violence and substance use related problems [17].

Unfortunately, there were also some drawbacks. Early on during the lockdown, officials at a high level of the federal government did not support dry laws [15]. Adulterated alcohol with methanol was illegally sold as an alcoholic beverage, causing 182 related deaths in 10 states [18]. Moreover, an actor in the alcohol

industry (Heineken) gained public favour by distributing water and hand sanitizer to the general population, providing food for those in need, and donating equipment and money to the Red Cross [19].

Although an in-depth analysis must be undertaken when information becomes available, preliminary results from the Unit of Health Information show that the number of hospitalisations directly attributable to alcohol (alcohol psychoses, alcohol abuse and alcohol dependence syndrome) fell during the alcohol restrictions, from 593 admissions in April, prior to the regulations in states that enforced dry law or availability restrictions, to 307 in May and 37 in June [20], maybe influenced by the reduction of treatment of chronic disorders. But acute alcohol intoxications seen in emergency rooms also fell, from 407 in April to 283 in May and 238 in June, in states that endorsed the dry law [20].

## Conclusions

In Mexico, important steps were taken to diminish risks during the COVID-19 emergency; preliminary data show a decrease in acute alcohol intoxications cared for in emergency rooms during the lockdown [20]. The alcohol industry was classified as non-essential, forbidding it from producing alcohol, and laws limiting availability, health promotion campaigns and promotion of access to treatment were endorsed. Significant efforts in alcohol policy were made, despite Mexico being a country with no sustained integrated policy, an impoverished health system that experienced significant budget cuts prior to the pandemic, a more impoverished population before the pandemic and since the effects of lockdown due to COVID-19 [11], and a lack of political will for a comprehensive reform among sections of the government other than health. The question is whether these efforts will be sustained, or will we go back to business as usual, with a shortage of alcohol policies once the crisis is over.

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## Conflict of Interest

The authors declare no conflict of interests.

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