

Rapid review of alcohol and other drug use and COVID-19

Suggested citation: Ahmed AMS, Shaw K. A rapid review of alcohol and other drug use and COVID-19. Primary Health Tasmania, 2020

Summary

- In Australia, there was a small increase in beer consumption overall for the current financial year when excise beer clearance is used as a proxy
- Credit card data indicate an increase in alcohol sales but do not reflect a person's overall alcohol consumption. Substitution of venue-based alcohol consumption for home-based alcohol consumption cannot be adjusted for in publicly available data
- No data is available to estimate the prevalence of use of the illicit drugs due to COVID-19 and mass social distancing
- No increase in the public hospitals or Emergency Department admissions for illicit drugs withdrawal presentations in Tasmania
- Anecdotal evidence from the sector is that illicit drugs are still accessible in Tasmania which may explain lack of increase in withdrawal presentations
- Literature review suggested that there could be an increase in alcohol related-use disorders among the general population as a result of psychological distress triggered by COVID-19 pandemic and/or interaction of financial difficulties and/or social isolation (mass social distancing) and/or uncertainty about the future
- No study reported findings for immediate health impact for alcohol-related disorders and other drug abuses of COVID-19 and mass social distancing
- There was a significant increase in alcohol-related disorders during the post epidemic period in China and the epicentre of the epidemic suffers significantly more the other regions
- Front line health workers of SARS have significantly suffered from more symptoms of alcohol use disorder than nonexposed health workers
- The current public health messaging for prevention of COVID-19 might be leaving people who use drugs and alcohol
- It is essential to invest in harm reduction supplies and services expansion at the time of crisis for people who use drugs and alcohol
- Treatment and service continuity plans are needed for individuals who use drugs and alcohol through innovative approaches
- Primary care physicians and mental health specialists should pay special attention to assessing their patient's situation and examining them to ensure they are free of any signs of substance abuse.

Background

It is suggested in the literature that COVID-19–related stressors (such as exposure to infected sources, infected family members, loss of loved ones, and physical distancing), secondary adversities (e.g. economic loss), psychosocial effects (such as depression, anxiety, psychosomatic preoccupations, insomnia and domestic violence), indicators of vulnerability (such as pre-existing physical or psychological conditions) and compliance with public health directives (stay-at-home, quarantine, and isolation) could trigger unhealthy behaviours such as substance abuse (Pfefferbaum & North, 2020). It is also evident from the literature that the possibility of raised use of alcohol is mediated by depressive symptoms or PTSD (Ben-Zur & Zeidner,

2009; Gross, Bastian, Smith, Harpaz-Rotem, & Hoff, 2020). It is reported in some studies that exposure to situations capable of generating PTSD, such as terrorist attacks, natural disasters or accidents, has been associated with increased rates of alcohol abuse and dependence (Boscarino, Adams, & Galea, 2006; Lebeaut, Tran, & Vujanovic, 2020). Regarding the COVID-19 pandemic, there are still no data on substance abuse disorders, or studies assessing the possible increase in consumption as a consequence of lockdown. Thus, the COVID-19 pandemic along with stay-at-home, quarantine, and isolation advice could lead to an increase in unhealthy behaviours such as excessive drinking or smoking or substance abuse to alleviate negative emotions (García-Álvarez, Fuente-Tomás, Sáiz, García-Portilla, & Bobes, 2020). Authors also emphasised about the population who had a substance use disorder and currently in remission could also have to cope with tension and more intense cravings, leading to an increased risk of relapse.

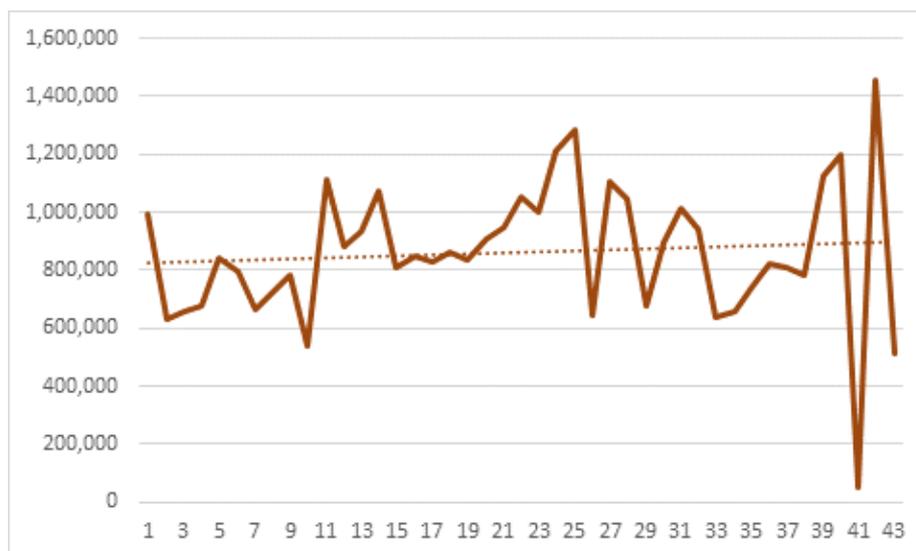
Impact of COVID-19 and social distancing on alcohol consumption

Recent literature review suggested two potential mechanisms for the possible impact of COVID-19 and social distancing on alcohol use (Rehm et al., 2020). The first one suggested that the increase in psychological distress triggered by the interaction of financial difficulties, social isolation and uncertainty about the future during and after crises like the COVID-19 pandemic can worsen patterns of alcohol use and increase attributable harm. The second mechanism suggested the physical and financial availability (affordability) of alcohol would predict the level of alcohol use and attributable problems. The COVID-19 pandemic is associated with unemployment and reduced working hours leading to income reductions for larger parts of the population. This might lead to tighter budgets and a decrease in alcohol use and attributable problems. The exact impact on unemployment will not be evident in Australia due to countermeasures enacted by the Australian Government. Moreover, outlets selling alcohol for off-premise consumption have been deemed 'essential' services in Australia and have been allowed to remain open.

As populations continue to face 'stay at home' or 'isolation' or 'lockdown' and financial difficulties are covered through the Australian Government's counter measures, attention must now be turned to the likelihood of increased drinking in the home (Reynolds & Wilkinson, 2020), which ultimately results in health and social harms to the individual and their family. Increased consumption of alcohol at home during the current pandemic situation may lead to additional burden on increasingly strained health systems and other emergency services.

The credit card data indicates a 37% increase in alcohol sales even before the close of on-premise outlets on 22 March 2020 in Australia. This indicates that Australians began stockpiling alcohol from bottle shops along with other commodities from supermarkets (Koziol, 2020). However, this does not account for decreases/closure of on-premise (bars, pubs, hotels, restaurants, and recreation centres) alcohol consumption as part of government directives. Substitution of on-premise alcohol consumption for home-based alcohol consumption cannot be adjusted for in publicly available data. The excise beer clearance data of Australian Taxation Office (ATO) demonstrated a very minor trend of increased overall beer clearance during the current financial year (ATO). However, no other alcohol type data were available for analyses.

Figure 1: Excise beer clearance (litre) by week for 2019-20 financial year



Additionally, online sales of alcohol has experienced rapid growth in Australia over recent years (Colbert, Thornton, & Richmond, 2020) and we were unable to identify any data related to the amount of sale of alcohol through e-commerce during the time of pandemic. In the United States (US), purchases of alcohol have soared, with sales increasing by 55% in the week ending March 21st compared to the same time last year (Nielsen, 2020). Drizly, an alcohol e-commerce platform operating in over 100 markets across the US and Canada has seen a 300% rise in sales during COVID-19 (Micallef, 2020).

COVID-19, social distancing, and alcohol use disorders and other drug use

A recent study conducted in China evaluated the impact of COVID-19 epidemic and mass isolation on mental health (Ahmed et al., 2020). The study reported that hazardous drinking increased to 29.1%, harmful drinking increased to 9.5% and alcohol dependency reached 1.6% among 1,074 study participants. Further analysis showed significant differences in alcohol abuse (Hazardous users 33.5% vs. 21.5%; Harmful users 11.1% vs. 1.9% and Dependent users 6.8% vs. 1.1%; $\chi^2 = 30.772$, $p < .001$, effect size = .169) between respondents from Hubei and other provinces.

The analyses of Tasmanian Public Hospital Admitted Patient Episodes and Emergency Department Presentations datasets showed no increase in ED presentations or hospital admissions for other drugs withdrawal presentations, compared to admissions during January to May last year (personal communication). Anecdotal evidence from sector is that illicit drugs are still accessible in Tasmania, which may explain the lack of increase in withdrawal presentations at acute health service facilities.

To understand the long-term (months to years) effect of COVID-19 and social distancing (stay-at-home, quarantine, and isolation), findings of prior epidemics of infectious diseases could be useful. A study reported an increase in alcohol drinking after one year of the SARS pandemic among more than 800 Hong Kong residents (Lau et al., 2005). Another study reported among hospital employees in Beijing who were either in quarantine or worked in high-risk hospital wards, the risk of reporting symptoms of an alcohol use disorder three years after the SARS outbreak was about 1.5 times higher than for nonexposed hospital employees (Wu et al., 2008).

Impact on health system

The current public health messaging for prevention of COVID-19 might be leaving out an important at-risk population - people who use drugs and alcohol. Most of these people are living with limited personal resources, having unstable and densely populated housing conditions, substance use sharing practices, and

compromised immunity, as well as inadequate access to essential medicines (substance agonist treatments) and harm reduction supplies. It is essential to invest in harm reduction supplies and services expansion for this vulnerable population. Supplies for safer smoking, snorting, and injecting drug use, access to alternatives to non-beverage alcohol, and providing sanitising supplies and educational materials are essential for harm reduction among this population (Karamouzian, Johnson, & Kerr, 2020).

During the COVID-19 pandemic, many addiction treatments and harm reduction organisations have had to reduce their hours and services for people with substance use disorders. In order to address restricted treatment access during COVID-19, the Substance Abuse Mental Health Services Administration, the US Drug Enforcement Administration, and the US Department of Health and Human Services has allowed for use of audio-only telehealth encounters for buprenorphine induction without requiring an in-person evaluation or video interface. Accordingly, Rhode Island Department of Health using a common sense approach (a phone hotline which functions as a "tele-bridge") to address the complex problem of access to treatment only now permissible due to regulatory changes during COVID-19 (Samuels et al., 2020).

Behavioural programs are usually conducted through group basis and are the cornerstones of therapy for alcohol and alcohol relapse prevention. Due to social distancing such programs are affected, and patients now no longer have structured time that can be allocated to non-alcohol related activities. Without structured activity, patients are left with nothing to occupy their time and may succumb to alcohol relapse. Moreover, patients from lower socio-economic backgrounds who lack access to smartphones or internet service will be particularly affected to receive education and counselling programs. A newspaper article reported that alcohol use disorder related patients across the US were struggling to stay sober despite years of abstinence, because their group in-person meetings are now cancelled (Hoffman, 2020). Therefore, primary care physicians and mental health specialists should pay special attention to assessing their patient's situation and examining them to ensure they are free of any signs of substance abuse. It is necessary to develop psychological support measures for this group of patients and for those who develop disorders as a consequence.

References

- Ahmed, M. Z., Ahmed, O., Aibao, Z., Hanbin, S., Siyu, L., & Ahmad, A. (2020). Epidemic of COVID-19 in China and associated Psychological Problems. *Asian J Psychiatr*, *51*, 102092. doi:10.1016/j.ajp.2020.102092
- ATO. Excise beer clearance data. Retrieved from <https://www.ato.gov.au/about-ato/research-and-statistics/tax-and-superannuation-statistics/excise-beer-clearance-data/>
- Ben-Zur, H., & Zeidner, M. (2009). Threat to life and risk-taking behaviors: a review of empirical findings and explanatory models. *Pers Soc Psychol Rev*, *13*(2), 109-128. doi:10.1177/1088868308330104
- Boscarino, J. A., Adams, R. E., & Galea, S. (2006). Alcohol use in New York after the terrorist attacks: a study of the effects of psychological trauma on drinking behavior. *Addict Behav*, *31*(4), 606-621. doi:10.1016/j.addbeh.2005.05.035
- Colbert, S., Thornton, L., & Richmond, R. (2020). Content analysis of websites selling alcohol online in Australia. *Drug Alcohol Rev*, *39*(2), 162-169. doi:10.1111/dar.13025
- García-Álvarez, L., Fuente-Tomás, L., Sáiz, P. A., García-Portilla, M. P., & Bobes, J. (2020). Will changes in alcohol and tobacco use be seen during the COVID-19 lockdown? *Adicciones*, *32*(2), 85-89. doi:10.20882/adicciones.1546
- Gross, G. M., Bastian, L. A., Smith, N. B., Harpaz-Rotem, I., & Hoff, R. (2020). Sex Differences in Associations Between Depression and Posttraumatic Stress Disorder Symptoms and Tobacco Use Among Veterans of Recent Conflicts. *J Womens Health (Larchmt)*, *29*(5), 677-685. doi:10.1089/jwh.2019.8082
- Hoffman, J. (2020, 26 March). With Meetings Banned, Millions Struggle to Stay Sober On Their Own. *The New York Times*. Retrieved from <https://www.nytimes.com/2020/03/26/health/coronavirus-alcoholics-drugs-online.html>
- Karamouzian, M., Johnson, C., & Kerr, T. (2020). Public health messaging and harm reduction in the time of COVID-19. *Lancet Psychiatry*, *7*(5), 390-391. doi:10.1016/s2215-0366(20)30144-9

- Koziol, M. (2020, 28 March). The booze epidemic: with no boss in sight, workers can drink from home. *The Sydney Morning Herald*. Retrieved from <https://www.smh.com.au/national/the-booze-epidemic-with-no-boss-insight-workers-can-drink-from-home-20200326-p54e74.html>
- Lau, J. T., Yang, X., Pang, E., Tsui, H. Y., Wong, E., & Wing, Y. K. (2005). SARS-related perceptions in Hong Kong. *Emerg Infect Dis*, 11(3), 417-424. doi:10.3201/eid1103.040675
- Lebeaut, A., Tran, J. K., & Vujanovic, A. A. (2020). Posttraumatic stress, alcohol use severity, and alcohol use motives among firefighters: The role of anxiety sensitivity. *Addict Behav*, 106, 106353. doi:10.1016/j.addbeh.2020.106353
- Micallef, J. V. (2020, 4 April). How The COVID-19 Pandemic Is Upending The Alcoholic Beverage Industry. *FORBES*. Retrieved from <https://www.forbes.com/sites/joemicallef/2020/04/04/how-the-covid-19-pandemic-is-upending-the-alcoholic-beverage-industry/#599a5ade4b0b>
- Nielsen (Producer). (2020, 17 May, 2020). Retail Analytics. Retrieved from <https://twitter.com/nielsen/status/1248366074317418498>.
- Pfefferbaum, B., & North, C. S. (2020). Mental Health and the Covid-19 Pandemic. *N Engl J Med*. doi:10.1056/NEJMp2008017
- Rehm, J., Kilian, C., Ferreira-Borges, C., Jernigan, D., Monteiro, M., Parry, C. D. H., . . . Manthey, J. (2020). Alcohol use in times of the COVID 19: Implications for monitoring and policy. *Drug Alcohol Rev*. doi:10.1111/dar.13074
- Reynolds, J., & Wilkinson, C. (2020). Accessibility of 'essential' alcohol in the time of COVID-19: Casting light on the blind spots of licensing? *Drug Alcohol Rev*. doi:10.1111/dar.13076
- Samuels, E. A., Clark, S. A., Wunsch, C., Keeler, L. A. J., Reddy, N., Vanjani, R., & Wightman, R. S. (2020). Innovation During COVID-19: Improving Addiction Treatment Access. *J Addict Med*. doi:10.1097/adm.0000000000000685
- Wu, P., Liu, X., Fang, Y., Fan, B., Fuller, C. J., Guan, Z., . . . Litvak, I. J. (2008). Alcohol abuse/dependence symptoms among hospital employees exposed to a SARS outbreak. *Alcohol Alcohol*, 43(6), 706-712. doi:10.1093/alcalc/agn073

June 2020

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