

The Shadow Pandemic of Alcohol Use during COVID-19: A Canadian Health Leadership Imperative

La pandémie cachée de la consommation d'alcool pendant la COVID-19 : un impératif en matière de leadership en santé au Canada



ELIZABETH HARTNEY, PhD, RPSYCH

Adjunct Professor

Royal Roads University

CEO/Director

Mind Science Consultants Inc.

Victoria, BC

Abstract

Increased alcohol consumption among Canadians during the COVID-19 pandemic will impact our health systems in the short and longer term, through increased hospitalizations due to alcohol-related illness, addiction, violence and accidents. The increased stress due to involuntary unemployment, confinement and boredom during the pandemic has led to an escalation in alcohol use. It is imperative that policy makers recognize and address the inherently conflicting roles of provincial/territorial governments as regulators/retailers of alcohol and funders of healthcare and prioritize the development and implementation of an evidence-based framework to mitigate the increased population health risks of alcohol-related harms.

Résumé

L'augmentation de la consommation d'alcool chez les Canadiens pendant la pandémie de COVID-19 aura un impact sur les systèmes de santé à court et à long terme; impact résultant d'une augmentation des hospitalisations en raison de maladies liées à l'alcool ainsi que de problèmes de toxicomanie, de violence et d'accidents. Le stress accru dû au chômage involontaire, au confinement et à l'ennui pendant la pandémie a conduit à une escalade de

la consommation d'alcool. Il est impératif que les décideurs reconnaissent et abordent les rôles intrinsèquement contradictoires des gouvernements provinciaux et territoriaux en tant qu'organismes de réglementation et détaillants d'alcool, mais aussi de bailleurs de fonds pour les soins de santé. Les décideurs doivent prioriser l'élaboration et la mise en œuvre d'un cadre fondé sur les données probantes afin d'atténuer les risques accrus pour la santé liés à l'alcool.

Introduction

Alcohol use is common in Canada; a recent study indicated that 83% of adults drink alcohol, and 42% report binge drinking. Prior to the pandemic, alcohol was estimated to be directly responsible for 77,000 hospitalizations annually (CIHI 2017). Heavy drinking in adults increased from 15% in 2000–2001 to 20% in 2013–2014 (Willmore et al. 2017). During March and April 2020, which marked the beginning of the COVID-19 quarantine period, liquor stores were deemed an essential service, and self-reported alcohol consumption increased by nearly 20% in Canadians aged 15–49 years, while less than 10% of Canadians in that age group reported drinking less alcohol (Statistics Canada 2020). Survey data indicated that increased drinking was due to the lack of regular schedule, boredom and stress (NANOS 2020). Given the extended duration of the quarantine, this has created circumstances where vulnerable individuals could develop alcohol-related disorders that might otherwise have been avoided. The inherently conflicting roles of provincial/territorial governments as both regulators and retailers of alcohol as well as funders of healthcare urgently needs to be addressed if the resulting harm is to be managed at a population level.

Simultaneously, the reduction of available health services not directly related to COVID-19 has impacted the public's access to services that could provide early intervention or ongoing treatment for heavy drinking. Patient-oriented research indicates the importance of supportive, trauma-informed relationships between physicians and people who use substances (Hartney et al. 2020), which are undermined by limited access, social distancing and infection-control strategies such as wearing masks. Any delay in help-seeking behaviours in people with substance-related problems is likely to increase the threshold for intervention to higher levels of impairment. As a result, there is a strong likelihood that people will have a greater severity of alcohol-related disorders when they do present for treatment, placing additional strain on the health system.

Despite the ubiquity of alcohol use, research on untreated heavy drinking is scarce, both in Canada and internationally. A large-scale, longitudinal study conducted by the Department of Health in the UK provided insight into a variety of aspects of untreated heavy drinking, including motivations to drink heavily, dependence on alcohol and potential influences on readiness to change (Hartney et al. 2003), and increased health system use over time (Rolfe et al. 2008).

The numerous negative short- and long-term health consequences of risky and excessive alcohol use are well established by decades of clinical research. Particularly concerning during the COVID-19 pandemic is the increased vulnerability of heavy drinkers to lung diseases,

including pneumonia, tuberculosis, respiratory syncytial virus infection and acute respiratory distress syndrome, all of which are caused by impaired immune responses (Simet and Sisson 2015). In the context of a novel virus that primarily assaults the lungs, increased heavy drinking could have significant repercussions on hospitalizations and mortality rates during subsequent waves of the COVID-19 pandemic.

It has been known for decades that alcohol-related harms occur in those who drink moderately as well as those who drink heavily, and the “prevention paradox” – which argues that population-wide approaches might best address alcohol-related harms – has long been debated (Stockwell 2006). Research has demonstrated that over 50% of people who died of cancer attributable to alcohol were moderate drinkers, consuming within weekly guidelines (Sherk et al. 2020). In addition, although effective evidence-based treatments have been developed, there are numerous systemic barriers to those seeking treatment by accessing withdrawal management and treatment services (Timko et al. 2015).

Intersection with Mental Health and Substance Use

People with mental health problems, such as depression, are at an elevated risk of excessive alcohol use and its consequences (Bell et al. 2015). People with post-traumatic stress disorders are particularly vulnerable (Leeies et al. 2010). For many people, alcohol is a way of coping with difficult emotional states. With other, healthier outlets for managing negative feelings no longer available, such as social interaction, exercise, and activities outside of the home, the pandemic could exacerbate the narrowing of repertoire of activities connected to drinking, which is a well-recognized symptom of alcohol use disorder (Hartney et al. 2003). This is a significant concern in the current pandemic – creating conditions that could escalate symptoms of depression and post-traumatic stress disorder through the disruption of normal life, and the potential for people to witness their loved ones’ pain, illness and demise without the culturally expected mechanisms for comfort or grieving.

Alcohol-related problems also predispose drinkers to using other psychoactive substances, such as tobacco, and may increase vulnerability to other substance-related disorders. The current pandemic intersects with an opioid crisis that has claimed the lives of thousands of illicit and prescribed opioid users. Staying home and having restricted access to sources of other drugs may create a greater dependence on alcohol for intoxication among people who use other substances.

Intersections with Age, Race and Gender

Specific subpopulations have been identified as being at elevated risk associated with alcohol consumption. While men have long been recognized as heavier drinkers in many cultures in Canada (Spithoff 2019) and internationally (Casswell et al. 2018), women’s alcohol use has escalated, with a 240% increase in alcohol-related hospital visits by young women (Spithoff 2019). Johnston (2015) has identified the “pinking” of alcohol marketing as a key influence on the increase in women’s drinking, particularly the portrayal of women’s drinking

as synonymous with self-medication and purported gender equality. Given the short- and long-term health risks associated with alcohol-related harm in women as well as men, it is imperative that we better understand the causes and effects of these demographic shifts. Some progress has been made in this regard: in a sex- and gender-based analysis, Peralta et al. (2018) found that regardless of sex, a masculine gender orientation was positively associated with heavy episodic drinking, while a feminine gender orientation with decreased risk. Further research is needed to establish precisely how this relates to alcohol-related harms among men and women.

Research has revealed even greater vulnerabilities in more marginalized women. Veldhuis et al. (2020) identified the specific vulnerabilities of sexual minority women, particularly when ethnicity was also considered. The specific role of alcohol in the lives of women is in urgent need of further study if we are to mitigate the potential harms it poses to members of society who are already experiencing stigma and social disadvantage.

Similarly, there are also cultural variations in alcohol use and its prevention. Importantly, for Canada, research indicates that Indigenous people may be at a higher risk of heavy drinking than non-Indigenous people (Kyu et al. 2015). Cultural sensitivity is required as we seek to better understand Indigenous drinking patterns, as stigmatizing stereotypes regarding alcohol use by Indigenous peoples have reinforced racism within the Canadian health system. Research exploring patterns of alcohol use among off-reserve Indigenous people has identified the need for culturally specific approaches to alcohol prevention (Ryan et al. 2016). Therefore, Indigenous-led, trauma-informed, culturally safe research and interventions are required to address this important healthcare need.

Collateral Damage

In addition to the health harms caused directly by alcohol use, as discussed earlier, indirect or collateral damage from alcohol use also has a massive impact on the Canadian health system. Many injuries, hospitalizations and untimely deaths are the result of alcohol-induced violence and drunk-driving accidents (Giesbrecht et al. 2010). The more frequently people drink, the more negative consequences are experienced (Kuntsche et al. 2008). These consequences create some of the most severe and distressing injuries the healthcare workforce routinely faces, arising from motor vehicle accidents and family violence. These injuries appear in hospital emergency departments every day and are entirely preventable. Yet, with the lack of recognition of alcohol use as a legitimate societal concern, they come to the attention of the parts of the healthcare system that are least able to intervene in a way that could mitigate further harms, such as hospital emergency departments. Attempting to treat the casualties of alcohol-related violence and accidents is traumatic for both healthcare staff and patients, and undermines the emotional well-being of our healthcare workforce, which ironically reinforces alcohol use in these occupational groups as a way of coping with vicarious trauma.

Heavy drinking has profound impacts on the family (Orford et al. 2002), and as indicated earlier, parental alcohol use poses significant physical, psychological and social risks

to children (Hartney and Barnard 2015). Research exploring the intersection of gender and violence showed that younger male heavy drinkers most frequently self-reported involvement in violence, while women's involvement in violence was rarely discussed (Rolfe et al. 2009). This clearly points to the abovementioned association between the stereotypical masculine identity and heavier alcohol use, compounded by positive perceptions of violence associated with masculinity. Meanwhile, women's involvement in violence, whether as perpetrators or victims, remains invisible and unacknowledged.

The relationship between alcohol use and high-risk sexual behaviour is well established (Plant 1990), and it has been speculated that alcohol use may impact adherence to social distancing (Stockwell et al. 2020), thus increasing the risk of COVID-19 infection among drinkers.

Responsible Alcohol-Related Health Policy during the COVID-19 Pandemic

When we consider the short- and long-term health risks associated with alcohol use, it seems surprising that healthcare leaders and other policy makers do so little to intervene. However, the involvement of the healthcare system in addressing the risks of alcohol use has been minimal – given the extent of the problem and its relevance to healthcare – and largely counterproductive, given recent evidence regarding increases in alcohol use cited above. How can this be explained in the context of a pandemic that has drawn together political opponents, healthcare providers and the community in a united effort to reduce the potential harms of COVID-19, a health risk that, though significant, pales in comparison to the harms emergent from alcohol use? Indeed, how can we justify daily messaging on social distancing while remaining silent on the use of a substance that has more far-reaching and detrimental effects on the health of individuals and communities?

The answer lies in the tension between the liberal substance use policy that emphasizes individual freedom (which clearly has important social functions) and a responsible approach to the promotion of health and prevention of alcohol-related harms, which is recognized by decades of research and accumulated health data. Clear, unambiguous health messaging regarding the impacts of alcohol should not be conflated with an authoritarian, out-of-touch, oppressive, restrictive or puritanical attitude toward individual choice. Clearly, people do have the choice to drink heavily, thereby increasing the risk of harms to themselves and others just as they have the choice to drive under the influence and to commit violent acts and injure their loved ones while under the influence. The question is whether policy makers recognize their role in maintaining a worsening situation in the context of the COVID-19 pandemic. Do we continue to passively stand by and absorb the financial and human costs of escalating alcohol use? Do we continue allowing our hospitals and morgues to accommodate the casualties of an indifferent leadership stance on alcohol use during the COVID-19 pandemic? Do we simply continue to pour public funds into charities and safe houses for women and children fleeing violence? Or do we recognize the immediate and long-term benefits of a well-designed, comprehensive, evidence-based and effective health promotion and

prevention framework that could prevent the untold misery and healthcare costs associated with alcohol use?

A Proposed Solution

Assuming that policy leaders recognize the importance of preventing and mitigating alcohol-related harms to the health of the Canadian population, how should they proceed? While there is clearly a need for immediate research to better understand the psychology of alcohol use and resulting behaviours during and after the pandemic, a good starting point would be to develop a comprehensive, evidence-based framework of prevention and treatment approaches for alcohol-related problems that recognize the specific demographic and social vulnerabilities according to gender, age and intersecting variables. Responsibility for the framework should be shared between federal and provincial policy makers and put into practice locally. While leading the development of this high-level framework would ideally be a federal responsibility through an agency such as the Public Health Agency of Canada, implementation plans would need to be developed provincially, along with identifying and addressing the specific needs of the subpopulations in local areas (for e.g., Indigenous peoples or people at particularly high risk of alcohol-related harms, such as illicit alcohol users in the downtown east side of Vancouver, BC).

In concert with this, a psychologically informed public health and communication strategy could make the application of this framework effective in reducing heavy drinking, thereby mitigating the consequent damage. Recent interventions to reduce the spread of COVID-19 are proof that the Canadian public are willing and able to significantly change their behaviours when presented with a compelling case for the well-being of their community. Finally, a coordinated response to patients presenting with alcohol-related health problems that provides the emotional and practical supports to mitigate alcohol-related harms could avert a future health crisis resulting from an unrecognized shadow pandemic of alcohol overuse. As stated earlier, a layered response involving high-level expectations regarding the continuum of care being provided by federal policy makers, in combination with local service delivery at the health authority and community levels, would best address the specific needs of local people. Ideally, this local planning would involve healthcare providers (from emergency, primary care and specialized care), professionals from other systems impacted by alcohol use (such as police and child welfare) and patient representatives. Evidence-based interventions could then be integrated into each point in the existing infrastructure, supplemented with new evidence-based initiatives to provide prevention and early intervention services.

Correspondence may be directed to: Elizabeth Hartney, PhD, RPsych, Adjunct Professor, Royal Roads University, 2005 Sooke Road, Victoria, BC V9B 5Y2. She can be reached by e-mail at elizabeth.hartney@royalroads.ca.

References

- Bell, S., J. Orford and A. Britton. 2015. Heavy Drinking Days and Mental Health: An Exploration of the Dynamic 10 Year Longitudinal Relationship in a Prospective Cohort of Untreated Heavy Drinkers. *Alcoholism, Clinical and Experimental Research* 39(4): 688–96. doi:10.1111/acer.12681.
- Canadian Institute for Health Information (CIHI). 2017. *Alcohol Harm in Canada: Examining Hospitalizations Entirely Caused by Alcohol and Strategies to Reduce Alcohol Harm*. Retrieved June 23, 2020. <<https://www.cihi.ca/sites/default/files/document/report-alcohol-hospitalizations-en-web.pdf>>.
- Casswell, S., T. Huckle, M. Wall, K. Parker, S. Chaiyasong, C.D.H. Parry et al. 2018. Policy-Relevant Behaviours Predict Heavier Drinking and Mediate the Relationship with Age, Gender and Education Status: Analysis from the International Alcohol Control Study. *Drug and Alcohol Review* 37(Suppl 2): S86–S95. doi:10.1111/dar.12669.
- Giesbrecht, N., S. Cukier and D. Steeves. 2010. Collateral Damage from Alcohol: Implications of 'Second-Hand Effects of Drinking' for Populations and Health Priorities. *Addiction* 105(8): 1323–25. doi:10.1111/j.1360-0443.2009.02884.x.
- Hartney, E., J. Orford, S. Dalton, M. Ferrins-Brown, C. Kerr and J. Maslin. 2003. Untreated Heavy Drinkers: A Qualitative and Quantitative Study of Dependence and Readiness to Change. *Addiction Research and Theory* 11(5): 317–37. doi:10.1080/1606635031000141094.
- Hartney, E. and D.K. Barnard. 2015. A Framework for the Prevention and Mitigation of Injury from Family Violence in Children of Parents with Mental Illness and Substance Use Problems. *Aggression and Violent Behavior* 25: 354–62. doi:10.1016/j.avb.2015.09.004.
- Hartney, E., D.K. Barnard and J. Richman. 2020. Development of Best Practice Guidelines for Primary Care to Support Patients Who Use Substances. *Journal of Primary Care & Community Health* 11: 1–7. doi:10.1177/2150132720963656.
- Johnston, A.D. 2015. Commentary: Girls, Women, and Alcohol: Implications for Alcohol Policy. *International Journal of Alcohol and Drug Research* 4(2): 101–02. doi:10.7895/ijadr.v4i2.212.
- Kuntsche, S., M.L. Plant, M.A. Plant, P. Miller and G. Gmel. 2008. Spreading or Concentrating Drinking Occasions – Who Is Most at Risk? *European Addiction Research* 14(2): 71–81. doi:10.1159/000113721.
- Kyu, H.H., K. Georgiades, H.L. MacMillan and M.H. Boyle. 2015. Community- and Individual-Level Factors Associated with Smoking and Heavy Drinking among Aboriginal People in Canada. *Canadian Journal of Public Health* 106(2): e22–e28. doi:10.17269/cjph.106.4663.
- Leeies, M., J. Pagura, J. Sareen and J.M. Bolton. 2010. The Use of Alcohol and Drugs to Self-Medicate Symptoms of Posttraumatic Stress Disorder. *Depression and Anxiety* 27(8): 731–36. doi:10.1002/da.20677.
- NANOS Research. 2020, April. *COVID-19 and Increased Alcohol Consumption: NANOS Poll Summary Report*. Canadian Centre on Substance Use and Addiction. Retrieved June 23, 2020. <<https://www.ccsa.ca/sites/default/files/2020-04/CCSA-NANOS-Alcohol-Consumption-During-COVID-19-Report-2020-en.pdf>>.
- Orford, J., S. Dalton, E. Hartney, M. Ferrins-Brown, C. Kerr and J. Maslin. 2002. The Close Relatives of Untreated Heavy Drinkers: Perspectives on Heavy Drinking and Its Effects. *Addiction Research and Theory* 10(5): 439–63. doi:10.1080/1606635021000034030.
- Peralta, R.L., M.L. Mulhollem, C. Blue and B.C. Stewart. 2018. The Association between Heavy Episodic Drinking and Gender Orientation among U.S. College Students: The Significance of Masculinity. *Substance Use & Misuse* 53(6): 910–20. doi:10.1080/10826084.2017.1385081.
- Plant, M.A. 1990. Alcohol, Sex and AIDS. *Alcohol and Alcoholism* 25(2–3): 293–301. doi:10.1093/oxfordjournals.alcalc.a045003.
- Ryan, C. J., M. Cooke and S.T. Leatherdale. 2016. Factors Associated with Heavy Drinking among Off-Reserve First Nations and Métis Youth and Adults: Evidence from the 2012 Canadian Aboriginal Peoples Survey. *Preventive Medicine* 87: 95–102. doi:10.1016/j.ypmed.2016.02.008.
- Rolfe, A., J. Orford and O. Martin. 2008, January 1. *The Birmingham Untreated Heavy Drinkers Project: Final Report*. Retrieved June 23, 2020. <https://bit.ly/3hjZ20S>.

- Rolfe, A., S. Dalton, M. Krishnan, J. Orford, M. Mehdikhani, J. Cawley et al. 2009. Alcohol, Gender, Aggression and Violence: Findings from the Birmingham Untreated Heavy Drinkers Project. *Journal of Substance Use* 11(5): 343–58. doi:10.1080/14659890600677487.
- Sherk, A., G.B. Thomas, S. Churchill and T. Stockwell. 2020. Does Drinking within Low-Risk Guidelines Prevent Harm? Implications for High-Income Countries Using the International Model of Alcohol Harms and Policies. *Journal of Studies on Alcohol and Drugs* 81(3): 352–61. doi:10.15288/jsad.2020.81.352.
- Simet, S.M. and J.H. Sisson. 2015. Alcohol's Effects on Lung Health and Immunity. *Alcohol Research: Current Reviews* 37(2): 199–208.
- Spithoff, S. 2019. Addressing Rising Alcohol-Related Harms in Canada. *CMAJ* 191(29): E802–03. doi:10.1503/cmaj.190818.
- Statistics Canada. 2020, April 8. Table 2: Change in Weekly Habits as a Result of COVID-19, March and April 2020. In *Canadian Perspectives Survey Series* (5311). Retrieved June 23, 2020. <<https://www150.statcan.gc.ca/n1/daily-quotidien/200408/t002c-eng.htm>>.
- Stockwell, T. 2006. Comments on Skog (2006): The Prevention Paradox Always Looked to Me Like a Sleight of Hand. *Addiction* 101(2): 159–60. doi:10.1111/j.1360-0443.2006.01345.x.
- Stockwell, T., S. Andreasson, C. Cherpitel, T. Chikritzhs, F. Dangardt, H. Holder et al. 2020. The Burden of Alcohol on Health Care during COVID-19. *Drug and Alcohol Review*. doi:10.1111/dar.13143.
- Timko, C., M. Below, N.R. Schultz, D. Brief and M.A. Cucciare. 2015. Patient and Program Factors That Bridge the Detoxification-Treatment Gap: A Structured Evidence Review. *Journal of Substance Abuse Treatment* 52: 31–39. doi:10.1016/j.jsat.2014.11.009.
- Veldhuis, C.B., T.L. Hughes, L.A. Drabble, S.C. Wilsnack and A.K. Matthews. 2020. Do Relationships Provide the Same Levels of Protection against Heavy Drinking for Lesbian and Bisexual Women? An Intersectional Approach. *Psychology of Sexual Orientation and Gender Diversity*. 7(3): 337–52. doi:10.1037/sgd0000383.
- Willmore, J., T.-L. Marko, D. Taing and H. Sampasa-Kanyinga. 2017. The Burden of Alcohol-Related Morbidity and Mortality in Ottawa, Canada. *PLoS ONE* 12(9): e0185457. doi:10.1371/journal.pone.0185457.