

## EDITORIAL

## **Second, third, fourth COVID-19 waves and the ‘pancession’: We need studies that account for the complexities of how the pandemic is affecting alcohol consumption in Australia**

The COVID-19 pandemic and related restrictions have influenced alcohol consumption in a variety of ways. For many Australians, restrictions on social gatherings and closures of licensed venues affected the settings and nature of their usual drinking, that is limiting opportunities for social drinking and moving drinking almost exclusively to homes, a setting that has received little attention in research or policy to date [1]. This editorial explores the longer-term research necessary to understand the pandemic’s impact. We focus on the Australian context, which provides a useful illustration of the complexity of the relationship between COVID-19 and alcohol consumption, but our recommendations are broadly relevant.

Evidence is emerging on how the initial phase of the pandemic has affected alcohol consumption in Australia. Most studies have found similar proportions reporting increases and decreases in drinking (e.g. 14% and 10%, respectively, in an Australian Bureau of Statistics study) [2,3]. Banking data on consumer credit card spending show an increase in spending on packaged alcohol since late March, with some volatility in April [4]. While this is offset by pronounced declines in spending on alcohol services (pubs, hotels), overall spending on alcohol was around 20% higher in July 2020 compared to July 2019 [5] (although it should be noted these figures are complicated by the shift away from cash during the pandemic). Sales data from major supermarket chains also indicate a substantial increase in off-premise alcohol sales in the early months of the pandemic [6–8], while other alcohol industry sources report major overall declines in sales from April [8,9]. Public health academics have raised concerns that the relaxation of licensing laws to permit take-away purchases from restaurants and cafes makes alcohol more widely available and may potentially continue after restrictions are lifted [1,10]. Concerns have also been raised that the boom in online and delivery sales of alcohol, which is not currently well-regulated, may increase the accessibility of alcohol to intoxicated people and minors [10].

Australia’s epidemic has largely been concentrated in metropolitan areas, in particular in the cities of

Sydney (first wave) and Melbourne (second wave), with the rest of the country showing low case numbers and little community transmission as of early August 2020 [11]. Nation-wide restrictions on gatherings and venues began in mid-March 2020, with further limits on movement imposed late-March. States and territories moved to re-open at varying paces. A summary of the restrictions implemented throughout the pandemic in each state and territory to date has been published by the Centre for Alcohol Policy Research [12]. In mid-June, Victoria began to see an increase in community transmission which led to the reimposition of restrictions on social gatherings and, within weeks, lockdowns of ‘hotspot’ areas, followed by the reintroduction of strict lockdowns across Victoria. The Victorian outbreak has highlighted the potential for a long tail of second (and possible third/fourth/fifth) waves, involving the easing and then reimposition of restrictions. This is already playing out internationally. For instance, Hong Kong, Japan and Israel have all reintroduced restrictions such as social distancing and border controls as they shift into second or third waves [13]. Although vaccine candidates show early promising results, the effective rollout of a vaccine is not likely to occur for at least another 12 months [14]. This means we will likely face repeated waves until a vaccine is able to be implemented widely enough to mitigate the need for restrictions and border controls [15].

Subsequent waves in Australia have the potential for markedly different impacts on alcohol consumption, via increases in fatigue, depression and stress, combined with increasingly difficult economic circumstances. Politicians and health experts must progressively balance restrictions which adequately limit the spread of this highly contagious illness while imposing on work, education and mental health as little as possible.

Despite efforts to limit economic damage, Australia has moved into a pandemic-induced recession, which some economists are calling the ‘pancession’ [16,17]. Evidence from previous economic crises shows that we can expect this to affect a population’s alcohol consumption. A realist systematic review [18] identified

two main, and notably opposing, mechanisms through which economic crises affect alcohol consumption. Firstly, psychological distress related to job losses and reductions in income was shown to increase heavy drinking [18]. Three studies found psychological distress accumulated over time [19–21], with two of these studies identifying flow-on effects on alcohol consumption and harms [20,21]. The second mechanism was that reduced household budgets can lead to less money being spent on alcohol across most demographics and subpopulations [18]. Thus, it is possible that we will see a divergence in drinking, with the majority of the population decreasing consumption, while people dealing with distress and mental health issues increase consumption and experience more harm. This existing literature suggests there is cause for concern, not only during the acute stages of the pandemic but in the subsequent economic downturn.

Cross-sectional studies conducted in Australia to date [2,3,22] play an important role in providing a snapshot into the early impacts of the pandemic. However, it is critical to understand how these impacts play out over time and in more nuanced ways. We echo the calls of Rehm *et al.* [23] that gender and socioeconomic factors are important to consider. Alcohol consumption is highly gendered, with men consistently shown to consume larger volumes of alcohol and experience greater harms. Previous studies on economic crises strongly suggest these gender disparities may worsen as significant economic recessions unfold. Internationally, previous studies have shown the gender disparities in drinking may worsen as economic crises unfold [19,24–28]. An Australian study [29] found that during the 2008 Global Financial Crisis, men were most likely to engage in alcohol consumption to cope, while women predominantly relied on relationships with friends and neighbours to cope. Complicating this further, however, is the shift over the last decade towards increases in alcohol consumption among women [30]. In the context of COVID-19, large proportions of the population have been required to work from home and supervise their child/ren's remote learning. Recent polls suggest increased psychological distress among parents, particularly mothers, who are more likely to bear the burden of multiple roles as workers, parents and teacher's aides [31]—which may translate to increases in consumption [32]. Socioeconomic circumstances are similarly implicated in differing patterns of alcohol consumption [33]. COVID-19 measures in Australia have seen some members of the population lose jobs, some have continued to attend their workplaces or work remotely while others (e.g. those who were previously unemployed or retired) may have experienced little change in their routines.

While the previous literature can provide some indication of what factors may be relevant to study, the current situation differs greatly from economic crises encountered to date. The overlay of pandemic-specific effects and the stop-start nature of restrictions alone makes this a different beast. In addition, advances in technology and other factors have changed how a society is able to respond to a pandemic. For example, many people are able to work remotely from home who may otherwise have lost work when offices were forced to close. Studies are therefore needed that can help us understand the complex situations which are playing out differently among different subpopulations, states and jurisdictions. As Marsden *et al.* [34] note, research responses to the pandemic will require innovation especially given the challenge of collection of pre-pandemic data. It is vital that we invest time and resources into studies with repeated measures, as well as qualitative studies that can provide in-depth understandings of everyday experiences and challenges. Traditional longitudinal studies will provide us with the ability to understand whose drinking is changing in which ways as the pandemic unfolds. Longitudinal studies will also point towards key intervention points by highlighting the factors that precede increases in heavy drinking in the population. Ecological momentary assessments, which involve repeated behavioural assessments can provide rich insights into how alcohol consumption changes weekly, or even daily. This allows us to finely measure shifts in consumption which are related to the introduction of specific COVID-19 restrictions in specific places.

National longitudinal studies which were able to be implemented early in the pandemic will provide better understandings of how variations in exposure to the pandemic's impacts influence drinking and harms in the longer term as well as help unpack the dual effects of the pandemic. For example, states and territories of Australia such as the Northern Territory, South Australia, Western Australia and Tasmania may encounter the impacts of the economic crisis without the double burden experienced by the states with longer-lasting and stronger restrictions. General trends data may mask large shifts in different areas and in subpopulations, which is why more complex designs are valuable. Studies using existing cohorts or administrative data (sales, wastewater analyses etc.) may provide further insights. Timely national data on sales in Australia are not available beyond the annual estimates reported by the Australian Bureau of Statistics [35], although state-based and beverage-specific data can provide an indication of how COVID-19 affected alcohol sales [36].

Qualitative research is also necessary given the unique situation and intersecting factors at play. Such

research can generate in-depth, detailed and nuanced knowledge on the transformations in social, cultural and economic circumstances and practices we are undergoing, the multiple ways these are implicated in alcohol consumption practices, and the multiple effects such changes may have on everyday life, health and wellbeing.

Together, these kinds of studies will allow us to examine subpopulations and disparities, the impacts of having different restrictions in different places (and benefit of staged changes), and to more comprehensively understand the intersecting effects of the pandemic and economic recession on people's lives, livelihoods and alcohol consumption. The COVID-19 pandemic will have lasting effects in Australia and globally. We invite fellow researchers to think creatively and deeply about how our research can best capture and understand the great challenges that we face. Although the COVID-19 pandemic has been described as a once-in-a-century type of event, others predict that we are likely to see an increasing number of environmental, health and financial crises [37]; it is imperative to understand the effects of the current pandemic so that we can better mitigate the impacts of this and future crises.

## Conflict of Interest

The authors have no conflict of interest.

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