Editorial

Christina Marel, Katherine L. Mills, Robert Stirling, Jack Wilson, Paul Haber and Maree Teesson

Impact of COVID-19 on substance use and treatment provision in Australia

The global pandemic of the novel coronavirus (COVID-19) presents an unprecedented and fluid challenge for almost every area of health care. As in many countries around the world, Australia has put in place a number of measures to reduce rates of transmission (e.g. increasing physical distancing) and maximising health-care resources available for emergency care. Preparing for and responding to the spread of the virus has changed the way we live our lives dramatically, but the effects of these changes have been felt even more so by vulnerable populations who are at greater risk of COVID-19-related complications and are more susceptible to the social and health disruptions caused by responses to COVID-19.

Recent commentaries have drawn attention to the fact that people with substance use disorders are disproportionately affected by COVID-19 for several reasons. These include:

- The severe acute respiratory syndrome coronavirus 2 (SARS-Cov2), is the virus that causes COVID-19, and targets the respiratory tract, placing those who smoke tobacco or other substances, use opioids or methamphetamine at increased risk of infection and/or complication (Dunlop *et al.*, 2020; Volkow, 2020).
- Substance use disorders are associated with poor physical health, including chronic pulmonary disease, cardiovascular disorder, diabetes and other respiratory conditions, all of which place them at increased risk of COVID-19-related complications (Wu *et al.*, 2018; Schulte and Hser, 2013; Dunlop *et al.*, 2020; Volkow, 2020; Marsden *et al.*, 2020).
- Flu-like symptoms of COVID-19, such as fever and sweats, fatigue, body aches and pains, could be misinterpreted by those using opiates as withdrawal symptoms, resulting in further opioid use (Dunlop *et al.*, 2020).
- People with substance use disorders often experience higher density or unstable housing, homelessness, incarceration and social disadvantage compared to the general population, which may increase rates of transmission (Marsden *et al.*, 2020; Volkow, 2020).
- Symptoms of mental health disorders such as anxiety, depression, self-harm and suicide may be exacerbated due to self-isolation, loneliness, unemployment and reduced access to substances used to alleviate mental health symptoms. These are also known risk factors which may precipitate the ideal circumstances for some people who had ceased or reduced substance use to increase or return to use, to help cope with mental health symptoms (Teesson *et al.*, 2015, 2017; Dietze and Peacock, 2020).
- There may be increasing difficulties accessing treatment services, some of which are facing challenges as a consequence of staff redeployment to COVID-19 clinics, reduced capacity to provide face-to-face services, being forced to close, not being able to accept new clients or have the capacity to care for more complex (and potentially high-risk) clients (Dunlop *et al.*, 2020; Dietze and Peacock, 2020; Vecchio *et al.*, 2020).

Christina Marel and Katherine L. Mills are both based at the Faculty of Medicine and Health, The Matilda Centre for Research in Mental Health and Substance Use, The University of Sydney, Sydney, Australia. Robert Stirling is based at the Network of Alcohol and other Drug Agencies, Sydney, Australia.
Jack Wilson is based at the Faculty of Medicine and Health, The Matilda Centre for Research in Mental Health and Substance Use, The University of Sydney, Sydney, Australia.
Paul Haber is based at Royal Prince Alfred Hospital Camperdown, The University of Sydney Addiction Medicine, Sydney, Australia.
Maree Teesson is based at the Faculty of Medicine and Health, The Matilda Centre for Research in Mental Health and Substance Use, The University of Sydney, Sydney, Australia.

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- The risk of opioid overdose may be elevated as a result of stockpiling supplies due to erratic access to opioid replacement therapies (methadone/buprenorphine) and/or other prescription opioids, increased access to takeaway doses of methadone/buprenorphine (Dunlop *et al.*, 2020), the potential substitution of opioids with other substances (Marsden *et al.*, 2020), the increased likelihood of using substances at home alone (Dietze and Peacock, 2020) and supply shortages reducing the availability naloxone (Dietze and Peacock, 2020; TGA, 2020).
- People with substance use disorders in forensic settings or transitioning to community care following release may be at increased risk of entering withdrawal, due to the suspension of all in-person visits in prisons across Australia which has resulted in reduced availability to drugs and increased demand for opioid replacement therapies (Mills and Cooper, 2020; Ferguson and Woodburn, 2020).

This editorial draws on emerging evidence to build on these works. In particular, the authors discuss the impact of COVID-19 with reference to key preliminary findings from a longitudinal cohort study of heroin dependence and contextualise these with other emerging evidence. At the time of the COVID-19 outbreak, we were part-way through the 18–20-year follow-up of participants in the Australian Treatment Outcome Study (ATOS; Teesson *et al.*, 2015; Marel *et al.*, 2021). The original cohort of 615 people with heroin dependence was recruited in 2001–2002 from Sydney, Australia. Participants have been re-interviewed on several occasions, most recently in 2011–2013. This cohort has provided us with a unique opportunity to examine the immediate impact of the COVID-19 at various stages of recovery. With the approval of the Sydney Local Health District Human Research Ethics Committee, additional COVID-19-related questions were added to the interview schedule from 3 April 2020. As of 3 June 2020, 67 participants had answered questions on the impact of COVID-19 on their substance use and mental health; access to substance use and other mental and social services.

Patterns of substance use and mental health

With COVID-19-related anxiety, uncertainty surrounding self-isolation, greater distress and anxiety associated with financial stress, unemployment and loss of income, it is not surprising that alcohol use and possibly other drug use, have increased in Australia, the UK and the USA (ABS, 2020b; Jernigan, 2020; Hamilton and Morris, 2020; YouGovGalaxy, 2020; Marsden *et al.*, 2020).

Perhaps most alarmingly, alcohol has been promoted by retailers and some media as ways of coping with the current crisis. Advertisements have been released that normalise and encourage drinking during isolation as a way of alleviating boredom [e.g. "social distancing just got a whole lot easier" (Wang, 2020); "Social distancing? There's never been a better time to become a wine connoisseur" (Jacob's, 2020)]. Alcoholic beverages named in honour of the chief US National Institute of Allergy and Infectious Diseases ("Fauci Spring") and measures of social distancing ("Don't stand so close to me") have been promoted with the tag line "just what the doctor ordered" (Absolute Beer, 2020). Rather than promoting responsible alcohol messaging, liquor retailers are capitalising on the unique and unprecedented circumstances surrounding this crisis to promote sales.

Earlier predictions that international travel restrictions would lead to reductions in the supply of heroin, cocaine, methamphetamine and 3-4 methylenedioxymethamphetamine (MDMA) in Australia (Dietze and Peacock, 2020) appear to be coming to fruition. More than 30% of ATOS participants who are using substances reported difficulties in accessing heroin, increased cost and/or decreased quality. Dietz et al. similarly reported that one-in-five of the 60 participants of the Melbourne-based SuperMIX cohort of people who inject drugs interviewed between 29 March and 1 May 2020 indicated that they were unable to access heroin due to financial, supply or transport issues (Dietz *et al.*, 2020). Increased demand may

also lead to the cutting of drugs with other, potentially more harmful, substances (Dietze and Peacock, 2020). Access to sterile injecting equipment has been highlighted as essential (Dunlop *et al.*, 2020), yet some ATOS participants reported experiencing difficulties accessing clean injecting equipment and the need to reuse their own equipment. This is likely to due to many needle and syringe programs (NSP) suspending face-to-face client operations (NSLHD, 2020), despite NSP strategies to ensure continued access to sterile equipment.

The second Australian Household Impacts of COVID-19 Survey, conducted by the Australian Bureau of Statistics between 14 and 17 April 2020, asked 1,028 Australians aged 18 years and over about their emotional and mental well-being over the past month and compared these findings with the *2017–2018 National Health Survey* (ABS, 2020a). Nearly twice as many people reported feelings of restlessness (42% vs 24%) or nervousness (35% vs 20%) compared to the *2017–2018 National Health Survey* (ABS, 2020a). Other measures, such as feeling that everything was an effort, hopeless, so depressed that nothing could cheer them up or worthless, showed no increase (ABS, 2020a). These findings indicate that whereas in general, people are experiencing an increase in symptoms of anxiety, there has been no similar increase in depressive symptoms so far.

Consistent with general population findings, members of the ATOS cohort reported experiencing high levels of worry surrounding COVID-19, particularly in relation to its potential to impact on their mental health, the possibility of increased stigma and reduced financial security. In total, 30% of ATOS participants who were currently using substances reported that their patterns of use had changed due to COVID-19, including increased use of or relapse to, alcohol and/or other drug use.

Access to and provision of treatment

The unmet demand for treatment in Australia has been conservatively estimated at 200,000–500,000 people each year prior to the pandemic (Ritter *et al.*, 2014). Treatment providers in Australia have already reported increases in contact about access to treatment. The potential increase in substance use-related harms resulting from experiences of the COVID-19 pandemic will place more pressure on treatment services that are already under-resourced and currently have reduced capacity to respond.

Public health responses introduced to limit the spread of the disease have impacted considerably on services and practitioners ability to provide and for clients to access, substance use treatment and other services. More than one-in-four ATOS participants reported that COVID-19 had impacted on their access to substance use and mental health services, their general practitioners and other health and social service providers. Availability of inpatient detoxification was limited and many residential rehabilitation providers have reported cessation of intake of new clients, reduced bed numbers to facilitate physical distancing and suspended access for visitors and contractors as they were unable to manage risk to staff and clients. While public treatment services had access to personal protective equipment required to ensure staff health and safety and service continuity (Dunlop *et al.*, 2020), many not-for-profits and non-government organisations [that make up 61% of treatment services in Australia (AIHW, 2019)], did not.

Rapid changes between and across services have been necessary in many districts to ensure continued provision of opioid substitution therapies. For some clients (e.g. those required to transfer from public to private clinics or pharmacies), this has led to an increase in the cost of treatment. While temporary government subsidies (e.g. jobseeker payments) are offsetting the increased costs of treatment for some people, if this support is not continued for as long as the changes are necessary, many will not be able to continue treatment.

With new long-acting depot formulations of buprenorphine available, it has been recommended that these replace daily dosing of methadone and buprenorphine (Dunlop

et al., 2020). It may also be appropriate to provide depot buprenorphine rather than additional takeaway doses of methadone and buprenorphine to those who may be considered at increased risk of dose diversion (e.g. stockpiling takeaway doses or using all doses within first few days and then supplementing with heroin or other opioids) or overdose. While many service users, including six ATOS participants, report the increase in takeaway doses as a positive consequence arising from COVID-19, it is important for adverse events that may occur due to changes in treatment provision (e.g. overdose from increases in takeaway doses), to be monitored carefully during this time.

It has also been recommended that buprenorphine be provided as buprenorphine-naloxone to minimise use by injection and be accompanied by take-home naloxone (Dunlop *et al.*, 2020). However as previously noted, naloxone may currently be difficult to access due to availability shortfalls (TGA, 2020). There have also been recent calls for the fast-tracking of more radical treatments to respond to the emerging mental health impacts related to COVID-19, including the use of psychedelics for the treatment of depression, anxiety and post-traumatic stress disorder (Nguyen and Cockburn, 2020). Despite some promising evidence, more research is needed to prove their safety and clinical efficacy before these treatments can be used in treatment settings (Muttoni *et al.*, 2019). The rise in COVID-19-related mental health conditions is concerning but it is critical that the response be evidence-based and not compromise patient safety for the sake of innovation.

To improve access to primary care, allied health and other services during this time, the Australian Government introduced temporary subsidies for a wide range of health and medical consultations. The recent changes to telehealth funding have resulted in a transformation of the mental health system. If extended they could continue to provide a platform through which digital blended care could become a sustained reality. Digital interventions can be as effective and are scalable to enable significant reach. Building on the telehealth changes, innovation through digital interventions is a unique opportunity. Australia leads in digital intervention research and development and is poised to lead implementation. Australia has developed roadmaps for taking digital blended care to scale and we are yet to implement them (Batterham *et al.*, 2019; Batterham *et al.*, 2015).

Telehealth and online peer support offer a number of advantages, including increased access for people living in rural/remote locations. While telehealth and online support may allow treatment to continue for some within a physical distancing environment, there are inherent challenges. These include issues relating to lack of universal internet coverage or access and challenges with respect to patients being able to find a safe, therapeutic space or environment in which they can receive support without interruption. Many treatment services have reported that disadvantaged people did not have access to technology, including credit for phone and data. There are also reports that people with cognitive impairments have experienced difficulties engaging with online platforms and whether telehealth and online support are suitable across cultures.

Implications

The world is unlikely to ever return to the way it was pre-COVID-19 and health-care systems as we knew them, have dramatically changed (The Matilda Centre, 2020). The unique challenge also presents an unprecedented opportunity to explore new directions and new models of care with respect to future thinking and forward planning. Consistent with the Australian Government COVID-19 National Mental Health Plan (Australian Government, 2020), developed to respond to both the immediate and long term impacts of the pandemic on mental health, the following key responses are recommended:

- Data and modelling: immediate monitoring and modelling of the substance use impact of COVID-19.

Up to date information about the impact of the COVID-19 pandemic on substance use is critical to understand mental health service need, health workforce requirements and the way vulnerable populations are affected both in the short term and long term.

- Outreach: adapt our models of care.

It is crucial that the positive effects of system change, including the use of digital and telehealth, are not lost. Ongoing commitment is needed to continue identifying and supporting particular at-risk groups, including (among others), frontline health-care workers, those with existing substance use disorders and individuals affected by family and domestic violence. Proactive outreach services should be provided for those in need following the disruption of the pandemic.

- Improve service capacity, linkage and coordination for our most vulnerable.

High levels of unmet need and disruptions in access to care have highlighted the necessity of better connectivity between services with different focuses (such as mental health, justice health, substance use, family violence, physical health), treatment intensity and oversight (private, public and non-government organisations). Improved capacity and linkage between services will ensure that, regardless of which service an individual first accesses, they have the complexity of their needs addressed.

Conclusion

The evidence-base, both anecdotal and data-driven, highlighting the shared and unique challenges posed by COVID-19 for people who are experiencing (or are at risk of developing) alcohol and/or other drug problems, is growing internationally. The consequences of COVID-19 with respect to substance use are both immediate and long-term and cannot be separated from the broader individual and societal level impacts of this condition. The harms associated with alcohol and other drug use are inextricably linked to mental health, as both an antecedent and consequence. The need to address alcohol and other drug use has been highlighted as a key area in need of attention in the Australian COVID-19 National Mental Health Plan (Australian Government, 2020). As such, it is crucial that support for and funds linked to operationalising this plan include scope for alcohol and other drug interventions across the spectrum of prevention, early intervention and treatment. Investment in research at an international level is also critical to monitoring the impact of COVID-19 on a variety of substance use indicators to ensure timely intervention to flatten the curve of mental ill-health.

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Corresponding author

Christina Marel can be contacted at: christina.marel@sydney.edu.au