

EDITORIAL

Illicit drug use and harms in Australia in the context of COVID-19 and associated restrictions: Anticipated consequences and initial responses

Illicit drug use and harms can significantly and rapidly change with market disruptions. The study of major historical events (e.g. illicit drug use in the context of the 2008 Global Financial Crisis [1]) can inform predictions of the effects of major market disruptions. However, the COVID-19 pandemic is an unparalleled event in modern times, precipitating widespread government interventions to close borders and restrict social interactions. These changes are causing unprecedented economic, social and political upheaval, meaning historical events may only offer limited insight regarding the impacts of the COVID-19 pandemic. This is coupled with increasing morbidity and mortality from COVID-19 and from disruption to health service provision (although the magnitude of the latter is yet to be established as of early April, at least in Australia). The current situation has profound implications for illicit drug supply, procurement and use practices, as well as prevention, treatment and harm reduction responses—both now in the midst of the pandemic and in the coming years as the ramifications of actions to reduce COVID-19 transmission unfold.

Drug Market Activity

There is good reason to expect major interruptions to illegal drug supply internationally and in Australia. Key drugs such as heroin, cocaine, methamphetamine and 3,4-Methylenedioxymethamphetamine (MDMA) are typically detected at the Australian border via seizures related to air transport (85–99% of seizure numbers for the key drugs listed) [2]. Restrictions on air passenger transport will not only impact drugs imported by passengers but passenger crafts also carry freight and mail, meaning that reduced air travel will have direct impacts across these supply routes. This change will likely reduce the available supply in non-producer countries and increase stockpiles in producer

countries. How drug-trafficking systems respond to these changes in available distribution streams is unknown, but the initial disruption is likely to be major and profound—particularly for Australia, given our geographical remoteness from source countries.

Previous work in Australia on the abrupt changes in heroin supply in late 2000/early 2001 may provide some clues on the effects of COVID-19 restrictions on gathering and movement, should they produce expected disruptions to supply [3,4]. The heroin ‘drought’ or shortage at the beginning of 2001 was characterised by plummeting purity and availability, producing a major increase in the purity-adjusted price of the drug [5]. With all major drug types likely to be impacted by changes in air transport [2], we should expect similar impacts on drug markets with COVID-19 as were observed in the heroin drought, at least in the short term. The medium- and long-term effects of the heroin drought were much less clear—the market recovered, but rates of use and harms did not immediately return to those observed in the late 1990s (although some recent work does suggest rising rates of heroin-related harms in recent years) [6,7]. However, in the current environment where supply chains are disrupted internationally, markets may rebound more, as would be expected by normal economic theory, and return to pre-COVID-19 levels as markets adapt in the context of the technology advances of recent years (e.g. smart phones and internet-based commerce) and as restrictions are eventually lifted. Alternatively, demand may drive shifts towards more easily transported, cheaper and higher-potency substitutes for heroin or other opioids (e.g. fentanyl analogues) or may create incentives for more cutting of drugs with other (potentially dangerous) substances, and these impacts may remain after restrictions are lifted.

Supply chains to people who use drugs may be disrupted by COVID-19 restrictions. Physical distancing measures, restrictions on gatherings of people and

increased police powers and numbers may all affect the way drug markets operate. With reduced crowding in public places, drug dealing may be harder to conceal, requiring greater reliance on indirect means of sourcing illicit drugs (e.g. online markets, social media) and modes of delivering drugs (e.g. postal), all of which carry some risk (not only of detection but also potentially of contracting COVID-19) to those who sell and purchase drugs. Any increased risks may lead to increased prices [8], or other outcomes such as a greater number of arrests, presuming that detectable drug purchasing and trafficking efforts continue. On the other hand, the role of the internet (e.g. Web forums, online marketplaces) and social media in connecting consumers to dealers may be enhanced in the context of COVID-19 through mechanisms such as cryptomarkets and surface net markets, which may reduce risks of detection for some. The internet may also play a role in connecting consumers to other consumers for drug-taking activity (including the sharing of harm reduction information).

Drug Use Behaviours

Illegal drug use typically occurs in social settings that will be impacted fundamentally by COVID-19 responses. Reduced pedestrian activity will likely make street-based drug use more visible and easily targeted, restrictions on movement will likely make home-based drug use among some groups riskier (e.g. using opioids at home alone), and the closure of night-time economy venues and music festivals will impact people who use drugs in these settings. Reductions in drug use may produce health and/or social benefits in the short term that may be sustained, as was the case in relation to heroin overdoses after the heroin drought [3], but these will vary by the types of use involved, with effects much more likely when dependence and/or harmful use is involved. Furthermore, harm reduction agencies are promoting strategies to reduce COVID-19 transmission risk (e.g. reinforcing the need to avoid sharing drug use equipment, avoiding smoking/vaping drugs and better hand hygiene), which could also result in reduced injection-related injuries and diseases and respiratory problems [9].

However, there are substantial risks associated with potential changes in use. Advice on stocking up on sterile drug use equipment and having a drug supply to avoid withdrawal has been endorsed by harm reduction agencies as a response to COVID-19 [9]. The latter requires financial resources for such purchasing, which may not be available. There are also legal risks associated with possessing larger quantities of drugs,

and other harms such as overdose are possible if larger quantities are consumed with greater quantities available [10]. However, the absence of a supply may lead to experiences of withdrawal and increasingly desperate attempts to procure drugs—which may result in the increased likelihood of arrest or other legal consequences. Cessation or reductions in use may also produce changes such as lesser tolerance that may present as a risk for overdose if the drug supply rebounds abruptly after COVID-19 restrictions are lifted [11].

Furthermore, in the absence of a drug of choice, people may turn to alternatives as substitutes or complements, including pharmaceutical medicines, alcohol or tobacco. Substitution of heroin with other illicit drugs was reported as a short-term impact of the heroin drought in Australia in the early 2000s [12], and we have already received reports of increased alcohol consumption by participants in the SuperMIX cohort study of people who inject drugs in Melbourne, Australia [13]. These substitutes may in some ways be safer but could also increase risks of health effects such as overdose and dependence.

Finally, COVID-19 restrictions may also lead to the initiation of drug use or a return to illicit drug use among those who have ceased use. Examples of pathways through which this may occur include precarious economic circumstances caused by increased unemployment or uncertain employment [1], poorer mental health leading to self-medication or use of illicit drugs as a coping strategy [14], or a lack of alternative activities while gatherings and movement outside of the home are restricted.

Harm Reduction and Drug Treatment

Treatment and harm reduction services are faced with many major challenges, including restrictions on face-to-face contact to reduce COVID-19 transmission, rising treatment demand and staff redeployment for COVID-19 clinical response. By early April 2020, this had already led to profound impacts on the delivery of drug treatment and harm reduction services, with some services closing some operations, ceasing accepting new clients or moving to electronic systems of service provision [15]. While the Melbourne Supervised Injecting Room continues to operate it has made operational changes including reducing the number of active injecting booths to support physical distancing measures, and some needle-and-syringe programs have moved to outreach distribution (e.g. mailing or home delivery of equipment) to minimise face-to-face contact with clients. Restrictions on needle and syringe supplies distributed per person have been mooted in

the context of reports of stockpiling, and concerns have been raised about how smaller services in regional areas will be able to continue to operate at the time of writing.

Considerable efforts are underway within services to minimise disruptions in service provision to vulnerable clients and maximise their safety. In Australia, difficulties in accessing general practitioners and pharmacists have led to the relaxation of some policies related to medication-assisted treatment, including longer prescription duration, more unsupervised dosing and third-party (e.g. carer) collection of unsupervised doses in some circumstances [16]. Harm reduction agencies have developed resources outlining potential options for people in pharmacotherapy to assist in exploring uninterrupted and satisfactory treatment [17,18]. However, policy changes have been fragmented, with major differences between Australian jurisdictions. There have also been unintended consequences—recommendations to ensure naloxone is made available to all clients receiving additional unsupervised doses of medication-assisted treatment has led to a major shortage of naloxone supply, as noted by the Therapeutic Goods Administration [19], which is unlikely to be resolved in 2020. While the impacts of these changes in service provision are not yet known, the efforts of policy and practice leaders to rapidly respond to the challenges of service provision in the context of COVID-19 restrictions must be commended.

Impacts Beyond Drug Use

COVID-19 will impact people's illicit drug use and experience of harms, but it is important to acknowledge additional risks because of COVID-19 for some people who use drugs, both from the virus itself and from the broader social and economic upheaval it has generated.

First, people who use illicit drugs may face additional risks of contracting COVID-19 and of serious illness in the event of transmission. This is particularly true for those who inject drugs, who we know to be an older cohort in Australia with a high prevalence of chronic medical conditions (including respiratory conditions [20]), who are often socially marginalised and vulnerable. Transmission risk may also be particularly elevated due to behaviours associated with drug use (e.g. sharing drug use equipment), contexts of drug use (e.g. individuals congregating together) and the typical means of treatment and harm reduction provision (e.g. in-person for receipt of most pharmacotherapies).

Second, it is likely that the COVID-19 restrictions will impact the rights, health and well-being of those

who use illicit drugs more so than anticipated for the general population. Emergency governance provisions (e.g. additional policing powers) may compromise the rights of the broader population, and there is concern that these may be used to specifically target the rights of people who use drugs [21]. Anticipated negative effects of COVID-19 restrictions on health and well-being of the general population (e.g. poorer mental health and difficulties accessing services) were already commonplace issues for those experiencing problematic drug use and will likely only be exacerbated further by COVID-19 restrictions. Conversely, some effects may be positive, such as extra support for the provision of housing for the homeless [22].

Measuring the Impacts of COVID-19 on Drug Use and Related Harms

Australia is particularly well-positioned to measure the impacts of COVID-19 restrictions on drug use and related harms. Drug use surveillance systems are adapting to the changed environment and several COVID-19-specific studies are already operating or gearing up to go into the (often electronic) field. The Australian alcohol and other drugs service sector has already responded with alacrity and adapted to the changed circumstances under which they must operate, with important leadership from key figures and institutions. The exceptional circumstances of the COVID-19 pandemic present an important opportunity to understand how drug markets, drug use behaviours and service systems adapt, which may inform future policy and practice. Researchers and policymakers should seize the moment to study what happens as the COVID-19 response unfolds over time as the results will have implications for action in the longer term.

Conclusion

It is reasonable to assume that COVID-19 physical and social restrictions will disproportionately impact people who regularly use illicit drugs and cause substantial shifts in illicit drug markets, drug use patterns and related harms. These impacts will likely vary as a function of the intensity of measures and their timing and by sub-population, with those experiencing problematic use and other drivers of disadvantage (e.g. homelessness, unemployment) most likely to experience negative effects. The impacts of COVID-19 interventions on drug use and related harms need to be determined through surveillance and research, not

only to inform adjustments to drug policy and clinical practice during the immediate COVID-19 crisis but also into the longer term as restrictions are lifted and societies move into the post-COVID-19 era.

Conflict of Interests

PMD has received investigator-driven funding from Gilead Sciences in relation to work on hepatitis C and an untied educational grant from Indivior for work unrelated to this study. AP has received investigator-driven untied funding from Mundipharma and Seqirus for work unrelated to this study. PMD is a National Health and Medical Research Council Senior Research Fellow, and AP is a National Health and Medical Research Council Emerging Leader. These funders had no input into any aspect of this study. PMD has served as an unpaid member on Mundipharma's Advisory Board around the Nyxoid intranasal naloxone product. The authors gratefully acknowledge the support of the Victorian Operational Infrastructure Support Fund.

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