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COVID-19 and overdose prevention: Challenges and opportunities for clinical practice in housing settings



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ABSTRACT

The global coronavirus disease 2019 (COVID-19) will exacerbate the negative health outcomes associated with the concurrent opioid overdose crisis in North America. COVID-19 brings unique challenges for practitioners who provide opioid use disorder (OUD) care. The majority of overdose deaths in the Canadian province of British Columbia occur in housing environments. Some supportive housing environments in Vancouver, British Columbia, have on-site primary care and substance use disorder treatment clinics. Some of these housing environments also include supervised consumption services. These housing environments needed to make adjustments to their care to adhere to COVID-19 physical distancing measures. Such adjustments included a pandemic withdrawal management program to provide patients with a pharmaceutical grade alternative to the toxic illicit drug supply, which allow patients to avoid the heightened overdose risk while using illicit drugs alone or potentially exposing themselves to COVID-19 while using drugs in a group setting. Other modifications to the OUD care continuum included modified supervised injection spaces to adhere to physical distancing, the use of personal protective equipment for overdose response, virtual platforms for clinical encounters, writing longer prescriptions, and providing take-home doses to promote opioid agonist treatment retention. These strategies aim to mitigate indoor overdose risk while also addressing COVID-19 risks.

Preliminary reports raise the fear that the global coronavirus disease 2019 (COVID-19) pandemic will exacerbate the morbidity and mortality associated with the concurrent opioid overdose crisis in North America (Becker & Fiellin, 2020; Volkow, 2020). According to recent coroners' data from the Canadian province of British Columbia (BC), June 2020 was the deadliest month ever recorded with respect to illicit drug overdose fatalities, with a 132% increase in the number of deaths seen in June 2019 (BC Coroners Service, 2020). Indeed, there are numerous health and economic factors that may place individuals with opioid use disorder (OUD) at higher risk in the context of the COVID-19 pandemic, such as pre-existing health conditions associated with substance use and prior overdose (BC CDC, 2020a; Volkow, 2020); mental health challenges associated with social isolation, income instability; and threats to the supply of illicit substances, including increasingly toxic and unpredictable potencies (Khatri & Perrone, 2020; Volkow, 2020). Additionally, physical distancing measures bring unique challenges to providing OUD care. For instance, patients' treatments may be interrupted due to difficulties accessing health clinics and pharmacies for daily dispensation of medications for OUD, as health care settings

transition to new, physically distant models of delivering care. Safer drug use practices, such as utilizing supervised consumption services (SCS) or not using alone, are also more challenging when individuals are physically distancing themselves.

People who use drugs across various housing environments, including supportive housing buildings, may be particularly at risk for substance use-related harms given the new challenges that the COVID-19 pandemic imposes. In fact, a growing body of literature demonstrates the relationship between housing and overdose risk (Bardwell, Collins, McNeil, & Boyd, 2017; Bardwell, Kerr, & McNeil, 2019; Hembree et al., 2005; Siegler, Tuazon, Bradley O'Brien, & Paone, 2014). In the Canadian province of BC, for example, the coroner reported that 86% of overdoses in 2019 occurred indoors (e.g., private residences, shelters, supportive housing), often the result of individuals using drugs alone (BC Coroner's Service, 2020). As such, there is an urgent need to address the unique barriers to OUD treatment and safer substance use practices within housing environments.

In Vancouver, BC, Canada, some supportive housing buildings designed for people with OUDs also have on-site primary care and

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substance use disorder (SUD) treatment clinics. These low-barrier clinics offer nursing support, physician outreach, access to social workers, and collaboration with a local pharmacy that delivers medications and provides a nurse dedicated to medication dispensing. Within these supportive housing buildings, practitioners dispense opioid agonist treatments (OAT) either in the on-site clinic or the pharmacy nurse delivers the OAT to patients' residences, and the treatment includes traditional OATs, such as methadone and buprenorphine, as well as novel OATs, including sustained release oral morphine, injectable hydromorphone, and a pilot transdermal fentanyl program. In addition to these clinical services, some of these housing programs provide on-site interventions including SCS, and they encourage substance use in common spaces in the presence of others. Individuals trained in overdose response staff many buildings 24/7.

Despite the success of this low-barrier model of care in facilitating access to care to unstably housed people, we needed to make adjustments due to the COVID-19 pandemic. The most notable change in the treatment for OUD has been the release of provincial interim clinical recommendations for pandemic withdrawal management (PWM) practices (Ahamad et al., 2020). Substances being prescribed as part of the PWM include hydromorphone tablets, stimulants, alcohol, benzodiazepines, and nicotine replacement therapy. PWM is intended to provide individuals with SUD with a known quality, non-adulterated, pharmaceutical grade alternative to the increasingly toxic illicit drug supply while also adhering to physical distancing guidelines for those who are in self-isolation or quarantining in their rooms. This allows patients to avoid the dilemma of heightened overdose risk while using illicit substances alone or potentially exposing themselves to COVID-19 while using substances in groups or while acquiring illicit substances. Low-barrier outreach models such as the one described here, in our experience, have been ideal for implementing PWM because of the wrap-around care provided. Specifically, therapeutic relationships built between clinic staff and residents, as well as accessibility, have facilitated the uptake, regular check-ins, titrations, and education required for PWM. Furthermore, these models enable individuals who have experienced challenges in accessing care elsewhere to more readily acquire SUD treatment, including PWM, in their homes.

People receiving PWM in housing settings have responded with immense gratitude as the supply of local illicit substances has been inconsistent in potency and availability, and has been contaminated with other substances such as fentanyl and benzodiazepines. These factors render people who use drugs at risk of unintentional overdoses. Further, patients are grateful that to pay for or procure substances, they no longer need to engage in street-based income generation activities (e.g., drug dealing, sex work, theft), which have been found to increase their exposure to violence (Richardson et al., 2015).

Additional COVID-19-related adaptations include physical distancing measures within SCS and the use of personal protective equipment by SCS and supportive housing staff. Without N95 masks, overdose responses are limited to administering naloxone only, as administering breaths via bag valve masks and providing CPR both carry aerosolization risk. Overdose prevention education within clinical practice has been adapted to promote safer substance use while decreasing risk of COVID-19 transmission (BC CDC, 2020b).

Unfortunately, most North American cities do not provide housing with this level of support for people with OUD. Nevertheless, clinicians across Canada are using many of these strategies, including PWM, to mitigate overdose risk for individuals in all housing environments, including private residences, shelters, and urban camping sites (Ahamad et al., 2020; Hales et al., 2020; Health Canada, 2020; Rai, Sereda, Hales, & Kolla, 2019). Other strategies implemented in the province of BC to prevent disruptions in OUD care include virtual platforms for clinical encounters, such as videoconferencing software. However, this novel strategy is not without challenges given that many patients with OUD may not have access to private devices with internet access. Additionally, when appropriate, clinicians have written longer

prescriptions with the option of take-home doses to promote retention in OAT during this pandemic.

Although there are contextual differences between Canada and the United States (e.g., political will, implementation contexts, and legal barriers), some American cities have made progress in legislation toward the implementation of SCS (CBS, 2020; Yang & Beletsky, 2020). This progress demonstrates the potential of these life-saving services across multiple settings in the United States, including housing environments. While housing-based programs that prescribe PWM may face numerous implementation barriers in the United States, clinicians do have opportunities to provide home-based primary care (Schuchman, Fain, & Cornwell, 2018), which could include access to OAT and other programs (e.g., naloxone programs). The intersecting COVID-19 pandemic and opioid epidemic demonstrate the urgent need to provide health care services to those with OUD within residential settings to reach the most vulnerable.

Prescribing novel treatments and veering from traditional OAT guidelines to use, at times, new clinical encounter platforms have been interesting and largely positive experiences. It has been helpful to us that governing agencies and health authorities have supported clinicians with these endeavors (Ahamad et al., 2020). Treatment must prioritize novel strategies that aim to mitigate indoor overdose risks to prevent further harm to those most vulnerable for opioid-related injury and death while also addressing COVID-19 risks. While housing-based interventions may provide an untapped opportunity to mitigate the risks associated with these overlapping epidemics, research must evaluate their effectiveness while also ensuring the safety and well-being of people with SUDs.

CRedit authorship contribution statement

Laura MacKinnon: Conceptualization; Writing – original draft; Writing – review, and editing. **M. Eugenia Socías:** Writing – review and editing. **Geoff Bardwell:** Conceptualization; Supervision; Writing – original draft; Writing – review, and editing.

Declaration of competing interest

The authors declare that they have no conflict of interest.

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