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Integrating harm reduction and clinical care: Lessons from Covid-19 respite and recuperation facilities



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ABSTRACT

In response to the novel coronavirus 2019 (Covid-19) pandemic, many people experiencing homelessness and substance use disorders entered respite and recuperation facilities for care and to isolate and prevent subsequent SARS-CoV-2 transmission. However, because drug use was officially prohibited in these facilities, we observed people who use substances leaving isolation temporarily or prematurely. The initial Covid-19 surge magnified the need for harm reduction access for those who use substances to ensure their safety and well-being and that of their local communities. In this commentary, we argue that expanding harm reduction access is crucial for subsequent waves of SARS-CoV-2 infection and also for patients who use substances and are hospitalized for other reasons.

The novel coronavirus 2019 (Covid-19) pandemic disproportionately affects people experiencing homelessness and substance use disorders. These individuals may be unable to access usual services and substance use treatment, socially distance, or isolate if they test positive for or are symptomatic with severe respiratory syndrome coronavirus 2 (SARS-CoV-2) infection (Barocas et al., 2020; Mosites et al., 2020). Though comprehensive overdose data during the United States Covid-19 pandemic are limited, initial reports from national syndromic surveillance data indicate a 17.6% rise in overdose events before and after March 19, 2020, when local state governments initiated the first stay-at-home orders (Alter & Yeager, 2020). In Boston, Massachusetts, the local government quickly developed and deployed innovative testing programs and emergency respite and recuperation facilities at decommissioned hospitals, convention centers, and tents to provide care and isolation for those who tested positive among this vulnerable population (Gaeta, De Las Nueces, Munson, Barocas, & Walsh, 2020). However, because drug use was officially prohibited in these sites, we observed individuals with substance use disorders leaving isolation temporarily or prematurely. Many more people may have avoided SARS-CoV-2 testing out of fear of isolation, forced withdrawal, or imposed abstinence. Institutional policies prohibiting drug use and prioritizing abstinence may adversely affect the health and safety of individuals who use substances while also threatening broader

SARS-CoV-2 infection control efforts. Experiences with the initial Covid-19 surge magnify the need for harm reduction access, a crucial lesson for subsequent waves of SARS-CoV-2 infection and also for patients who use substances and are hospitalized for other reasons.

Harm reduction recognizes the inevitability of substance use and seeks to reduce its negative consequences without mandating abstinence as a precondition for care. Harm reduction interventions meet people “where they are” and strive to redistribute power to affected individuals to help them regain control over their health (Harm Reduction Coalition, n.d.). Decades of research demonstrate that harm reduction services effectively prevent infectious disease transmission, reduce fatal overdose, and help link individuals to evidence-based substance use treatment, all without increasing substance use or crime (Fernandes et al., 2017; Potier, Lapr votte, Dubois-Arber, Cottencin, & Rolland, 2014; Wood et al., 2006). Based on this evidence, early in the Covid-19 pandemic, practitioners recognized that syringe service programs were essential health services, and many harm reduction organizations adapted their service delivery models to continue serving affected communities (Glick et al., 2020).

Boston's Covid-19 respite and recuperation facilities have sought to be inclusive of those who use substances. Some sites offered methadone and buprenorphine. Some facilities, such as the Covid-19 Recuperation Unit at Boston Medical Center, also incorporated harm reduction

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workers into their staff. Our experience at this facility suggests that the presence of harm reduction personnel helped to foster a respectful and supportive environment for people who use drugs. Specifically, these staff helped to interface with security staff to limit unnecessary searches, trained staff in de-escalation techniques, provided sterile injection equipment and naloxone, and supported referrals to other essential services upon discharge. Yet even with these significant interventions, individuals who voluntarily isolate due to SARS-CoV-2 infection nonetheless may lack all of the supports and substances needed to maintain isolation. For example, though this recuperation facility provided methadone and buprenorphine, not all individuals were willing or able to stop using substances during isolation. Prohibiting substance use can ultimately result in use of illicit “street” drugs, clandestine use in bathrooms or other locations, and increased risk of adverse consequences, including overdose and infectious disease transmission (e.g., HIV, hepatitis C virus). We argue that additional measures are vital to encourage individuals to remain in respite and recuperation facilities to improve their own health and that of their local communities.

The U.S. opioid overdose crisis has challenged clinicians to recognize substance use as a chronic medical condition and a public health problem rather than a moral failing requiring legal repercussions. Efforts to improve in-hospital access to evidence-based medications for opioid use disorder, such as methadone and buprenorphine, are increasing across the United States (Englander et al., 2019). However, harm reduction perspectives and related interventions (e.g., provision of sterile injection equipment, naloxone rescue kits, and medical supervision of consumption) remain marginalized within clinical care (Heller, McCoy, & Cunningham, 2004). Though some emergency departments provide naloxone to people who have experienced an overdose, it is not widely available (Chen, Wang, Nielsen, Kuhn, & Lam, 2020). Harm reduction interventions remain largely separated from the rest of clinical care, underfunded, restricted, and in some states, illegal.

Covid-19 has focused a light on the counter-productivity of this mentality and highlighted the need for and feasibility of change. In-hospital overdose prevention or supervised injection facilities are available to patients in several hospitals in Canada and must be made available in the United States (Dong, Brouwer, Johnston, & Hyshka, 2020; Ti et al., 2015). In response to Covid-19, the British Columbia Ministry of Health recommended additional harm reduction approaches. They designated overdose prevention sites as essential services and expanded access by allowing temporary housing sites; respite, recuperation, isolation facilities; and all acute care hospitals to provide overdose prevention services as needed (COVID-19: Provincial Episodic Overdose Prevention Service (e-OPS) Protocol, 2020). They also recommended that clinicians provide pure, pharmaceutical grade opioids to people who use drugs to mitigate overdose risk (Risk Mitigation in the Context of Dual Public Health Emergencies, 2020). Providing opioids with consistent potency to people who use drugs protects them from the toxicity and variability of opioids from the street and enhances their ability to develop healing connections with clinicians. To ensure the health, safety, and dignity of hospitalized patients who use substances, policy-makers and practitioners in the United States should more widely consider these approaches.

These lessons also apply to the care of patients who require prolonged hospitalization for other reasons. For example, individuals with serious, injection-related infections are expected to abstain from using substances or risk increased stigma, scrutiny, confiscation of substances and syringes, and even refusal of care (Bearnot, Mitton, Hayden, & Park, 2019). Instead of optimizing safety within these clinical settings, the abstinence-focused perspectives that are pervasive within many large medical institutions establish hospitals as “risk environment[s]” in which people who use drugs face limited choices and constrained abilities to maintain their health and well-being (McNeil, Small, Wood, & Kerr, 2014). Many avoid care because they anticipate being treated poorly in institutions that have not adopted harm reduction approaches (Biancarelli et al., 2019). Furthermore, the anti-harm reduction

mentality within our healthcare system renders leaving the hospital the only viable option for many people who use substances.

While the Covid-19 pandemic has devastated vulnerable communities, it has presented an opportunity to reassess and change institutional policies to protect the health and well-being of all members of our communities. Now more than ever, we see that we are all interconnected. We must respect the rights of people who use drugs and begin to rebuild trust in our healthcare system now and post-Covid-19. To do this, we must fund, support, and value harm reduction staff and leverage their expertise within clinical environments. Further, we must critically evaluate institutional conceptualization, acceptance, and treatment of people with substance use disorders and realize the potential of hospitals and respite facilities to provide safe places where patients can recuperate with dignity.

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Declaration of competing interest

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References

- Alter, A., & Yeager, C. (2020). COVID-19 impact on US national overdose crisis. Baltimore. Retrieved from <http://odmap.org/Content/docs/news/2020/ODMAP-Report-May-2020.pdf>.
- Barocas, J. A., Blackstone, E., Bouton, T. C., Kimmel, S. D., Caputo, A., Porter, S. J., & Walley, A. Y. (2020). Prevalence of Covid-19 infection and subsequent cohorting in a residential substance use treatment program in Boston, MA. *Journal of Addiction Medicine*. <https://doi.org/10.1097/adm.0000000000000700> publish ahead of print.
- Bearnot, B., Mitton, J. A., Hayden, M., & Park, E. R. (2019). Experiences of care among individuals with opioid use disorder-associated endocarditis and their healthcare providers: Results from a qualitative study. *Journal of Substance Abuse Treatment*, *102*, 16–22. <https://doi.org/10.1016/j.jsat.2019.04.008>.
- Biancarelli, D. L., Biello, K. B., Childs, E., Drainoni, M., Salhaney, P., Edeza, A., ... Bazzi, A. R. (2019). Strategies used by people who inject drugs to avoid stigma in healthcare settings. *Drug and Alcohol Dependence*, *198*, 80–86. <https://doi.org/10.1016/j.drugalcdep.2019.01.037>.
- Chen, Y., Wang, Y., Nielsen, S., Kuhn, L., & Lam, T. (2020). A systematic review of opioid overdose interventions delivered within emergency departments. *Drug and Alcohol Dependence*, *213*. <https://doi.org/10.1016/j.drugalcdep.2020.108009>.
- COVID-19: Provincial Episodic Overdose Prevention Service (e-OPS) Protocol (2020). Vancouver, British Columbia. Retrieved from <http://www.bccdc.ca/Health-Professionals-Site/Documents/COVID19-EpisodicOPSProtocolGuidelines.pdf>.
- Dong, K. A., Brouwer, J., Johnston, C., & Hyshka, E. (2020). Supervised consumption services for acute care hospital patients. *CMAJ*, *192*(18), E476–E479. <https://doi.org/10.1503/cmaj.191365>.
- Englander, H., Dobbertin, K., Lind, B. K., Nicolaidis, C., Graven, P., Dorfman, C., & Korhuis, P. T. (2019). Inpatient addiction medicine consultation and post-hospital substance use disorder treatment engagement: A propensity-matched analysis. *Journal of General Internal Medicine*, *34*(12), 2796–2803. <https://doi.org/10.1007/s11606-019-05251-9>.
- Fernandes, R. M., Cary, M., Duarte, G., Jesus, G., Alarcão, J., Torre, C., ... Carneiro, A. V. (2017). Effectiveness of needle and syringe programmes in people who inject drugs - An overview of systematic reviews. *BMC Public Health*. <https://doi.org/10.1186/s12889-017-4210-2> BioMed Central Ltd., December 11, 2017.
- Gaeta, J. M., De Las Nueces, D., Munson, D. G., Barocas, J. A., & Walsh, K. E. (2020). Case 21-2020: A 66-year-old homeless man with Covid-19. *New England Journal of Medicine*, *383*(2). <https://doi.org/10.1056/nejmcp2002421>.
- Glick, S. N., Prohaska, S. M., LaKosky, P. A., Juarez, A. M., Corcorran, M. A., & Des Jarlais, D. C. (2020). The impact of COVID-19 on syringe services programs in the United States. *AIDS and Behavior*. <https://doi.org/10.1007/s10461-020-02886-2> April 24, 2020.
- Harm Reduction Coalition. (n.d.). Principles of harm reduction. Harm reduction coalition. Retrieved April 6, 2020, from <https://harmreduction.org/about-us/principles-of-harm-reduction/>.
- Heller, D., McCoy, K., & Cunningham, C. (2004). An invisible barrier to integrating HIV primary care with harm reduction services: Philosophical clashes between the harm reduction and medical models. *Public Health Reports*, *119*(1), 32–39. <https://doi.org/>

- 10.1177/003335490411900109.
- McNeil, R., Small, W., Wood, E., & Kerr, T. (2014). Hospitals as a 'risk environment': An ethno-epidemiological study of voluntary and involuntary discharge from hospital against medical advice among people who inject drugs. *Social Science & Medicine*, *105*, 59–66. <https://doi.org/10.1016/J.SOCSCIMED.2014.01.010>.
- Mosites, E., Parker, E. M., Clarke, K. E. N., Gaeta, J. M., Baggett, T. P., Imbert, E., ... Stoltey, J. (2020). Assessment of SARS-COV-2 infection prevalence in homeless shelters — Four U.S. cities, March 27–April 15, 2020. *Morbidity and mortality weekly report* Centers for Disease Control MMWR Office <https://doi.org/10.15585/MMWR.MM6917E1>.
- Potier, C., Lapr vate, V., Dubois-Arber, F., Cottencin, O., & Rolland, B. (2014). Supervised injection services: What has been demonstrated? A systematic literature review. *Drug and Alcohol Dependence*, *145*, 48–68. <https://doi.org/10.1016/j.drugalcdep.2014.10.012>.
- Risk Mitigation in the Context of Dual Public Health Emergencies (2020). Vancouver, British Columbia. Retrieved from <https://www.bccsu.ca/wp-content/uploads/2020/04/Risk-Mitigation-in-the-Context-of-Dual-Public-Health-Emergencies-v1.5.pdf>.
- Ti, L., Buxton, J., Harrison, S., Dobrer, S., Montaner, J., Wood, E., & Kerr, T. (2015). Willingness to access an in-hospital supervised injection facility among hospitalized people who use illicit drugs. *Journal of Hospital Medicine*, *10*(5), 301–306. <https://doi.org/10.1002/jhm.2344>.
- Wood, E., Tyndall, M. W., Zhang, R., Stoltz, J. A., Lai, C., Montaner, J. S. G., & Kerr, T. (2006). Attendance at supervised injecting facilities and use of detoxification services. *New England Journal of Medicine*, *354*(23), 2512–2514. <https://doi.org/10.1056/NEJMc052939>.