COMMENTARY



Emergency department care for patients who use opioids during the COVID-19 pandemic

Sarah A. Weicker¹ · Kelsey A. Speed^{2,3} · Elaine Hyshka^{2,3} · May Mrochuk^{1,2} · Brynn Kosteniuk^{2,3} · Kathryn Dong^{1,2}

Received: 26 June 2021 / Accepted: 5 November 2021 / Published online: 24 November 2021 © The Author(s), under exclusive licence to Canadian Association of Emergency Physicians (CAEP)/ Association Canadienne de Médecine d'Urgence (ACMU) 2021

Keywords Opioids · Opioid use disorder · Emergency medicine · COVID-19 pandemic · Harm reduction

Introduction

The COVID-19 pandemic has coincided with an alarming increase in opioid-related deaths. In the 9 months following the onset of the pandemic, a record 5148 deaths were reported in Canada, representing an unprecedented 89% increase from the same period in 2019 [1]. Harms for people who use opioids have been exacerbated by a number of factors, including increased toxicity of the illegal drug market, social isolation, and decreased access to community addiction and mental health resources [1, 2]. Emergency departments (EDs) are a key access point for opioid-related care and can mitigate future opioid poisoning risk by identifying and initiating treatment for individuals with opioid use disorder, distributing take-home naloxone kits, educating patients about safer substance use, and providing referrals to community addiction supports [3]. On the front line of two major public health crises, EDs must address the rise in opioid-related morbidity and mortality while continuing to adapt to challenges imposed by the COVID-19 pandemic.

☑ Kathryn Dong kathryni@ualberta.ca

How have opioid-related emergency medical service and emergency department presentations changed?

With the onset of the pandemic, EDs rapidly shifted their focus to preparing and caring for COVID-19 patients. Concurrently, there was an increase in Emergency Medical Service (EMS) utilization and ED visits related to opioid poisoning, while visits for other medical conditions decreased. After stabilizing or declining in most Canadian jurisdictions in 2019, over 8500 EMS responses for suspected opioidrelated overdoses occurred between July and September 2020—the highest quarterly count since national surveillance began in 2017 [1]. Similarly, numerous US jurisdictions experienced an increase in ED visits for opioid overdoses in 2020, despite a decrease in all-cause presentations [4]. While data on disparities in opioid poisoning presentations during the pandemic period are sparse, preliminary research has suggested that First Nations populations may be disproportionately impacted [5].

How has provision of opioid-related care in the emergency department changed?

The pandemic response has led to a rapid expansion of public health and clinical care infrastructure for COVID-19, including testing centres, mass vaccination campaigns, and creation of specialized clinics for Long COVID. In contrast, there have been reports of reduced access to both community and ED-based services for people who use opioids in many settings [2, 6].

Opioid agonist treatment, such as buprenorphine/naloxone, is the mainstay of treatment for people with opioid use disorder. Opioid agonist treatment initiated in the ED has



Department of Emergency Medicine, University of Alberta, Edmonton, AB, Canada

Inner City Health and Wellness Program, B804 Women's Centre, Royal Alexandra Hospital, 10240 Kingsway Avenue, Edmonton, AB T5H 3V9, Canada

School of Public Health, University of Alberta, Edmonton, AB, Canada

been shown to increase engagement in addiction treatment [3]. Early in the pandemic, there was a sharp decrease in buprenorphine/naloxone prescriptions for opioid use disorder noted in California EDs: in April 2020, there was a 53% drop in the number of patients administered buprenorphine/naloxone within EDs and a 33% decrease in patients attending follow-up visits [7]. Similarly, from March to May 2020, an ED in Vermont reported a decrease of 86% in enrollment in a program aimed at initiating patients on buprenorphine/naloxone [2]. Emergency providers identified concerns regarding a lack of community follow-up available to patients started on opioid agonist treatment, given shutdowns and restricted hours of community resources and opioid agonist treatment clinics [6].

There have been reports of ancillary support staff such as social workers and peer support navigators being removed from EDs or transitioned to telehealth modalities during the pandemic [2, 6]. For patients presenting with poisoning or other opioid-related concerns, such workers are an invaluable resource for high quality patient care and engagement. ED providers noted that patients who use opioids were less likely to accept these virtual supports and that telehealth limited the ability of support workers to build rapport and relationships with patients in comparison to in-person interactions [6].

Similarly, some community addiction services temporarily closed during the pandemic or were transitioned to telehealth to limit in-person interactions between patients and providers [6]. Connection to outpatient substance use-related care from the ED is essential to facilitate opioid agonist treatment initiation, counseling, peer supports, and other formal and informal supports. Unfortunately, some people who use drugs have limited access to the technology required to engage in these supports virtually, such as computers or video enabled phones [6]. Additionally, the transition away from in-person visits has limited the ability of community organizations to provide other important interventions such as needle exchange, naloxone kits, and fentanyl testing strips [2]. Further to this, the requirement for negative COVID swabs to access in person treatment services has been perceived as an additional barrier as prolonged test turnaround times may result in treatment delays and missed opportunities to connect patients with key services [6].

How can emergency departments better support patients who use opioids?

ED visits are an opportunity to engage patients in conversation about their substance use and identify those at risk of opioid-related morbidity and mortality [3]. Patients with opioid use disorder should be offered initiation of buprenorphine/naloxone whenever possible; home inductions can be considered in appropriate patients who are not experiencing opioid withdrawal in the ED [3, 8]. In the face of restricted access to community providers, longer prescriptions of buprenorphine/naloxone can be provided to allow greater flexibility in arranging follow-up care [9].

Prescribers should support patients in maintaining current opioid agonist treatment prescriptions. For patients who are stable on treatment, missed doses can be provided in the ED after confirming the last dose with the patient's community pharmacy. For individuals requiring isolation or quarantine, alternate medication dispensation strategies such as takehome doses or daily medication delivery can be considered in consultation with the patient's community prescriber and pharmacy.

EDs should consider augmenting their existing overdose prevention and harm reduction interventions. Patients should be offered take-home naloxone kits and sterile supplies, such as alcohol swabs, sterile water, syringes, and safer smoking supplies. Alternate distribution methods of harm reduction supplies, such as dispensing machines on hospital property, can facilitate 24/7 access when face-to-face distribution is a barrier [10, 11]. Existing COVID-19 infrastructure could also be utilized to intertwine the public health response to these two crises, such as by screening individuals for highrisk substance use practices, providing safer use education, and distributing take-home naloxone kits at testing and vaccination centres.

Providers should also inform patients who use drugs about the locations of supervised consumption services and support further expansion of these facilities within communities. Where feasible, supervised consumption services could also be integrated within hospitals or on hospital grounds to help promote patient and staff safety [12]. Close collaboration between EDs, community organizations, and outpatient providers is important to ensure EDs are aware of changes to community services and are able to successfully direct patients to low-barrier follow up care during the pandemic. Protocols for the transfer of patients who use substances between sites and services (e.g. to detoxification services) also require careful consideration and should take into account the risk of withdrawal and any required isolation precautions [13]. If care is to be provided virtually, services should consider partnering with pharmacies, community shelters, and isolation facilities to ensure patients have access to the required technologies.

Outside of the ED, interventions must be augmented to engage a broader range of individuals, including patients who initiate discharge from the ED and those who decline EMS transport to hospital following opioid poisoning. EMSinitiated buprenorphine has been used in the pre-hospital setting to engage this population [14]. Several jurisdictions have implemented outreach programs in which public safety agencies or peer support workers follow up with individuals





post-overdose to offer resources and connection to treatment [15]. Such innovative programs may enhance engagement in treatment and follow-up care during the critical post-overdose period in which high-risk individuals may be more likely to accept supports. Additionally, concerns that First Nations populations are disproportionately impacted by opioid poisonings highlight the need to develop culturally safe interventions in partnership with Indigenous communities [5]. This includes developing services and policies which are trauma-informed, peer-led, strengths-based, and that avoid compounding historical and ongoing impacts of colonialism [16].

Conclusion

The COVID-19 pandemic has been accompanied by worsening of Canada's opioid poisoning crisis and an increase in opioid-related ED and EMS presentations. In many jurisdictions, there has also been reduced access to communitybased addiction treatment services, supervised consumption services, and other social supports. More than ever, EDs must not neglect their obligation to patients who use substances, in particular those at high risk of opioid-related death. The ED should serve as a key space to identify those at risk of opioid-related harm, initiate buprenorphine/naloxone for those who meet criteria for opioid use disorder, refer patients for ongoing substance use disorder treatment, provide take-home naloxone kits and other supplies that support safer substance use, and direct patients to other supports in the community. In addition, emergency physicians should continue to advocate for innovative strategies, both in and out of the ED, to address the ongoing and escalating opioid-related harms in Canada. Lessons learned during the COVID-19 pandemic represent an opportunity to strengthen our systems of care for people who use drugs and create more robust contingency plans to avoid disruptions in care during future crises and pandemics.

Declarations

Conflict of interest KD receives a medical leadership salary from Alberta Health Services and has received committee honoraria from the College of Physicians and Surgeons of Alberta and the Edmonton Zone Medical Staff Association. EH reports grants from the Canadian Institutes of Health Research, outside the submitted work, and a partial secondment to Alberta Health Services as the Scientific Director of the provincial Harm Reduction Services Team between 2018 and 2021. She also serves as the Scientific Director of the Royal Alexandra Hospital's Inner City Health and Wellness Program.

References

 Public Health Agency of Canada. Special advisory committee on the epidemic of opioid overdoses. Opioids and stimulant-related

- harms in Canada [Internet]. Ottawa; 2021. https://health-infobase.canada.ca/substance-related-harms/opioids-stimulants. Cited 22 Aug 2021
- Grunvald W, Herrington R, King R, Lamberson M, Mackey S, Maruti S, et al. COVID-19: a new barrier to treatment for opioid use disorder in the emergency department. J Am Coll Emerg Phys Open. 2021;2(2).
- Koh JJ, Klaiman M, Miles I, Cook J, Kumar T, Sheikh H, et al. CAEP Position Statement: emergency department management of people with opioid use disorder. CJEM, 2020:22(6):768–71.
- Soares WE, Melnick ER, Nath B, D'Onofrio G, Paek H, Skains RM, et al. Emergency Department visits for nonfatal opioid overdose during the COVID-19 pandemic across 6 US Healthcare Systems. Ann Emerg Med. 2021;S0196064421002262.
- Government of Alberta. Opioid Response Surveillance Report: First Nations People in Alberta [Internet]. 2021. https://open.alberta.ca/publications/alberta-opioid-response-surveillance-report-first-nations-people-2021. Cited 22 Jun 2021
- Collins AB, Beaudoin FL, Samuels EA, Wightman R, Baird J. The impact of COVID-19 on service provision for emergency department patients post-opioid overdose: a field report. J Addic Med. 2021;15(5):432–4.
- Herring AA, Kalmin M, Speener M, Goodman-Meza D, Snyder H, Campbell A, et al. Sharp decline in hospital and emergency department initiated buprenorphine for opioid use disorder during COVID-19 state of emergency in California. J Subst Abuse Treat. 2021;123:108260.
- 8. D'Onofrio G, O'Connor PG, Pantalon MV, Chawarski MC, Busch SH, Owens PH, et al. Emergency Department-initiated buprenorphine/naloxone treatment for opioid dependence: a randomized clinical trial. JAMA. 2015;313(16):1636.
- Dong K, Meador K, Hyshka E, Salokangas E, Burton-MacLeod S, Bablitz C, et al. Supporting people who use substances in acute care settings during the COVID-19 pandemic: CRISM—interim guidance document. [Internet]. Canadian Research Initiative in Substance Misuse; 2021. https://crism.ca/wp-content/uploads/ 2021/02/Supporting-people-who-use-substances-in-acute-caresettings-during-the-COVID-19-pandemic-V2-18-Feb-2021.pdf. Cited 1 Sept 2021
- CATIE. Harm reduction dispensing units. 2019. https://www.catie. ca/en/pc/program/hrdu. Cited 22 Aug 2021
- Islam MM, Wodak A, Conigrave KM. The effectiveness and safety of syringe vending machines as a component of needle syringe programmes in community settings. Int J Drug Policy. 2008;19(6):436–41.
- 12. Dong KA, Brouwer J, Johnston C, Hyshka E. Supervised consumption services for acute care hospital patients. CMAJ. 2020;192(18):E476–9.
- Schreyer KE, del Portal DA, King LJL, Blome A, DeAngelis M, Stauffer K, et al. Emergency Department management of the Covid-19 pandemic. J Emerg Med. 2020;59(6):946–51.
- Carroll GG, Wasserman DD, Shah AA, Salzman MS, Baston KE, Rohrbach RA, et al. Buprenorphine field initiation of rescue treatment by emergency medical services (Bupe FIRST EMS): a case series. Prehosp Emerg Care. 2021;25(2):289–93.
- Bagley SM, Schoenberger SF, Waye KM, Walley AY. A scoping review of post opioid-overdose interventions. Prev Med. 2019;128:105813.
- Canadian Aboriginal AIDS Network, Interagency Coalition on AIDS and Development. Indigenous harm reduction = Reducing the harms of colonialism [Internet]. 2019. http://www.icad-cisd. com/pdf/Publications/Indigenous-Harm-Reduction-Policy-Brief. pdf. Cited 1 Sept 2021

