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Editorial

Naloxone distribution, trauma, and supporting community-based overdose responders

North America is in the midst of a growing overdose epidemic. The dramatic rise in overdose deaths experienced over the last five years can primarily be attributed to increases in the distribution and use of illicitly-manufactured fentanyl, fentanyl-related analogues, and fentanyl-adulterated drugs (BC Coroners Service, 2018; Peterson et al., 2016). The United States Centres for Disease Control (CDC) reported that 60% of the 47,872 opioid-related overdose deaths in 2017 involved synthetic opioids, representing a 46% increase from the previous year (CDC, 2018), while in Canada, the percentage of apparent opioid-related deaths involving fentanyl or related analogues increased from 55% in 2016 to 72% in 2017 (Public Health Agency of Canada, 2018). In the Canadian province of British Columbia (BC), fentanyl was detected in 1210 deaths in 2017 (BC Coroners Service, 2018).

Although the current public discourse on the overdose epidemic has increasingly focused on issues of drug supply and the increased incidence of opioid use in white, suburban and rural communities, overdose risk has been shown to be strongly associated with social and economic marginalization (Dasgupta, Beletsky, & Ciccarone, 2018; Monnat & Rigg, 2016; Zoorob & Salemi, 2017). Hence, overdose vulnerability can be viewed through a structural vulnerability lens (Rhodes et al., 2012) in which location within social, economic, and political hierarchies, as well as power dynamics limit agency and produce vulnerability to risk and harm among particular groups. Histories of racism and colonialism, extreme poverty, housing instability, and drug prohibition are among the multiple intersecting structural vulnerabilities experienced by PWUD that together contribute to a range of poor health outcomes. For example, a higher degree of structural vulnerability has been associated with increases in risk of HIV and hepatitis transmission (Rhodes et al., 2012), violence (Torchalla, Linden, Strehlau, Neilson, & Krausz, 2014), and early mortality (Milloy, Marshall, Montaner, & Wood, 2012). Furthermore, recent research has demonstrated that marginalized groups experience poorer mental health outcomes, such as post-traumatic stress disorder, depression, and anxiety resulting from, and exacerbated by, their structural vulnerabilities (Puri, Shannon, Nguyen, & Goldenberg, 2017; Reddon et al., 2018). The implementation of overdose-focused interventions must, therefore, contend with the overlapping vulnerabilities experienced by PWUD, particularly in relation to their involvement in overdose responses.

In response to the overdose epidemic, community-based harm reduction interventions aimed at both overdose prevention and response (e.g., naloxone distribution and training, supervised consumption) are being scaled up. Peers (i.e., PWUD who are members of the affected community) have been critical to the successful expansion of these interventions, in part because pre-existing social networks can be leveraged to deliver timely interventions to those who are frequently missed by harm reduction efforts and are often among the most marginalized members of the community (Faulkner-Gurstein, 2017). Measures to make the life-saving overdose reversal agent naloxone more available have found particular success, with peers assuming responsibility for administering naloxone in response to overdose in both direct injecting settings and the wider community; one recent student found that 226 deaths were prevented in a 10-month period following rapid scale-up of community-based naloxone distribution in BC (Irvine et al., 2018). In accordance with their new, positive social role conferred by community naloxone distribution, peers have reported an increased sense of self-esteem, confidence and empowerment following naloxone training (Marshall, Piat, & Perreault, 2018; Wagner et al., 2014). A frequent theme across previous qualitative studies has been a regained sense of control in an increasingly high-risk overdose environment due to confidence in one's ability to administer naloxone when it is needed (Faulkner-Gurstein, 2017; Wagner et al., 2014).

However, it has been increasingly recognized that risks of burnout and vicarious traumas are considerable for peers working on the frontlines of the overdose epidemic, with reports of stress, trauma, and grief being commonplace for those responding daily to overdoses (Bardwell, Fleming, Collins, Boyd, & McNeil, 2018; Wallace, Barber, & Pauly, 2018). In addition to their comparative lack of crisis training, the pre-existing relationships between peers and many of the individuals experiencing overdoses is a key difference separating them from emergency medical personnel. For many peers, stressful overdose situations are all the more traumatic because of close relationships and community ties.

Whereas peers comprise the main target of community-based naloxone distribution programs, there has been a remarkable lack of public discourse on the necessary resources and supports needed, as well as traumas experienced by peers acting as first-responders in overdose events. As the overdose epidemic continues and peers are tasked to respond again and again, they risk burnout. Wagner et al. (2014) identified the concerning behaviour of some peers cutting social ties over time with individuals known to frequently overdose. While this helped these participants better cope with the stresses of responding to overdoses, this potential trend ultimately serves to undermine the protective social networks fundamental to community-based harm reduction efforts. In particular, it seems likely that "community naloxone champions," are at an increased risk of scaling down their participation efforts due to the burden of frequent overdose resuscitations. This same effect has also been observed among designated housing-based overdose responders, who subsequently limited the hours in which they were available to respond to overdoses (Bardwell et al., 2018). Moreover, trauma brought on by overdose response may both interact with and reinforce the multiple intersecting structural vulnerabilities of PWUD, thereby contributing to a cascade of negative health and social outcomes. *Thus, provision of supports for peers assuming first-responder positions is critical to the sustainability of community-based*

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overdose response interventions.

In Vancouver, Canada, one of the cities hardest hit by the overdose epidemic, BC Emergency Health Services has recently implemented a 'psychological resilience' program for all staff, aimed at preventing depression and post-traumatic stress disorder associated with increased occupational stress (Woo, 2017). Additional support services are framed as necessary measures to support the ongoing work of those most heavily exposed to the overdose epidemic, yet despite public health efforts to engage the broader community in overdose response through naloxone distribution, these additional supports are limited to formally employed healthcare workers. In contrast to those available to employed individuals, there is a stark lack of resources and supports, including remuneration and workplace supports, for marginalized community members who shoulder the responsibility of early overdose intervention, largely as peer workers receiving modest stipends or unpaid volunteers. Previous research evaluating naloxone training programs has demonstrated that participants of such programs themselves perceive an urgent need for trauma-informed mental health support for community members serving as first responders, and in the absence of such supports may resort to setting boundaries on their ability to respond to an event as a strategy to protect against adverse mental health outcomes (Bardwell et al., 2018; Wagner et al., 2014). Dedicated funding for integrated mental health support services for peer-responders is urgently needed to address the specific traumas associated with overdose attendance and to ensure the sustainability of community-based harm reduction interventions. Further, paid formal employment and associated benefits, including workplace and trauma supports, should be extended to community-based overdose responders in recognition of their critical role in combating the overdose epidemic. This acknowledgement that effective harm reduction efforts extend beyond drug-related risks is crucial to supporting community-based efforts to combat the overdose epidemic. Given the increasing burdens placed on peers as community-based naloxone programs are expanded, and the demonstrated traumas associated with overdose-response, resources dedicated to providing integrated support services and remuneration for peer responders should be a priority to ensure sustainability of such programs in the face of a growing overdose epidemic.

Conflict of interest

No conflicts declared.

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