



Expanding access to diacetylmorphine and hydromorphone for people who use opioids in Canada

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Abstract

The increasing incidence of fatal opioid overdose is a public health crisis in Canada. While buprenorphine/naloxone and methadone are the standard first-line of opioid substitution options, limitations, including difficulty achieving long-term retention for some people who use opioids, are well known. For this group, injectable diacetylmorphine or hydromorphone can achieve positive outcomes, including high retention rates, reduced use of unregulated opioids, and reduced criminal activity. In May 2019, Health Canada announced changes to increase the accessibility of diacetylmorphine and hydromorphone, and in September 2019, the CIHR-funded Canadian Research Initiative in Substance Misuse released a national clinical guideline for diacetylmorphine and hydromorphone as additional frontline substitution options. While these developments present opportunities for scale-up, significant financial, structural, and practice barriers continue to impede access. This commentary explores the current state of policy and practice for diacetylmorphine and hydromorphone as opioid substitution options in Canada, outlines the rationale for rapid expansion of access, and highlights clinical and policy changes that must be undertaken or the death toll will continue to rise.

Résumé

L'incidence croissante des surdoses d'opioïdes mortelles représente une crise de santé publique au Canada. La buprénorphine/naloxone et la méthadone sont au premier rang des options de substitution aux opioïdes, mais leurs limites, dont la difficulté de fidéliser à long terme certaines des personnes qui consomment des opioïdes, sont bien connues. Dans ce groupe, la diacétylmorphine ou l'hydromorphone en injection peuvent donner de bons résultats, dont des taux de fidélisation élevés, la baisse de la consommation des opioïdes non réglementés et la réduction des activités criminelles. En mai 2019, Santé Canada a annoncé des modifications visant à accroître l'accessibilité de la diacétylmorphine et de l'hydromorphone, et en septembre 2019, l'Initiative canadienne de recherche sur l'abus de substances, financée par les IRSC, a publié une directive clinique nationale pour la diacétylmorphine et l'hydromorphone comme autres options de substitution de première ligne. Ces développements ouvrent des possibilités de mise à l'échelle, mais l'accès aux produits est encore entravé par d'importants obstacles financiers, structurels et pratiques. Dans notre commentaire, nous explorons l'état actuel des politiques et des pratiques pour faire de la diacétylmorphine et de l'hydromorphone des options de substitution aux opioïdes au Canada, nous expliquons les raisons qui justifient une expansion rapide de l'accès et nous soulignons les changements d'ordre clinique et stratégique qu'il faudra apporter, sans quoi le nombre de morts continuera d'augmenter.

Keywords Opiate substitution treatment · Heroin · Hydromorphone · Drug overdose

Mots-clés Traitement de substitution aux opiacés · Héroïne · Hydromorphone · Mauvais usage des médicaments prescrits

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Introduction

Against the backdrop of an overdose crisis driven in large part by the toxically contaminated unregulated drug supply, Health Canada announced changes in May 2019 to expand access to diacetylmorphine and hydromorphone as an evidence-based approach to reduce drug-related harms, particularly for those persistently using contaminated opioids from the unregulated supply placing them at risk of fatal opioid overdoses and drug-associated health morbidities. In September 2019, these changes were augmented by the Canadian Research Initiative in Substance Misuse, which released a national clinical guideline for diacetylmorphine- and hydromorphone-based systems of care. Some prescribers have begun prescribing hydromorphone to persons using the unregulated opioid supply and, along with activists, are fiercely advocating for enhanced lower barrier opioid availability that centers the perspectives of people who use opioids (Rai et al. 2019). Nevertheless, significant barriers impede widespread availability and until financial, structural, and practice barriers are addressed, access to diacetylmorphine and hydromorphone will remain out of reach for the majority of those across Canada who would benefit from them.

Overdose crisis in Canada

With over 12,800 apparent opioid-related deaths between January 2016 and March 2019 (National Report: Apparent Opioid-related Deaths in Canada 2019), fatal opioid overdose is a public health crisis in Canada. Fentanyl or fentanyl analogues were involved in 82% of accidental apparent opioid-related deaths in the first quarter of 2019, compared with 76% in 2018, 71% in 2017, and 54% in 2016 (National Report: Apparent Opioid-related Deaths in Canada 2019), indicating that the high incidence of fatal overdoses is increasingly related to potent opioid adulterants in the unregulated drug supply. In response to this crisis, Health Canada announced reforms to increase the accessibility of diacetylmorphine and hydromorphone for those reliant on Canada's unregulated opioid supply ("Government of Canada approves new treatment options for opioid use disorder and supports research, treatment and harm reduction projects in Ontario"), as their substitutive use has demonstrated individual and societal benefits and drug-associated harm reductions (Strang et al. 2015). Specifically, diacetylmorphine was added to the List of Drugs for an Urgent Public Health Need, allowing provinces and territories to import it. Health Canada also approved injectable hydromorphone when administered under the supervision of an experienced physician trained in injectable opioid agonist treatment (iOAT) and in accordance with applicable provincial or territorial professional requirements ("Government of Canada approves new treatment options for opioid use disorder and supports research, treatment

and harm reduction projects in Ontario"). This was followed by the release of a national clinical guideline on iOAT by the Canadian Research Initiative in Substance Misuse (CRISM) (Fairbairn et al. 2019).

Opioid substitution with diacetylmorphine and hydromorphone

While buprenorphine/naloxone and methadone are standard first-line opioid substitution options (WHO, UNODC, and UNAIDS technical guide for countries to set targets for universal access to HIV prevention, treatment, and care for injecting drug users: 2012 revision 2012), limitations, including difficulty achieving long-term retention for some people who use opioids, are well known. For this group, injectable diacetylmorphine administered in clinical settings with supervision from trained health professionals has demonstrated positive outcomes, including high rates of retention, reduced use of unregulated opioids, and reduced criminal activity (Strang et al. 2015). Diacetylmorphine could previously only be obtained through Health Canada's Special Access Programme and given these restrictions, research, including the North American Opiate Medication Initiative (NAOMI) and the Study to Assess Longer-term Opioid Medication Effectiveness (SALOME) in Vancouver, British Columbia, compared diacetylmorphine with hydromorphone. Study investigators found that hydromorphone was associated with similar positive outcomes as diacetylmorphine, and therefore recommended hydromorphone as an effective opioid substitution-based standard of care (Oviedo-Joekes et al. 2016). By increasing retention rates and reducing unregulated opioid use, provision of diacetylmorphine and hydromorphone to people who use opioids can reduce overdose events and fatalities caused by the consumption of unknown-quality, high-potency opioids present in the unregulated market. Expanding access to diacetylmorphine or hydromorphone—including through the use of lower barrier models—to those reliant on the unregulated opioid supply and whose needs are unmet by existing options could better equip systems of care to prevent the growing loss of lives from overdose.

Availability of opioid substitution with diacetylmorphine and hydromorphone in Canada

Health Canada's announcement and the CRISM clinical guideline are welcome, given that they recognize the effectiveness of these two opioid formulations and provide a framework for their provision. Although an established standard of care in other countries—such as Belgium, Denmark, Germany, the Netherlands, Switzerland, and the United Kingdom—

offering diacetylmorphine is a limited option in Canada. Provision of diacetylmorphine and hydromorphone in Canada is largely limited to individual providers, with a small number of clinicians providing access in Vancouver, Surrey, Calgary, London, Toronto, Ottawa, and select other settings. Coverage of diacetylmorphine and hydromorphone (with the latter available in injectable and oral formulations, as well as supervised and unsupervised) appears to be highest in Vancouver, and in principle is available across British Columbia given that these formulations are covered by the provincial Medical Services Plan (MSP). In Ottawa, one shelter-based residential program offers supervised injectable and oral hydromorphone, and elsewhere in Ontario, some physicians have begun to prescribe oral hydromorphone. In Alberta, a pilot program offers supervised injectable hydromorphone at clinics in Calgary and Edmonton (Browne 2019; Expanding Opioid Substitution Treatment with Managed Opioid Programs 2019). While these are examples of jurisdictions with some coverage of diacetylmorphine and hydromorphone, the exact number of recipients served by these programs is not publicly known, and there is no inventory of all programs. Large numbers of eligible people remain on waitlists to access limited programs in these settings, and access remains even more limited, if at all available, elsewhere in the country. Centering the needs of people who use opioids that could benefit from expanded access to diacetylmorphine or hydromorphone requires a re-examination of existing access barriers. Efforts to improve access should seriously consider the adoption of novel lower barrier approaches that avoid the overmedicalization of opioid dispensation, such as is recommended by the Canadian Association of People who Use Drugs (Safe Supply Concept Document 2019).

Addressing barriers to access

Significant financial, structural, and practice barriers continue to impede access to diacetylmorphine and hydromorphone for the majority of people who use opioids that would benefit from them. While not all-inclusive, the discussed barriers provide examples that can be applied across Canadian settings. Financial coverage for hydromorphone poses a challenge, as provincial and territorial drug benefit formularies may not include hydromorphone at the appropriate concentration and as an opioid substitution option. For example, an open letter signed by over 400 healthcare providers and researchers points to the lack of coverage for 50 mg/mL and 100 mg/mL formulations of hydromorphone by the Ontario Drug Benefit (ODB) program in Ontario as the most significant barrier to implementing and scaling up an effective hydromorphone-based system of care in the province (“An Open Letter calling for Public Drug Coverage of High Dose Injectable Hydromorphone for People Who Use Opioids in Ontario,” 2019). With respect to related structural barriers,

the Toronto Board of Health has urged the Ontario Ministry of Health and Long-Term Care to take the necessary steps to add hydromorphone at the appropriate concentrations and as an opioid substitution option to the ODB Formulary (Expanding Opioid Substitution Treatment with Managed Opioid Programs 2019). Guidelines on the effective delivery of hydromorphone could address practice barriers related to limited knowledge and capacity among healthcare providers and increase willingness to prescribe, and were previously only available in British Columbia (Guidance for Injectable Opioid Agonist Treatment for Opioid Use Disorder 2017; Policy Guide: Injectable Hydromorphone Maintenance Treatment 2018) until the release of national guidelines by CRISM. Efforts to promote uptake and adherence, such as training and education for multiple types of providers, will be critical to ensuring widespread adoption of the national guidelines. Related structural barriers would be addressed by reducing laborious regulatory requirements for supervised consumption facilities and confirming sustainable provincial funding. Another barrier that can influence willingness to prescribe among healthcare providers is concerns over diversion. Robust evaluation approaches could serve to gain an understanding of diversion and work with prescribers on expanding access, thus reducing diversion. Prescribers should be able to depend on advocacy efforts from a variety of stakeholders that showcase support and reduce prescribing concerns. To address these and other remaining barriers, engagement from diverse policy actors is necessary, including provincial and territorial drug benefit formularies to provide financial coverage for high-dose hydromorphone as an opioid substitution option. Centering the voices of people who use opioids and frontline providers for best approaches in increasing expansion and implementation is critical as their expertise in this area is unparalleled.

Conclusion

As opioid-related harms increase, demonstrating the demand for expansion of pragmatic, effective system of care options, there is an urgent imperative to support the scale-up of diacetylmorphine and hydromorphone throughout Canada. However, critical barriers must be addressed to ensure that those currently reliant on Canada’s unregulated drug supply, who consequently make up the subpopulation at highest risk of overdose, are able to access a safe supply of opioids and experience associated benefits.

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Compliance with ethical standards

Conflict of interest The authors declare that they have no conflict of interest.

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