Patient-centred care in opioid agonist treatment could improve outcomes

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■ Cite as: *CMAJ* 2019 April 29;191:E460-1. doi: 10.1503/cmaj.190430

See related article at www.cmaj.ca/lookup/doi/10.1503/cmaj.181506

Opioid agonist treatment is life saving for people with opioid use disorder. Meta-analyses of observational studies find that the most common forms of opioid agonist treatment, methadone and buprenorphine, are associated with a 40%–70% reduction in mortality,[1] a 54% reduction in HIV infections[2] and a 50% reduction in hepatitis C virus (HCV) infections.[3] However, prescribing practices in opioid agonist treatment vary widely. Methadone and buprenorphine are often prescribed at lower dosages than those recommended by clinical guidelines,[4,5] and at dosages patients feel are inadequate.[6] Although randomized trial evidence suggests that higher dosages of opioid agonist treatment are more effective,[5] few studies have explored the importance of patient-perceived dosage adequacy of opioid agonist treatment on health outcomes.

In linked research, Artenie and colleagues[7] report findings from a prospective cohort study involving people who inject opioids who did not have HCV infection at study entry. Of 513 participants, 159 (31%) were engaged in opioid agonist treatment with methadone or buprenorphine. Of this group, 46% were prescribed dosages lower than those recommended by clinical guidelines (i.e., methadone ≥ 60 mg/d or buprenorphine ≥ 16 mg/d) and 31% felt their opioid agonist treatment dosage was inadequate.

Remarkably, opioid agonist treatment was associated with a reduced incidence of HCV infection only if participants were taking dosages that were determined to be adequate by both clinical guidelines and participants themselves. If participants received dosages of opioid agonist treatment lower than both of these thresholds, they were twice as likely to acquire HCV as study participants who were not engaged in opioid agonist treatment at all.

The importance of patients' perceptions of adequacy of opioid agonist dosage on reducing the risk of HCV infection — and the potential harm created by delivering care that patients find inadequate — is a novel finding with important implications for the care of people who inject opioids. It indicates that patients receiving opioid agonist treatment have expertise in their condition, and it prompts consideration of a more patient-centred approach to their care, which could improve individual and public health outcomes. Whereas substantial qualitative research has described the negative effects of opioid agonist treatment practices that are not meeting patients' needs,[6,8] the linked study is among the first to quantify this harm and link it to increased risk for HCV infection.

KEY POINTS

- Opioid agonist treatment with methadone or buprenorphine reduces the risk of death and infection with HIV and hepatitis C virus (HCV) among people who inject opioids.
- Although clinical guidelines suggest minimum dosages for methadone and buprenorphine, some people engaged in opioid agonist treatment receive dosages they feel are inadequate.
- A linked cohort study involving people who inject substances showed that the incidence of HCV infection was reduced only when people were receiving dosages of opioid agonist treatment they felt to be adequate.
- Active patient involvement in treatment decisions may be essential to improving health outcomes associated with opioid use disorder, including transmission of HCV.

The North American opioid crisis is driving increasing rates of HCV transmission, just as direct-acting antivirals make HCV elimination a feasible public health strategy.[9] Sharing of infected injecting equipment is the primary vehicle for HCV transmission among people who inject opioids, and improving access to and quality of opioid agonist treatment is essential to preventing HCV infections and to facilitating treatment and cure with direct-acting antivirals in this population. Interventions that reduce HCV transmission among people who inject substances may also reduce transmission of HIV and deaths from overdose.[5,9,10]

Titrating methadone and buprenorphine dosages involves partnership between clinicians and patients to determine the dosage that relieves opioid withdrawal symptoms for 24 hours, blocks the effects of other exogenous opioids and reduces opioid cravings, without causing oversedation.[4,5] Meta-analyses of randomized trials have established that methadone dosages of 60 mg daily or higher and buprenorphine dosages of 16 mg daily or higher lead to improved retention in treatment, less substance use and less injecting.[5] In one cohort study from Amsterdam,

people engaged in methadone therapy at doses of 60 mg or more daily who also had sufficient access to needle and syringe exchanges were at decreased risk of acquiring HCV.[10] To our knowledge, minimum dosing recommendations have not yet been established for other forms of opioid agonist treatment, including sustained-release oral morphine and injectable hydromorphone or diacetylmorphine.

Despite these minimum dosing recommendations, individual dosages of opioid agonist treatment vary considerably. Prescribed dosages are affected by factors such as biology (i.e., individual differences in absorption and metabolism), patients' goals (e.g., abstinence, reduced substance use, avoiding withdrawal, or concern about methadone or buprenorphine dependence), clinical and regulatory policies (e.g., setting upper limits on dosing, encouraging dosage reductions, or punitively reducing dosages for ongoing substance use), and stigmatization of opioid agonist treatment and people who use substances.[6,8] Although clinical guidelines describe the importance of patients' symptoms on optimizing dosing, they have not emphasized patient perception of dosage adequacy.[4,5]

Factors beyond dosage of opioid agonist treatment and perceived dosage adequacy contribute to improved outcomes for people who inject opioids. Patients who feel their dosage of opioid agonist treatment is inadequate or who have a weak therapeutic relationship with their clinicians might be better served in different treatment settings, for example in primary care. Needle and syringe exchanges, safe consumption sites, and peer outreach and education help people inject more safely. Other forms of opioid agonist treatment, including slow-release oral morphine and injectable hydromorphone or diacetylmorphine, may be helpful. Social and structural supports, including stable housing and income, and decriminalization or avoiding incarceration, also help people who inject substances to reduce their risk of HCV infection.[9]

The linked study's main finding was that people who inject opioids while receiving dosages of opioid agonist treatment that they feel are inadequate face a higher risk for contracting HCV than their peers who are not engaged in opioid agonist treatment. Further research is needed to determine why this is the case. Patients who are at high risk for contracting HCV related to injecting practices might also be more likely to describe their dosage of opioid agonist treatment as inadequate, leading to confounding. It is possible that patients dissatisfied with opioid agonist treatment may experience treatment interruptions that lead them to inject more frequently or more dangerously than they did before.[8] The linked study included participants who had been previously infected with HCV and cleared the virus. In our experience, many people who inject substances believe that if they cleared HCV once they are immune to re-infection and may not emphasize safer injecting practices.

Providing patient-centred care for people with opioid use disorder is similar to caring for people with other chronic illnesses. Collaboration, cooperation, communication and the development of mutual trust is needed to improve individual and public health outcomes. The linked study provides initial, observational evidence that listening to patients regarding the adequacy of their opioid agonist treatment is important and may affect the success of treatment.

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Competing interests: Thomas Brothers reports receiving grants from Dalhousie University (the Ross Stewart Smith Memorial Fellowship). Matthew Bonn reports being paid from the Ross Stewart Smith Memorial Fellowship.

This article was solicited and has not been peer reviewed.

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Contributors: Both authors contributed to writing the commentary, approved the final version to be published and agreed to be accountable for all aspects of the work.

Funding: This work was funded by the Ross Stewart Smith Memorial Fellowship from Dalhousie University awarded to Thomas Brothers.

Acknowledgements: The authors thank Drs. Jessica Hann, Samuel Hickcox, David Martell and Tiffany O'Donnell for helpful comments on earlier drafts.

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