Community strengths in addressing opioid use in Northeastern Ontario

Kathryn Dorman¹ · Brittany Biedermann² · Christina Linklater³ · Zahra Jaffer⁴

Received: 12 October 2017 / Accepted: 3 March 2018 / Published online: 19 April 2018

© The Canadian Public Health Association 2018

Abstract

The number of opioid-related deaths in Ontario is rising, and remote First Nations communities face unique challenges in providing treatment for opioid use disorder. Geographic barriers and resource shortages limit access to opioid agonist therapy, such as buprenorphine or methadone. However, attempts to rapidly expand access have the potential to overlook community consultation. Our experience in Moose Factory, Ontario, offers insight into the ethical questions and challenges that can arise when implementing opioid agonist therapy in Northern Ontario and provides an example of how a community working group can strengthen relationships and create a culturally relevant program. We call on medical regulators and the provincial and federal governments to invest in community-based opioid dependence treatment programs that incorporate cultural and land-based healing strategies and draw on First Nations teachings.

Résumé

Le nombre de décès liés aux opioïdes est en hausse en Ontario, et les communautés éloignées des Premières Nations font face à des difficultés uniques pour traiter les troubles de consommation d'opioïdes. Les obstacles géographiques et la rareté des ressources limitent l'accès au traitement par agonistes opioïdes comme la buprénorphine ou la méthadone. Les tentatives d'élargissement rapide de l'accès risquent toutefois de passer outre aux consultations communautaires. Notre expérience à Moose Factory (Ontario) nous a donné un aperçu des questions éthiques et des difficultés qui peuvent se poser durant la mise en œuvre du traitement par agonistes opioïdes dans le Nord de l'Ontario et nous a montré qu'un groupe de travail communautaire peut renforcer les relations et créer un programme culturellement approprié. Nous invitons les organismes de réglementation de la médecine et les gouvernements fédéral et provinciaux à investir dans les programmes communautaires de traitement de la dépendance aux opioïdes qui intègrent des stratégies de guérison fondées sur la culture et le territoire et qui puisent dans les enseignements des Premières Nations.

Keywords Opioid-related disorders · Medicine · Traditional · Buprenorphine · Naloxone drug combination

Mots-clés Troubles liés aux opiacés · Médecine traditionnelle · Association de buprénorphine et de naloxone

Introduction

Opioid use is responsible for an increasing number of deaths in Ontario: nearly 1 in 8 deaths in individuals aged 25 to 34 was opioid-related in 2010 (Gomes et al., 2014). The rates of

opioid use are disproportionately high in Northern Ontario (Kelly et al., 2014; Resolution 09/92, 2009) and access to first-line treatment is limited (Mamakwa et al., 2017). The rise in opioid use and overdose deaths in Ontario has been partly attributed to the introduction of oxycodone and its addition to the public formulary (Dhalla et al., 2009). The burden of the current crisis therefore lies on the shoulders of physicians, government, and big pharma. For those who have suffered, it is little consolation that Purdue Pharma, the maker of OxyContin, settled a recent class action lawsuit, highlighting their role in the crisis.

The context of opioid prescribing and use within First Nations communities is pertinent. Colonization, loss of land,

✉ Kathryn Dorman
dormanka@smh.ca

¹ Department of Family and Community Medicine, St. Michael's Hospital, 73 Regent Park Blvd, Toronto, Ontario M5A 2B7, Canada

² Moose Cree Health Services, Moose Factory, Ontario, Canada

³ Moose Factory Health Centre, Moose Factory, Ontario, Canada

⁴ Weeneebayko Area Health Authority, Moose Factory, Ontario, Canada

and the disruption of family and cultural ties, along with widespread trauma from the residential school system, have created insufferable pain across generations. Opioid use can provide momentary relief from this suffering, driving some to self-medicate to numb the pain (Assembly of First Nations, 2011). Unfortunately, despite good intentions in prescribing, it is physicians, often settlers in Canada, who bear the brunt of the responsibility for introducing opioids into First Nations communities.

As alarms continue to sound across Ontario calling for urgent solutions to this crisis, resource shortages persist, preventing uniform access to treatment (Mamakwa et al., 2017). There are opportunities for expansion of opioid agonist therapy through telemedicine; however, meaningful cultural-based programs are often out of reach. Furthermore, the idea of introducing opioid agonist treatments is fraught with stigma, safety concerns, and questions about physician intention and long-term consequence.

Treating opioid use disorder

Opioid use disorder can be treated using an abstinence-based approach or the long-acting opioid agonists, methadone and buprenorphine. There is strong evidence that treatment with methadone and buprenorphine is associated with higher treatment retention rates and markedly reduced opioid use, compared to abstinence-based approaches (Srivastava et al., 2017).

Buprenorphine is as effective as methadone in reducing illicit opioid use when dosed appropriately (Mattick et al., 2014) and has many advantages. Any family physician can prescribe buprenorphine in Ontario, whereas methadone requires a special exemption and is not accessible in many rural regions. Buprenorphine is also safer than methadone and is implicated in fewer overdose deaths (Kimber et al., 2015).

Community-based buprenorphine programs have been implemented in several First Nations in Ontario with positive results. In one community, the introduction of a program that combined buprenorphine with First Nations healing strategies was associated with dramatic reductions in police criminal charges and child protection cases, along with increased school attendance and immunization rates (Kanate et al., 2015). The experience of six community-based buprenorphine programs in Northwestern Ontario is also promising, with high treatment retention rates (over 70% at 18 months) and negative urine drug screens for illicit opioids in most patients (84 to 95%) (Mamakwa et al., 2017). These programs were community-driven and some included counseling and land-based aftercare.

Despite these successes, underfunding and inadequate support for culturally based, trauma-focused programming

prevents many First Nations communities from moving forward with opioid use disorder treatment (Mamakwa et al., 2017). The broader historic underfunding of addiction treatment in Ontario arguably reflects inadequate government prioritization of this important public health concern and widespread stigma towards drug use.

Community experience in Northeastern Ontario

In 2009, the Northwestern Ontario First Nations chiefs declared a state of emergency in response to the significant social, health, and economic consequences of prescription drug abuse (Resolution 09/92, 2009).

Moose Factory is a remote, predominantly First Nations community in Northeastern Ontario, which faced similar challenges. The Weeneebayko Area Health Authority provides the majority of health services. Exact rates of opioid use and overdose are unknown; however, regional 2015 data suggested that 28% of new admissions for substance use treatment involved prescription opioids (Rush et al., 2016).

Moose Factory faces barriers to health care access, similar to other remote communities. Road access is seasonal and health care provider shortages exist. Opioid use disorder treatment options were previously limited because methadone and buprenorphine were not available locally and the closest withdrawal management facility is hundreds of kilometres away, accessible only by train or airplane. The island of Moose Factory includes the Moose Cree First Nation and MoCreebec Eeyoud Council. The community has a hospital and pharmacy, meaning that opioid agonist therapy can be delivered in a manner similar to urban centres, but carries the complexities of an isolated community with distinct cultural considerations.

In 2015, a single physician started prescribing buprenorphine/naloxone locally, without adequate resources for formal programming or supports. The introduction of buprenorphine/naloxone in Moose Factory led to predictably positive outcomes for many individual patients, who were able to reduce their opioid use and regain family, education, or occupational function. However, its introduction also led to much concern and debate at the community level, with the following questions arising:

- Why are we replacing dependence on one drug for another?
- What are the harms associated with diversion or abuse?
- Are physicians promoting buprenorphine as a way to earn money?
- Why not promote traditional or land-based therapies instead?

Community members were justifiably suspicious of opioid agonist therapy, given that physicians were implicated in the decade of rising opioid prescriptions that preceded the crisis. In the absence of comprehensive education and partnership, buprenorphine treatment carried significant stigma, even among local health professionals, with misinformation informing the concerns above.

It was important to openly address these questions through public discussions and education. Community members were reassured that local physicians were not remunerated for buprenorphine prescribing and information on its efficacy was shared. It was also acknowledged that some buprenorphine/naloxone diversion and abuse was occurring, that there are potential harms to any pharmacotherapy, and that gaps exist in the literature on cultural-based treatment methods for opioid use disorder.

In order to improve care for those suffering from opioid use disorder and bridge the divide between the community and prescribers in Moose Factory, we created a community working group in 2016. The group included community nurses, mental health workers, traditional healers, police and probation officers, physicians, and hospital administrative staff. It united members of the Moose Cree First Nation, MoCreebec Eeyoud Council, and Weeneebayko Area Health Authority, creating a space to strengthen alliances between First Nations' and provincial health services.

The working group identified early on that community input was lacking and that an ideal program would address emotional, physical, mental, and spiritual elements of addiction. It was felt that the group's efforts should give a voice to the pain and injustice experienced by Indigenous peoples by recognizing their path traveled.

The community working group met monthly for a year and devised local guidelines for buprenorphine therapy through a consensus-based process. These guidelines were ultimately supported through a Band Council Resolution from the Moose Cree First Nation and implemented by local health care providers.

The resulting buprenorphine treatment program contains unique community-driven elements, including 4 months of directly observed therapy, special exceptions for land-based activities or hunting, and participation in counseling or traditional healing. In cases where the community working group's preferences diverged from the existing medical literature or expert opinions, the working group's recommendations were implemented. Efforts were made to reduce stigma related to drug use and buprenorphine treatment, including community presentations and education.

Formal evaluation of the program is pending; however, our clinical experience suggests high treatment retention rates and low rates of illicit opioid use. There have been challenges related to health care provider capacity, patients perceiving differential treatment due to multiple prescribers, ongoing

community concerns about the safety of long-term buprenorphine therapy, and limited resources to implement land-based programs. The community working group provides space to address these issues and further coordinate services funded by the First Nations and various levels of government.

The greatest strength of the program is perhaps the inspiration provided by the patients, community members, and providers, who together share a vision of treatment that is culturally focused and aims to recreate ties within families, schools, workplaces, and with the land.

Conclusion

Our experiences in a remote Northern Ontario community demonstrate the strength and opportunities arising from collaboration between a local hospital, community members, and First Nations. This model, applied to a treatment program for opioid use disorder, provides a bridge between the academic literature and traditional teachings, recognizing that there are limits in applying the existing scientific evidence in this unique context. Our efforts were constrained by significant human resource, funding, and social service shortfalls in the region, so important local cultural-based treatment modalities such as land-based therapy are missing from the program.

Call to action

Health care providers and researchers have called for medical regulators and the provincial and federal governments to empower and sustainably invest in community-based buprenorphine treatment initiatives (Mamakwa et al., 2017). It is critical for First Nations leaders to lead this planning. We call on all levels of government to invest in support and evaluation of cultural-based programs of priority to First Nations, to improve access to traditional or cultural-based medicine as a complement to Western approaches. We expect that this will encourage healing and empowerment amid the opioid crisis in Northern Ontario.

Acknowledgements We would like to thank members of the Opioid Dependence Treatment Program Working Group for their important contributions to the program.

We would also like to acknowledge and express gratitude for leadership from the Moose Cree First Nation and MoCreebec Eeyoud Council, support from the Weeneebayko Area Health Authority, and guidance from those with personal or family lived experience.

Compliance with ethical standards

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

References

- Assembly of First Nations. (2011). *The National Native Addictions Partnership Foundation Inc, and Health Canada. Honouring our strengths: a renewed framework for addressing substance use among First Nations people in Canada*. Ottawa, ON: Ministry of Health http://publications.gc.ca/collections/collection_2011/sc-hc/H14-63-2011-eng.pdf. Accessed on 1 July 2016.
- Dhalla, I. A., Mamdani, M. M., Sivilotti, M. L., Kopp, A., Qureshi, O., & Juurlink, D. N. (2009). Prescribing of opioid analgesics and related mortality before and after the introduction of long-acting oxycodone. *CMAJ*, 181(12), 891–896.
- Gomes, T., Mamdani, M. M., Dhalla, I. A., Cornish, S., Paterson, J. M., Juurlink, D. N., et al. (2014). The burden of premature opioid-related mortality. *Addiction*, 109(9), 1482–1488.
- Kanate, D., Folk, D., Cirone, S., Gordon, J., Kirlaw, M., et al. (2015). Community-wide measures of wellness in a remote First Nations community experiencing opioid dependence: evaluating outpatient buprenorphine-naloxone substitution therapy in the context of a First Nations healing program. *Canadian Family Physician*, 61(2), 160–165.
- Kelly, L., Guilfoyle, J., Dooley, J., Antone, I., Gerber-Finn, L., et al. (2014). Incidence of narcotic abuse during pregnancy in northwestern Ontario: three-year prospective cohort study. *Canadian Family Physician*, 60(10), e493–e498.
- Kimber, J., Larney, S., Hickman, M., Randall, D., & Degenhardt, L. (2015). Mortality risk of opioid substitution therapy with methadone versus buprenorphine: a retrospective cohort study. *Lancet Psychiatry*, 2(10), 901–908.
- Mamakwa, S., Kahan, M., Kanate, D., Kirlaw, M., Folk, D., et al. (2017). Evaluation of 6 remote First Nations community-based buprenorphine programs in northwestern Ontario: retrospective study. *Canadian Family Physician*, 63(2), 137–145.
- Mattick RP, Breen C, Kimber J, Davoli M. (2014). Buprenorphine maintenance versus placebo or methadone maintenance for opioid dependence. *Cochrane Database of Systematic Reviews*; CD002207.
- Resolution 09/92. (2009). *Prescription drug abuse state of emergency*. Thunder Bay, ON: Nishnawbe Aski Nation.
- Rush B, Kirkby C, Furlong A. (2016). *Northeast local health integration network addiction services review*. Timmins, ON.
- Srivastava, A., Kahan, M., & Nader, M. (2017). Primary care management of opioid use disorders: abstinence, methadone, or buprenorphine-naloxone? *Canadian Family Physician*, 63(3), 200–205.