Prescription for Life

This report provides key actions urgently needed to improve opioid safety and reduce accidental opioid overdose fatalities and injuries by expanding access to the emergency medicine naloxone.

Massive increases[1] in opioid prescribing have made Canada a world leader in per-capita prescription opioid consumption[2] and Ontario a leading province in opioid prescribing[3] and high dose opioid dispensing.[4] Ontario has witnessed 13 years of increasing and record-setting opioid overdose fatalities,[5,6] which now rank as the third leading cause of accidental death,[7] and more than double the number of drivers killed in motor vehicle collisions.[8] More than 5000 Ontarians have died of an opioid overdose since 2000, the vast majority unintentionally.[9] Non-fatal opioid overdoses have been estimated at 20-25 times the number of fatal overdoses and can be a significant contributor to morbidity[10] however, data on prevalence and injury burden are limited.[11,12] Opioid-related hospital emergency department (ED) visits in Ontario have increased significantly,[13] and hospital stays across Canada are up 23%.[14]

It is critical to understand that people who are at-risk of an accidental overdose[15] include individuals who are taking opioids as prescribed,[16-20] in addition to people using opioids non-medically.[21] Effective opioid overdose prevention and intervention targets both opioid-using populations- and potential witnesses.

Naloxone is the opioid antagonist that has been used to effectively revive victims of opioid overdose for decades, in hospital emergency rooms and by select paramedics. A limited "take-home" naloxone program was recently launched in Ontario,[22] however, barriers prevent dispensing to most Ontarians at risk of experiencing or witnessing an opioid overdose; an opioid overdose victim cannot save themselves. Considered as an essential part of the First Aid toolbox, expanded low-barrier naloxone access will reduce injuries, save lives,[23-30] and begin to provide similar levels of care that are dedicated to reducing other preventable deaths.

We can do much better at responding to the thousands of opioid-related medical emergencies that are certain to occur. As Peterborough Police Chief Murray Rodd noted when speaking of opioid overdoses and naloxone, "It could be anybody's mother or father, anybody's brother or sister - we have to respond appropriately".[31]

Recommendations

The Municipal Drug Strategy Co-ordinator's Network of Ontario recommends the following actions to reduce accidental opioid overdose fatalities and injuries in our communities:

1. **Add naloxone to Provincial, Federal and Veterans Affairs Formularies**
    a. Ontario Formulary Ontario Drug Benefit Plan (ODB), General Benefits
    b. Federal Formulary and
    c. Veterans Affairs Canada Formulary

    The emergency medicine naloxone is a post-patent, World Health Organization (WHO) recommended[32] Essential Medicine[33] that (temporarily) reverses an opioid overdose. Naloxone should be on all government drug formularies for the same reason that epinephrine (e.g. EpiPen®, Allerject™) is: it is the emergency medicine of choice and a proven lifesaver. More than 150 opioid

formulations are on the Ontario Drug Formulary (ODB, General Benefits),[34] but not the essential lifesaver naloxone. The absence of Formulary standing is a barrier to patient safety and for physicians who wish to prescribe naloxone alone or with opioids for at-risk patients and potential Good Samaritans (witnesses).

2. Increase onsite naloxone access

a. The Ministry of Health and Long Term Care to expand naloxone and kits beyond select Public Health Units and Hepatitis C programs

Ontario has a 'take home' naloxone program with onsite access that is limited to participants of select HIV and HCV programs and has helped to successfully reverse opioid overdoses. The existing administrative arrangement precludes equitable and expanded access as per the Minister's promise of 2012.[35] All Ontarians at risk for an opioid overdose, and potential Good Samaritans such as parents and friends, should have access to this essential lifesaver. For example, targeted onsite dispensing via medical staff, including Registered Nurses, as well as non-medical staff providing outreach, shelter, withdrawal management, and addiction treatment services, and in primary care settings are among the priority options.

b. The Ministry of Health & Long-Term Care to provide naloxone and kits to patients receiving Opioid Substitution Therapy (OST)

The MOHLTC should provide naloxone and kits to OST patients given that portions of the patient roster at OST clinics are considered high-risk for an accidental overdose.[36-40] Methadone-related fatalities have been increasing for several years[41] and physicians and other care providers are willing to dispense naloxone onsite to their patients.

c. The Ministry of Health & Long-Term Care and area Local Health Integration Networks to ensure naloxone and kits are provided at Ontario hospitals

Ontario hospitals treat thousands of overdose victims each year. A major predictor of an accidental opioid overdose is having experienced a non-fatal overdose in the past.[42,43] Frequency of ED visits are a predictor of fatal overdose.[44] The Canadian Paediatric Society's "Emergency Treatment of Anaphylaxis in Infants and Children"[45] provides a discharge protocol relevant for people at risk of experiencing or witnessing an overdose. Naloxone dispensing is a promising practice at select hospitals in the United States,[46-50] and currently three Canadian hospitals dispense naloxone through inpatient and ED services.[51]

d. The Ministry of Community Safety and Correctional Services, Corrections Canada, and Public Safety Canada to provide naloxone and kits to high-risk prisoners leaving correctional institutions

People released from correctional facilities are at an exceptionally elevated risk for accidental overdose death upon release.[52-59] Forty-three percent of opioid-related deaths amongst Ontario inmates occurred within 7 days of release.[60] Scotland's national naloxone program has cut the fatality rate by almost half in just a few years.[61] England's N-ALIVE program was a proven success for discharged inmates exiting 15 prisons.[62] New York State's Department of Corrections provides one example of a formal naloxone program in the U.S.A.[63] Correctional Services Canada noted the importance of naloxone access in discharge planning and transfer guidelines provided in 2014.[64]

e. Health Canada to provide naloxone and kits to Aboriginal, Inuit and Metis nations as requested

In 2007, opioid per capita prescribing in Ontario's First Nations was over 52% higher than the rest of Ontario[65]. In 2009, the Nishnawbe Aski Nation declared a State of Emergency due to an epidemic of opioid addiction and death in 49 northern communities,[66] as did Eabametoong and Cat Lake.[67] In 2014-15, Alberta's Blood Tribe witnessed a serious rise in fentanyl-related deaths[68], for which Health Canada, possibly for the first time, provided naloxone kits[69] that enabled the community to successfully reverse several overdoses.[70]

3. Ensure health professionals and others can be lifesavers

a. The Ministry of Health & Long-Term Care work with the Ontario College of Pharmacists, the College of Nurses of Ontario, the Ontario Pharmacists Association and the Registered Nurses Association of Ontario to add naloxone to the list of medicines these health professionals can prescribe

Pharmacists and nurses have key roles in opioid safety. Pharmacists have unique pharmacological expertise, access to patient history, frequent interaction with physicians regarding opioids[71] and a high level of patient trust.[72,73] An Ontario study revealed that 56.1% of fatal opioid overdose victims had filled a prescription for opioids in the month preceding their death (66.4% had seen a physician).[74] Pharmacists, associations and legislators in several U.S. states are already providing patients with improved opioid safety via naloxone.[75-81] The Ontario pharmacists' Scope of Practice recently changed to include flu vaccines and tobacco cessation products[82], and naloxone should be included in this expansion too. The Registered Nurses' Association of Ontario recently released best practice guidelines on engaging clients who use substances[83] and have advocated for expanded naloxone distribution.[84] In British Columbia, Registered Nurses and Nurse Practitioners are permitted to "*compound, dispense or administer Schedule 1 drugs autonomously for the purpose of treating opiate overdose*".[85] Naloxone should be added to the Scope(s) of Practice for nurses and pharmacists.

b. The Ministry of Community Safety and Correctional Services, Corrections Canada, Public Safety Canada, the Ontario Provincial Police and the Royal Canadian Mounted Police to provide naloxone and training to select jail, correctional centre, detention centre and policing staff

Federally, 80% of incarcerated males have an identified 'substance abuse disorder.[86] No prison is 'drug-free'[87,88] and officials from Public Safety, the Correctional Service and the Parole Board of Canada conclude drug-free prisons are "an aspirational goal, just as is achieving drug-free societies".[89] In Ontario, overdose deaths while in custody have been the subject of several (mandatory) Coroner's Inquests.[90] Twenty percent of opioid-related inmate deaths in Ontario (2006-2008) occurred while in custody.[91] Risky drug use, specifically opioid use, is significant inside both provincial[92,93] and federal[94,95] facilities. Staff in correctional institutions, detention centres and other custodial facilities should be trained in overdose prevention generally, have naloxone in their first aid kit, and be trained to administer it. The U.S. National Commission on Correctional Health Care supports increased access to and use of naloxone in correctional facilities.[96] The College of Physicians and Surgeons of Ontario (CPSO) recommends naloxone on site.[97] Even the best response times from Emergency Medical Services can be too slow to avert injuries or death.

4. Develop Overdose Policies

a. The Province of Ontario and the Government of Canada to Develop Real Time and Online Monitoring and Surveillance

Throughout the United States data exists from surveillance and monitoring to inform policy and programming that is simply not collected and available in Canada, including Ontario. Health Canada cannot provide a national snapshot of drug-related deaths for any year; data from the Office of the Chief Coroner for Ontario is at least a year behind; the Ontario Ministry of Community Safety & Correctional Services does not track overdoses occurring in its correctional facilities; the Ontario Health Minister's promise of 2012 to implement "real-time surveillance of opiate overdose and withdrawal in 73 emergency departments"[98] has yet to be realized; the MOHLTC's Public Health Division has yet to implement monitoring and surveillance; and the Ontario Narcotics Monitoring System appears limited in functionality. There is no early warning system with evidence from real-time monitoring and surveillance – critical in a post-OxyContin era of non-pharmaceutical bootleg fentanyl[99,100] and, in spite of clinical prescribing guidelines, increased high-dose opioid prescribing.[101] These are persistent, systemic problems[102] that limit efforts to understand, address and evaluate opioid-related harms.

b. The Ministry of Health & Long-Term Care and the College of Physicians & Surgeons of Ontario to provide clear third-party liability guidance and eliminate any identified barriers

An opioid overdose victim cannot save themselves. Potential third party liability concerns could arise when naloxone i) is administered by a bystander/Good Samaritan when the victim does not have a prescription, and/or ii) is prescribed to a person not using opioids (e.g. concerned parent). The concern for prescribers and administrators may be real or perceived. We request the MOHLTC and the CPSO to provide clear third-party liability guidance, and if necessary, to identify, communicate and eliminate any barriers that prevent third-party prescribing, dispensing and administration.

c. The Province of Ontario and the Government of Canada to develop Overdose Prevention and Intervention Plans

U.S. governments and agencies at all levels have shown leadership on reducing opioid-related deaths via strategic plans with defined overdose reduction targets, dedicated funding and regulatory-legislative changes as required.[103-105] In Canada, no provincial or federal plan exists despite similar opioid consumption rates and opioid overdose rates at record levels. A "leading public health and safety concern"[106] and a "public health crisis"[107] merits a strategic plan not unlike what is in place for other significant causes of accidental death and injury such as motor vehicle collisions and infectious diseases.

d. The Government of Canada to create Good Samaritan Legislation

At most accidental overdose emergencies involving illicit substance use, a witness is present.[108-113] In an Ontario study of barriers to calling 911 during an (illicit) overdose emergency, respondents reported that 911 was called just 46% of the time at the last witnessed overdose,[114] the primary barrier cited being fear of police presence and the potential for criminal charges.[115] By contrast, call rates for cardiac arrest are above 90%.[116] Good Samaritan Laws that provide limited immunity from prosecution for witnesses and victims and have been passed or are pending in more than 27 U.S. states,[117] often with bi-partisan support and alongside bills that expedite improved naloxone access. In Canada, a Good Samaritan Law is a federal responsibility.

e. Health Canada to reschedule naloxone
Naloxone should be rescheduled to ensure that health care professionals other than physicians can provide naloxone for clients without a physician's prescription. For example, pharmacist-prescribed naloxone is an increasingly common practice in several U.S. states[118] and entirely appropriate in the Canadian context for reasons outlined in recommendation 3b.

f. Health Canada to encourage additional naloxone formulations
The sole format approved in Canada is intra-muscular, requiring an injection. Although typically more expensive, auto-injectors similar to an EpiPen®, and intra-nasal devices are available in the USA and Europe but not in Canada.

Conclusion

The Municipal Drug Strategy Co-ordinator's Network of Ontario calls on the Province of Ontario, the Government of Canada, and others with a critical role in these recommendations to take action now to prevent deaths due to accidental opioid overdose. Expanded naloxone access can be quick to implement and is a WHO Essential Medicine because it is the "safest, most efficacious and cost effective medicine for priority conditions".[119]

Members of the Municipal Drug Strategy Co-ordinator's Network of Ontario (MDSCNO) work in more than 155 municipalities, counties, townships and First Nations communities across the province. These multi-sectoral initiatives aim to reduce the harms of alcohol and other drugs, including prescription medications. Strategies are tailored to each community, and based on the integrated components of prevention, harm reduction, treatment and enforcement/justice.

The MDSCNO has no conflicts to declare and receives no funding.
The MDSCNO endorsed these recommendations in May 2015 (2 abstentions).

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