



Opioid stewardship in the management of chronic non-cancer pain

The role of the community pharmacist in Canada



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Highlights

- An estimated one in five Canadians suffer from chronic non-cancer pain (CNCP), and it costs the Canadian healthcare system \$46 billion a year^{1,2}
- Opioid analgesics are commonly used to treat CNCP in Canada¹; however, there is limited evidence supporting their use for the condition⁶
- Opiate use can lead to addiction, dependence and overdose^{4,6,8}
- Community pharmacists can help manage these risks through counselling and referring patients to support services such as take-home naloxone (THN) programmes^{11,12,13}
- Access to THN programmes across Canada is uneven¹³
- Community pharmacists can help optimise opioid prescribing and dispensing practices by implementing The 2017 Canadian Guideline for Opioids for Chronic Non-Cancer Pain¹
- The Canadian Pharmacists Association (CPhA) believes that tackling opioid abuse will require a multipronged approach with the engagement of a cross section of stakeholders¹⁴

Background about chronic non-cancer pain and opioid prescribing

Chronic non-cancer pain (CNCP) is any painful condition of a non-malignant nature that persists for three months or longer¹. An estimated one in five Canadians suffer from CNCP², and it has been reported that 54 percent of Canadians experience CNCP for more than 10 years¹, while 25 percent experience it for more than 20 years¹.

The causes of CNCP are multifactorial and may arise from conditions such as osteoarthritis, migraine or even fibromyalgia, and the condition often leads to absences from work and lost work productivity¹. CNCP has a greater prevalence in people age 65 years and over¹. It affects an estimated 65 percent of people living in the community and 80 percent of those living in longterm care facilities³.

Currently, CNCP in working-age adults costs the Canadian healthcare system \$46 billion a year, which includes both direct and indirect costs of managing the condition¹. This financial cost is likely to increase as the population in Canada continues to age; projections estimate that one in four Canadians will reach or surpass 65 years of age by 2036³.

CNCP is often managed with prescription opioid analgesic medications, and the use of those drugs is on the rise in Canada. The country now has the second-highest rate of opioid prescribing in the world¹, with dispensing per capita that is five times higher than that of the United Kingdom and four times greater than Germany⁴.

Some studies suggest that the high rates of opioid prescribing in Canada may have been partially influenced by the marketing efforts of pharmaceutical companies throughout the last 20 years^{1,4,5}. Furthermore, opioids are often used to manage CNCP despite a limited understanding of their safety and efficacy for treating CNCP⁶. Another concern is that the number of opioid prescriptions that are used to tackle CNCP has increased in Canada despite the prevalence of CNCP remaining almost unchanged¹.

The challenges associated with opioids

While opioids can be effective in short-term pain management, little is known about their effectiveness in CNCP. A Cochrane meta-analysis by Nobel et al. showed that the evidence supporting long-term opioid use in CNCP is weak at best⁶. The study goes on to highlight how patients taking opioids for CNCP are more likely to discontinue therapy due to adverse events and insufficient pain relief⁶.

Typical adverse effects of opioids range from oral side effects such as dry mouth, to gastrointestinal effects such as constipation or nausea, which can affect a patient's quality of life if poorly managed^{1,7,8}. Such side effects have been shown to occur more frequently in opioid analgesics than non-opioid analgesics such as non-steroidal anti-inflammatory drugs (NSAIDs)¹.

Opioids also exhibit strong addiction potential, and patients who use them on a long-term basis might be at risk of developing tolerance, physical dependence or overdose toxicity^{4,8}. While physical dependence manifests as withdrawal symptoms upon cessation, including stomach cramps, vomiting and insomnia⁴, overdose manifests in the form of severe respiratory depression and bradycardia, which may lead to death^{4,9}. The latter has been shown to occur in 0.1 percent of patients¹, a number that is rising in Canada^{1,4}.

In Ontario, the number of opioid-related deaths rose from 121 in 1991 to 540 in 2010¹. Overdose may occur if a patient who is stabilised on an opioid analgesic ceases the medication, loses tolerance to the therapy and then restarts the therapy at a dose that may no longer be tolerable⁴—as might occur in patients who express a desire to wean off opioid medications, but fail to do so.

Additionally, the risk of opioid overdose increases if a patient uses higher-dose drugs, longer-acting drug formulations or more potent drugs¹⁰. This is notably seen in the case of fentanyl, which is an opioid that is 100 times more potent than morphine and has been associated with mortality in Canada⁴.

Combatting opioid overdose can be challenging and often requires risk identification and mitigation initiatives. Those tactics can be spearheaded by community pharmacists who may engage patients using a combination of pharmacological support and educationally focussed counselling.

Practical guidance

Who is at risk of opioid overdose¹⁰?

- Opioid-naïve patients either being initiated on opiates for the first time, or who are past users of opiates and likely to return to using them
- Patients taking opioid medications at higher-than recommended doses or more frequently than prescribed
- Patients switching opioid medications to a higher dose or a more potent medication
- People who mix opioids with other opiates or sedative drugs such as benzodiazepines, sleeping pills or muscle relaxants
- Patients using injectable opiates
- Patients taking drugs of an unknown strength or potency, such as street drugs like heroin or cocaine
- Patients with comorbidities such as renal impairment, hepatic impairment or respiratory diseases

Non-judgemental, goal-directed and educationally focussed counselling has been shown to help mitigate risk behaviours and potentially promote safer drug use¹¹.

Practical guidance

Pharmacist-led education about the signs and symptoms of opiate overdose is important¹⁰.

- Bradypnea that is weak or non-existent
- Miosis
- Cyanosis of the lips and nails
- Cold, clammy skin
- Difficulty walking
- Dizziness, drowsiness or confusion
- Insomnia
- Dysarthria
- Choking, gurgling or snoring sounds

If pharmacists utilise pharmacological strategies to prevent opioid overdose, opioid antagonists such as naloxone may be used^{4,12}. Naloxone is a non-selective opioid receptor antagonist that reverses opioid toxicity and prevents life-threatening respiratory depression^{12,16}. The drug is available as either an intramuscular or intranasal preparation in Canada and requires careful counselling to ensure correct administration^{13,17,18}.

Challenges to naloxone access

Recent changes to pharmacy services across Canada have spurred improved access to naloxone through initiatives that permit its supply without a prescription. Access is available across all 10 provinces and three territories for patients at risk of overdose or in an emergency¹³.

Unfortunately, access to take-home naloxone (THN) services is uneven across the provinces in Canada. Factors such as strict eligibility criteria and procurement challenges for community pharmacies are two major reasons for the disparate availability of the rescue medication¹³. A case in point is seen in Ontario where patients are required to present a valid health card before they are eligible to receive free naloxone without a prescription. Such requirements may deter vulnerable patient populations at risk of overdose from seeking help¹³.

However, progress has been made to tackle naloxone access challenges, and recently the Canadian Pharmacists Association (CPhA) published a naloxone environmental scanning tool to bring to light these obstacles and spearhead a coordinated effort between pharmacists, policy makers and the government to facilitate change¹³.

Optimising opioid medication management

Community pharmacists have an important role to play in helping ensure that opiates are only prescribed when necessary, in the right quantities and only after other therapeutic approaches have been optimised.

Recent guidelines published by the National Pain Centre, based at McMaster University in Ontario, may support pharmacists with managing the initiation, dosing, rotation and tapering of opioids in CNCP¹.

The 2017 Canadian Guideline for Opioids for Chronic Non-Cancer Pain serves as a framework that pharmacists may follow to optimise opioid analgesic use in patients.

In addition, pharmacists may also suggest pharmacy support services, such as needle exchange initiatives, safe disposal and addiction management services such as methadone and buprenorphine/naloxone dispensing, to provide a more rounded approach to tackling opioid-related harm^{4,14,15}.

How will the opioid stewardship roles for community pharmacists evolve?

There is little doubt that the role community pharmacists play in tackling the opioid crisis in Canada is evolving and becoming ever more important as the pressure mounts across the healthcare system^{13,14}. The CPhA has proposed changes that should help improve pharmacy practice for opioid management.

Practical guidance

The 2017 Canadian Guideline for Opioids for Chronic Non-Cancer Pain sets out 10 recommendations¹:

1. Clinicians should optimise the use of non-opioid pharmacological therapy and non-pharmacological therapy, instead of initiating a trial with opioids.
2. Clinicians may test opioids in patients with persistent CNCP if they are already optimised on non-opioid therapy and if they do not have a history of substance misuse or psychiatric disorders.
3. For patients with existing substance use disorders, clinicians should not initiate opioids due to a greater risk of adverse outcomes. The underlying disorder should be addressed first.
4. Similarly, for patients with an existing psychiatric disorder, clinicians should first aim to treat the disorder before initiating a trial with opioids.
5. Patients with a substance use disorder who are already stabilised on non-opioid therapy should be maintained on this therapy rather than a trial of opioids.
6. For patients who are about to be initiated on a long-term opioid, the dose should be restricted to less than 90 mg of morphine equivalent daily. In some cases, doses may exceed this upper limit, but this should be supported by a second opinion.
7. Opioid dose restrictions of less than 50 mg of morphine equivalents daily should also be considered, especially in patients where optimal pain control is achieved and increasing the dose further would put the patient at greater risk of adverse effects.
8. Clinicians should consider rotating to other opioids, rather than maintaining the same opioid in patients receiving opioids for CNCP but who are also experiencing persistent adverse effects and poorly controlled pain. Opioid rotation may also support dose reduction.
9. For patients who are taking 90 mg of morphine equivalents per day or more, clinicians should consider gradually tapering the dose to the minimal effective dose that controls the pain, or discontinuing altogether.
10. Patients who are using opioids for CNCP and having trouble weaning off them should be supported by a multidisciplinary team that may include physicians, nurses, psychologists, psychiatrists, physical therapists and pharmacists, among others.

CPhA's first recommendation suggests that pharmacists should be able to prescribe and make amendments to opioid prescriptions¹⁴, a power that Canadian pharmacists do not currently have for medications that fall under the Controlled Drugs and Substances Act¹⁴. CPhA argues that providing pharmacists with prescribing authority for controlled drugs such as opioid medications may lead to improved medication management practices that, in turn could improve patient outcomes¹⁴.

Secondly, the CPA views technology as a driver for improved opioid stewardship in community pharmacies across Canada¹⁴. Electronic drug information databases can provide localised, evidence-based content to help support evaluation of dose, indication, dose adjustment, precautions, adverse effects, interactions and monitoring. Patient education resources are also important for communicating with patients about their health and medications. The advent of integrated prescription monitoring, drug information systems and electronic medication record systems may allow for better patient monitoring, prescribing and dispensing practices in pharmacies¹⁴.

Finally, the CPhA envisions pharmacists working more closely with prescribers, policy makers and other stakeholders to develop and implement initiatives that protect patients from opioid abuse¹⁴. Such efforts may help to spur wider changes in regulation that could limit unnecessary opioid use in pain management. An example would be making codeine products with a strength of less than 8 mg, available as a prescription-only drug to stem the irresponsible abuse of such products, which are currently available over the counter¹⁴.

Conclusion

In conclusion, we feel it is apparent that opioid abuse is a problem across Canada, especially within the realms of CNCP management. We believe Canadian pharmacists are in a strong position to drive the adoption of new best practices and spearhead opioid stewardship. This could be achieved by following The 2017 Canadian Guideline for Opioids for Chronic Non-Cancer Pain¹⁴.

Additionally, pharmacists are suitably poised to facilitate patient education within the community pharmacy setting, and to help support opioid drug users with pharmacy services such as the THN programme.

It is also evident that tackling opioid drug abuse is challenging, as seen by the disparate access to naloxone across the country¹³. Changing established prescribing practices will potentially require a concerted effort between pharmacists and other stakeholders to help ensure opioid drug use is effectively monitored and controlled across the country.

To learn more about opioids and naloxone, use the search features in Micromedex[®] solutions.

Footnotes

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