

DSEN ABSTRACT

Predictors of Chronic Opioid Use in Non-Cancer Community-Dwelling Patients

Summary

- Canada has one of the highest levels of prescription opioid consumption in the world and a current critical concern is regarding how to reduce or prevent opioid-related harms, such as addiction, misuse, abuse and accidental overdose, and death.
- This study identified factors associated with chronic prescribed opioid use in the non-cancer adult population. The ultimate intent would be to help inform practice change at the point of care.
- We studied a population-based cohort of 124,492 non-cancer patients who initiated a prescription opioid in the outpatient setting, focusing on vulnerable populations, elderly and psychiatric patients. Patients were followed to determine, 12 months after opioid initiation, which patients had become a chronic opioid user.
- We found that 3.4% of the cohort went on to become chronic users. This is similar to estimates in other countries.
- In new users of a prescription opioid, the strongest predictors of transition to chronic opioid use were initial supply greater or equal to 30 days and a chronic pain diagnosis.
- Personalized strategies to monitor patients at risk of becoming chronic opioid users may be helpful, but should not compromise optimal pain care.

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What is the current situation?

Canada has one of the highest levels of prescription opioid consumption in the world. Well-known harms of prolonged opioid use include addiction, misuse, abuse, overdose, and death. Regulators need to know how to reduce or prevent opioid-related harms while preserving the highest standards of pain care.

If we could identify factors associated with chronic opioid use, we may be able to plan strategies to prevent unnecessary chronic opioid use and/or consider interventions to mitigate opioid-related harms.

What was the aim of the study?

The main objective of the study was to identify factors associated with chronic prescribed opioid use in the non-cancer adult population.

How was the study conducted?

We conducted a cohort study with population-based data from Quebec's public prescription drug insurance plan. We studied randomly selected non-cancer patients who initiated a prescription opioid in the outpatient setting from January 2012 to December 2016.

Patients were followed to determine, 12 months after opioid initiation, who had become a chronic opioid user. This was defined by at least 90 consecutive days or 120 or more cumulative days of active opioid prescription.

Multivariate logistic regression was used to assess factors potentially associated with transitioning to chronic opioid use, including prescriber's specialty, patient sociodemographic factors, patient co-morbidity including psychiatric disorders, characteristics of the initial opioid prescription (duration, type of drug) and potential indication for opioid including chronic pain conditions.

What did the study find?

- Among 124,492 non-cancer patients initiating a prescription opioid, 4,172 became chronic opioid users, which translated to 3.4% of the cohort. This resembles estimates obtained in recent similar studies from the United States, Europe, and Australia
- The mean duration of opioid use over 12 months was 242.7 days for chronic users and the mean treatment intensity was the equivalent of 41.5 mg morphine per day.
- The majority of patients were dispensed only one opioid product during follow-up, although 10.1% of chronic users used three or more different opioids.
- Factors independently associated with transition to chronic use included:
 - Initial opioid prescription by general practitioner
 - Prescription of multiple opioids concomitantly
 - Initiation of hydromorphone or oxycodone (versus morphine or codeine)
 - Patients of older age and those living in urban areas
- An initial opioid supply equal or greater to 30 days, and a diagnosis associated with chronic pain were the strongest predictors of chronic opioid use.
- Regulators may consider evaluating personalized strategies to monitor patients at risk of becoming chronic opioid users, without compromising optimization of pain care

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