CoLab Network

Summary Report

Opioid Analgesics to Treat Chronic Noncancer Pain in Patients Prescribed Opioid Agonist Therapy or With Opioid Use Disorder

Report Authors

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Knowledge Translation Support

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This Systematic Review was conducted through the Post-Market Drug Evaluation Program.

Executive Summary

Managing chronic noncancer pain in individuals with opioid use disorder (OUD) presents unique challenges, and there is a need for evidence-based guidance in this area. This Systematic Review aimed to summarize evidence on the efficacy, effectiveness, and safety of opioid analgesics, alone or in combination with opioid agonist therapy (OAT), to manage chronic noncancer pain in patients with OUD or a history of OUD. The review included 5 observational studies on safety, revealing that the risk of fatal harm from opioids may decrease in patients who are receiving both opioid analgesics and OAT. However, the limitations and biases of the available studies make it difficult to draw definitive conclusions. No studies exploring efficacy or effectiveness were eligible for inclusion. This review emphasizes the scarcity of evidence in this specific context and the need for rapid and diverse evidence generation to inform decision-making in health care.

Background

OUD is a significant public health concern in North America, with increasing prevalence and associated harms. Chronic noncancer pain and OUD often coexist, with individuals living with both conditions facing greater challenges in managing their health. The available treatments for co-occurring OUD and chronic noncancer pain presents unique challenges, and evidence-based guidance for their management is critical.

Policy Issue

In many provinces and territories, OAT is considered first-line treatment for OUD. However, OAT alone may be insufficient to effectively manage chronic noncancer pain in people with OUD. Opioids for pain management, also known as opioid analgesics, may be needed when other options have been tried but found ineffective. Guidance for supporting pain management in this population is needed.

Policy Questions

1. How can opioid analgesics be used safely and effectively in patients with chronic noncancer pain who are currently receiving OAT?
2. How can opioid analgesics be used safely and effectively in patients with chronic noncancer pain who are not receiving OAT and have OUD or a history of OUD?
3. Are these patients at a higher risk of opioid-related toxicity or relapse? Is there an interval following OUD remission when risk of relapse is minimal?

Objective

This Systematic Review aimed to summarize evidence on the efficacy, effectiveness, and safety of opioid analgesics alone or in combination with OAT to manage chronic noncancer pain for patients with OUD or a history of OUD.

Results

Selection of Studies

Researchers used a systematic review approach and included 5 observational studies exploring the safety of opioid analgesics alone or in combination with OAT for the management of chronic noncancer pain for patients with OUD or with a history of OUD. The studies varied in the number of participants, age ranges, sex and gender proportions, and geographical locations. No studies exploring efficacy or effectiveness met the inclusion criteria.

Critical Appraisal

One study was assessed at a low risk of bias, while the remaining 4 studies were found to have high risk of bias in at least 1 domain. Three of the studies were at high risk of bias due to unadjusted analysis for confounders. Two studies conducted adjusted analysis, but caution is advised when interpreting this evidence.

Findings

The risk of fatal harm from opioids may decrease in patients with chronic noncancer pain and OUD who receive both opioid analgesics and OAT treatment compared to those who only receive opioid analgesics. However, the evidence supporting this is not very strong.

It is uncertain whether:

- the risk of fatal opioid-related toxicity is altered in patients with chronic noncancer pain who are prescribed opioid analgesics and have OUD compared to those who do not have OUD
- long-term opioid analgesic therapy in patients with chronic noncancer pain and OUD affects the combined outcome of fatal and nonfatal opioid-related harm
- a history of OUD in the past 2 years increases the likelihood of prolonged opioid analgesic use in patients with chronic noncancer pain
- the dosage of prescribed opioid analgesics is altered in patients with chronic noncancer pain and OUD who are undergoing methadone maintenance therapy.

Limitations

In addition to the bias concerns, there are other key limitations to this Systematic Review.

The generalizability of evidence to the Canadian context is challenging due to the limited representation of groups that are racialized or other equity-deserving groups, adolescents, and Indigenous Peoples in the studies. In addition, the data on opioid analgesics, nonpharmaceutical drugs, and OAT practices may not fully reflect the current Canadian context due to substantial changes in these areas over the past decade. The available studies on opioid-related harms have limitations in determining whether the harms are caused by pharmaceutical or nonpharmaceutical sources, which affects the interpretation of the results.

Implications for Policy-Making

This report sheds light on a significant gap in the existing literature, revealing a lack of evidence on the safety, and especially the efficacy and effectiveness, of opioid analgesics in the specific context of patients with chronic noncancer pain and coexisting OUD. It highlights the impact of this scarcity of evidence on health care decision-making at various levels. Rapid and diverse evidence generation and synthesis, including real-world data, qualitative evidence, and case series, are needed to inform and optimize decision-making in this complex area.

Considerations

Post-Market Drug Evaluation (PMDE) projects aim to produce health policy issue evidence and are not linked to a recommendation.

This work was intended to inform health policy. Questions regarding opioid analgesics, OUD, or OAT should be directed to a health care professional.

For more information on CoLab and its work, visit the **CoLab website**.

For the full scientific report:

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About CADTH: CADTH is a not-for-profit organization responsible for providing Canada's health care decision-makers with objective evidence to help make informed decisions about the optimal use of drugs and medical devices in our health care system.

About CoLab: CoLab is a pan-Canadian network of experts in applied research, scientific methods, and data analysis. CoLab members work with CADTH's Post-Market Drug Evaluation Program to produce credible and timely evidence on post-market drug safety and effectiveness.