Protocol Brief

St. Michael's
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Use of hydromorphone controlled release compared to immediate release in adults and risk of HIV, hepatitis C, and infective endocarditis: A systematic review

Rationale

To identify risk of infective endocarditis (IE), hepatitis C virus (HCV) infection and/or human immunodeficiency virus (HIV) infection in individuals exposed to hydromorphone controlled release (HCR) compared with other opioids and determine the characteristics of HCR users.

Implications

After conducting a brief search of studies that identify high-quality reviews which includes HCR exposure and the risk of IE, HCV, and/or HIV, search results identified no existing overall synthesis in this field.

PROSPERO registration number:
CRD42021289020

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Background

- To explore the potential increased risk of IE, HIV infection and/or HCV infection in relation to parenteral (intravenous) abuse/use of hydromorphone controlled-release capsule (HCR).

Objective

- To identify risk of IE, HCV infection and/or HIV infection in individuals exposed to HCR compared with other opioids and determine the characteristics of HCR users.

Objective

- **Eligibility criteria:**
  - **Population:** Adults aged 18 years and older.
  - **Interventions:** HCR through prescription, illicit use or persons who inject drugs (PWID).
  - **Comparators:** Immediate release (oral) hydromorphone, injectable HCR opioids.
  - **Outcomes**: Incident cases of IE, HCV infection, and HIV infection
  - **Study designs:** Randomized controlled trials (RCTs), non-randomized trials (NRCTs), and observational studies will be included.
  - **Time periods:** No restrictions will be imposed.
- **Study selection:** A screening form based on the eligibility criteria will be prepared and a brief calibration exercise will be conducted prior to citation and full-text screening. This exercise includes all reviewers using a random sample of 5 included articles. Included studies will be abstracted by two reviewers independently using Synthesi.SR. Conflicts will be resolved through discussion or involvement of a third reviewer.
- **Data abstraction/collection:** Items for data abstraction will include study characteristics, patient characteristics, intervention details, comparator details, and outcome results at the longest duration of follow-up.
- **Synthesis:** The patient characteristics, study characteristics, and risk of bias results will be presented descriptively in tables and figures. If appropriate, a random effects meta-analysis will be considered, using the Cochrane Handbook methods.

Knowledge Translation Strategy

- Summary of findings will be sent to Health Canada and other relevant DSEN policy-makers as a summary report and policy brief. The findings will also be submitted to an open-access, peer-reviewed journal for publication.

Funded by: Canadian Institutes of Health Research Drug Safety and Effectiveness Network

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