Pharmacological Interventions for the Prevention or Treatment of Cannabis Use: Clinical Effectiveness and Guidelines
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**Cite As:** Pharmacological Interventions for the Prevention or Treatment of Cannabis Use: Clinical Effectiveness and Guidelines. Ottawa: CADTH; 2017 Sep. (CADTH rapid response report: reference list).

**Acknowledgments:**

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**About CADTH:** CADTH is an independent, 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, medical devices, diagnostics, and procedures in our health care system.
Research Questions

1. What is the clinical effectiveness of pharmacological interventions for the prevention or treatment of cannabis use in adults?

2. What are the evidence-based guidelines associated with the use of pharmacological interventions for the prevention or treatment of cannabis use in adults?

Key Findings

Four systematic reviews and two randomized controlled trials were identified regarding pharmacological interventions for cannabis use disorder.

Methods

A limited literature search was conducted on key resources including PubMed, Medline, Embase, The Cochrane Library, University of York Centre for Reviews and Dissemination (CRD) databases, Canadian and major international health technology agencies, as well as a focused Internet search. Methodological filters were applied to limit retrieval to health technology assessments, systematic reviews, meta-analyses, randomized controlled trials, and guidelines. Where possible, retrieval was limited to the human population. The search was also limited to English language documents published between January 1, 2012 and September 14, 2017. Internet links were provided, where available.

Selection Criteria

One reviewer screened citations and selected studies based on the inclusion criteria presented in Table 1.

Table 1: Selection Criteria

<table>
<thead>
<tr>
<th>Population</th>
<th>Adults ≥ 18 years of age using cannabis (looking to either prevent cannabis use, reduce cannabis use [in those without an addiction], or for use in cannabis use disorders)</th>
</tr>
</thead>
</table>
| Intervention | Pharmacological interventions:  
- Oral tetrahydrocannabinol  
- Cannabidiol  
- Mirtazapine  
- Rimonabant  
- Buspirone  
- Dronabinol |
### Comparator

Q1: Pharmacological interventions:
- Oral tetrahydrocannabinol
- Cannabidiol
- Mirtazapine
- Rimonabant
- Buspirone
- Dronabinol
- Sativex (Nabiximols)
- N-acetylcysteine
- Lofexidine

Q2: No comparator

### Outcomes

Q1: Clinical effectiveness (cannabis use reduction, improved quality of life, etc.)

Q2: Guidelines

### Study Designs

Health technology assessments, systematic reviews, meta-analyses, randomized controlled trials, evidence-based guidelines

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## Results

Rapid Response reports are organized so that the higher quality evidence is presented first. Therefore, health technology assessment reports, systematic reviews, and meta-analyses are presented first. These are followed by randomized controlled trials and evidence-based guidelines.

Four systematic reviews and two randomized controlled trials were identified regarding pharmacological interventions for cannabis use disorder. No relevant health technology assessment, meta-analyses, or evidence-based guidelines were identified.

Additional references of potential interest are provided in the appendix.

### Health Technology Assessments

No literature identified.

### Systematic Reviews and Meta-analyses


Randomized Controlled Trials


Guidelines and Recommendations

No literature identified.
Appendix — Further Information

Randomized Controlled Trials

Alternative Intervention


Alternative Population


Alternative Comparator


PubMed: PM22706327

Review Articles


PubMed: PM27027272