

CADTH RAPID RESPONSE REPORT: REFERENCE LIST

Nabilone for the Treatment of Post-Traumatic Stress Disorder: Clinical Effectiveness and Guidelines

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Research Questions

1. What is the clinical effectiveness of nabilone for the treatment of post-traumatic stress disorder in adults?
2. What are the evidence-based guidelines regarding the use of nabilone for the treatment of post-traumatic stress disorder in adults?

Key Findings

One randomized controlled trial and one non-randomized study were identified regarding the clinical effectiveness of nabilone for the treatment of post-traumatic stress disorder in adults. No relevant evidence-based guidelines were identified.

Methods

A limited literature search was conducted on key resources including Medline in Ovid, PsycInfo in Ovid, PubMed, 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. No filters were applied to limit the retrieval by study type. The search was also limited to English language documents published between January 1, 2013 and October 2, 2018. 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

Population	Adults with a diagnosis of post-traumatic stress disorder
Intervention	Nabilone (Cesamet)
Comparator	Q1: Active treatments, placebo, or no treatment Q2: No comparator
Outcomes	Q1: Clinical effectiveness (e.g., decreased symptoms, improved quality of life) and safety (e.g., harms, adverse events, abuse and misuse) Q2: Guidelines
Study Designs	Health technology assessments, systematic reviews, meta-analyses, randomized controlled trials, non-randomized studies, and evidence-based guidelines.

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, non-randomized studies, and evidence-based guidelines.

One randomized controlled trial and one non-randomized study were identified regarding the clinical effectiveness of nabilone for the treatment of post-traumatic stress disorder in adults. No relevant health technology assessment, systematic reviews, 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

No literature identified.

Randomized Controlled Trials

1. Jetly R, Heber A, Fraser G, Boisvert D. The efficacy of nabilone, a synthetic cannabinoid, in the treatment of PTSD-associated nightmares: A preliminary randomized, double-blind, placebo-controlled cross-over design study. *Psychoneuroendocrinology*. 2015 Jan;51:585-588.

[PubMed: PM25467221](#)

Non-Randomized Studies

2. Cameron C, Watson D, Robinson J. Use of a synthetic cannabinoid in a correctional population for posttraumatic stress disorder-related insomnia and nightmares, chronic pain, harm reduction, and other indications: a retrospective evaluation. *J Clin Psychopharmacol*. 2014 Oct;34(5):559-564.

[PubMed: PM24987795](#)

Guidelines and Recommendations

No literature identified.

Appendix — Further Information

Previous CADTH Reports

Mixed interventions

3. Post-traumatic stress disorder: summary of evidence of the clinical effectiveness of treatments. Ottawa (ON): CADTH; 2018. <https://www.cadth.ca/tools/post-traumatic-stress-disorder-summary-evidence-clinical-effectiveness-treatments> Accessed 2018 Oct 4.

Non-synthetic cannabinoid, mixed classes, or class not specified

4. Medical marijuana for post-traumatic stress disorder: a review of clinical effectiveness and guidelines. (Rapid response report: Summary with critical appraisal). Ottawa (ON): CADTH; 2017. <https://www.cadth.ca/medical-marijuana-post-traumatic-stress-disorder-review-clinical-effectiveness-and-guidelines-0> Accessed 2018 Oct 4.
5. Cannabinoids for the treatment of post-traumatic stress disorder: A review of the clinical effectiveness and guidelines. (Rapid response report: Summary with critical appraisal). Ottawa (ON): CADTH; 2012. <https://www.cadth.ca/cannabinoids-treatment-post-traumatic-stress-disorder-review-clinical-effectiveness-and-guidelines-1> Accessed 2018 Oct 4.
6. Cannabinoids for the treatment of post-traumatic stress disorder: A review of the clinical effectiveness and guidelines. (Rapid response report). Ottawa (ON): CADTH; 2009. <https://www.cadth.ca/cannabinoids-treatment-post-traumatic-stress-disorder-review-clinical-effectiveness-and-guidelines-0> Accessed 2018 Oct 4.

Position statement

7. Morgenthaler TI, Auerbach S, Casey KR, et al. Position paper for the treatment of nightmare disorder in adults: An American Academy of Sleep Medicine position paper. *J Clin Sleep Med*. 2018 Jun 15;14(6):1041-1055.

[PubMed: PM29852917](#)

Review Articles

Non-synthetic cannabinoid, mixed classes, or class not specified

8. Hill MN, Campolongo P, Yehuda R, Patel S. Integrating endocannabinoid signaling and cannabinoids into the biology and treatment of posttraumatic stress disorder. *Neuropsychopharmacology*. 2018 Jan;43(1):80-102.
[PubMed: PM2018-02777-005](#)
9. Shishko I, Oliveira R, Moore TA, Almeida K. A review of medical marijuana for the treatment of posttraumatic stress disorder: Real symptom re-leaf or just high hopes? *Mental Health Clinician*. 2018; 8(2):86-94.
<http://mhc.cnpn.org/doi/abs/10.9740/mhc.2018.03.086>. Accessed 2018 Oct 4.

10. Loflin MJ, Babson KA, Bonn-Miller MO. Cannabinoids as therapeutic for PTSD. *Current Opinion in Psychology*. 2017 Apr;14:78-83.
[PubMed: PM2017-16872-018](#)
11. Steenkamp MM, Blessing EM, Galatzer-Levy IR, Hollahan LC, Anderson WT. Marijuana and other cannabinoids as a treatment for posttraumatic stress disorder: A literature review. *Depress Anxiety*. 2017 03;34(3):207-216.
[PubMed: PM28245077](#)
12. Stoner SA. Effects of marijuana on mental health: Posttraumatic stress disorder (PTSD). Seattle (WA): Alcohol & Drug Abuse Institute, University of Washington. 2017. <http://adai.uw.edu/pubs/pdf/2017mjptsd.pdf>. Accessed 2018 Oct 4.
13. Zer-Aviv TM, Segev A, Akirav I. Cannabinoids and post-traumatic stress disorder: Clinical and preclinical evidence for treatment and prevention. *Behav Pharmacol*. 2016 Oct;27(7):561-569.
[PubMed: PM2016-45990-001](#)
14. Betthausen K, Pilz J, Vollmer LE. Use and effects of cannabinoids in military veterans with posttraumatic stress disorder. *American Journal of Health-System Pharmacy*. 2015; 72(15):1279-1284. <http://www.ajhp.org/content/ajhp/72/15/1279.full.pdf>. Accessed 2018 Oct 4.