

Poster 53

Cannabis-based therapies in chronic pain management: A systematic review of clinical trials

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Abstract

Background: Chronic pain affects millions worldwide, driving the need for effective treatment alternatives. Cannabis-based therapies have gained attention for their potential analgesic effects, but their efficacy and safety remain a topic of debate [1]. **Objective:** This review examines clinical trials assessing the effectiveness of cannabis-derived treatments, including FDA-approved cannabinoid medications such as CBD (Epidiolex[®]), a combination of Δ^9 -THC and CBD (Sativex[®]), and synthetic cannabinoids like nabilone (Cesamet[®]) and dronabinol (Marinol[®] and Syndros[®]). **Methods:** A search was conducted using PubMed, Web of Science, and ClinicalTrials.gov databases from inception through to October 31, 2024. Inclusion and exclusion criteria were designed to identify clinical trials evaluating only randomized double-blind clinical trials that compared the effects of cannabinoids with a placebo or standard treatment, lasted at least 4 weeks after the start of treatment, and used one of the internationally validated pain intensity scales. **Results:** While some studies report reductions in pain intensity and improvements in associated symptoms, others show limited or no significant benefit. The outcome variability highlights the need for further research to determine optimal formulations, doses, and patient populations that may benefit most. **Conclusions:** While cannabis-based treatments hold promise for chronic pain management, clinical evidence remains inconsistent. This review highlights the urgent need for more rigorous clinical trials to establish definitive safety and efficacy profiles before these therapies can be widely adopted in clinical practice.

Keywords: *Cannabis sativa*; cannabinoids; chronic pain; clinical trials

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