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## The Effects of Cannabis Among Adults With Chronic Pain and an Overview of General Harms: A Systematic Review.

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### Abstract

**BACKGROUND:** Cannabis is increasingly available for the treatment of chronic pain, yet its efficacy remains uncertain.

**PURPOSE:** To review the benefits of plant-based cannabis preparations for treating chronic pain in adults and the harms of cannabis use in chronic pain and general adult populations.

**DATA SOURCES:** MEDLINE, Cochrane Database of Systematic Reviews, and several other sources from database inception to March 2017.

**STUDY SELECTION:** Intervention trials and observational studies, published in English, involving adults using plant-based cannabis preparations that reported pain, quality of life, or adverse effect outcomes.

**DATA EXTRACTION:** Two investigators independently abstracted study characteristics and assessed study quality, and the investigator group graded the overall strength of evidence using standard criteria.

**DATA SYNTHESIS:** From 27 chronic pain trials, there is low-strength evidence that cannabis alleviates neuropathic pain but insufficient evidence in other pain populations. According to 11 systematic reviews and 32 primary studies, harms in general population studies include increased risk for motor vehicle accidents, psychotic symptoms, and short-term cognitive impairment. Although adverse pulmonary effects were not seen in younger populations, evidence on most other long-term physical harms, in heavy or long-term cannabis users, or in older populations is insufficient.

**LIMITATION:** Few methodologically rigorous trials; the cannabis formulations studied may not reflect commercially available products; and limited applicability to older, chronically ill

populations and patients who use cannabis heavily.

**CONCLUSION:** Limited evidence suggests that cannabis may alleviate neuropathic pain in some patients, but insufficient evidence exists for other types of chronic pain. Among general populations, limited evidence suggests that cannabis is associated with an increased risk for adverse mental health effects.

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