

# Effects of Medical Cannabis on Advanced Cancer Pain

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## QUESTION

In patients with advanced cancer, how does medical marijuana use compared with those who do not use medical marijuana, affect pain management?



## STUDY

## DESCRIPTION

## FINDINGS

The Efficacy of Medical Marijuana in the Treatment of Cancer-Related Pain (Pawasarat et al., 2020)

**Level IV retrospective chart review** that examined trends in pain levels, pain management, and opioid use in advanced cancer patients. This study compared two cohorts MMJ(+) and MMJ(-), based on whether the patient used medical marijuana.

Of the MMJ(-) cohort, 48% reported mild-moderate pain and 52% reported severe pain. Of the MMJ(+) cohort, 55% reported mild-moderate pain and 45% reported severe pain. The MMJ(+) group was also shown to decrease their daily opioid consumption throughout the study, whereas the MMJ(-) experienced dose escalation.

The Use of Medical Cannabis in Cancer Patients (Zaki et al., 2017)

**Level VI self conducted series of surveys** that examined the effects of medical cannabis in advanced cancer pain and quality of life. This study was conducted over a ten month period in 2016-2017, the participants were asked to fill out follow-up questionnaires at 4 months and 10 months.

Pain was assessed using a numeric scale of 1-10. The initial survey found that 25% of participants reported mild pain and 45.8% reported severe pain. At the 4-month follow up improvements were seen through 54.2% reporting mild pain and only 16.7% reporting severe pain. In both surveys 29.2% reported moderate pain.

Short-Term Medical Cannabis Treatment Regimens Produced Beneficial Effects Among Palliative Cancer Patients (Aviram et al., 2020)

**Level IV multi-center, prospective study** that examined changes in patients' cancer pain from baseline after one month using some form of medicinal marijuana using a series of questionnaires.

When patients reported on their pain at one month, researchers found the intensity of patients' average weekly pain had decreased when they used medical marijuana.

Results of a Double-Blind, Randomized, Placebo-Controlled Study of Nabiximols Oromucosal Spray as an Adjunctive Therapy in Advanced Cancer Patients with Chronic Uncontrolled Pain (Lichtman et al., 2018)

**Level II double-blind multicenter, randomized, placebo-controlled trial** that compared the effects of nabiximols oral spray and a placebo on patients' cancer pain. The study analyzed patients from a variety of clinics around the world and randomly assigned patients to receive the nabiximols or a placebo.

Nabiximols were deemed effective if there was a positive median percent difference. In the nabiximols group, patients had a median percent improvement of 10.7% whereas in the placebo group, there was a 4.5% improvement. The treatment difference was 3.41% showing a possible treatment benefit of nabiximols. Average pain did not differ between the nabiximols and placebo groups.

## CONCLUSIONS

- Overall marijuana shows promise as an adjunct analgesic in advanced cancer treatment.
- While majority of articles support the PICO question, some articles did not determine clinical significance.
- Therefore more research is needed to definitively answer the PICO question.

### Wong-Baker FACES® Pain Rating Scale



https://www.google.com/url?sa=i&url=https://www.facespainrating.com/%3Ffeed%3F29085885&pg=AOv1q1tMpd5PmZ70DJYJdx\_&ust=164988073587000&source=images&cd=v&ved=0CAwQjRqFwTCjirSlYkvcCF0A0AAAAAABAD

## BACKGROUND

- 20% to 50% of patients with cancer experience pain and in patients with advanced-stage cancer, 80% of patients experience moderate to severe pain (National Cancer Institute, 2021).
- In patients with cancer, one of the most frequent and burdensome symptoms is pain (Fujii et al., 2017).
- In clinical trials, people required less pain medication when they took marijuana extracts (American Cancer Society, 2020).

## APPLICATIONS

- Nurses will need to understand route of administration, potential interactions, adverse effects and clinical indications of medical marijuana.
- Nurses can promote follow up on patients that use medical marijuana for pain management to determine efficacy.
- Nurses can provide resources for reliable information on medical marijuana.

This work is not original. This is an evidence based practice brief that includes published research conducted by professionals. Guidance was provided by Stephanie Burkholder and Melissa Kukulski, Professors of NU 307: Evidence-Based Practice Research Methods.