# Simplified guideline for prescribing medical cannabinoids in primary care

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# Systematic review of systematic reviews for medical cannabinoids

Pain, nausea and vomiting, spasticity, and harms

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# Medical Cannabinoids Come in Many Forms

liquid tinctures

vaporizing or smoking dried buds

eating

capsules

lozenges

dermal patches

oral sprays

# A Cannabis plant

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~ 400 different chemicals
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~70 cannabinoids

Medical Marijuana

average joint 0.5-1g of cannabis - different concentrations

THC - (tetrahydrocannabinol) - psychoactive

dronabinol (Marinol)<sup>NA - (Syndros) - FDA oral solution</sup> nabilone (Cesamet) - capsules

CBD - (cannabidiol)

THC plus CBD

nabiximols (Sativex) - buccal spray

## The Evidence base

Lack of high level research

bias, many studies enrolled people with a history of cannabinoid use, unblinding was common (90%), small sample size, short duration, inconsistent reporting

Reasonable evidence for

Chronic pain - neuropathic pain and refractory pain in palliative care

Nausea and vomiting - chemotherapy

Spasticity - MS and special cord injury

### The Evidence for Cannabinoids

#### BENEFIT

15 RCTs - at least a 30% pain reduction RR = 1.37 (95% CI 1.14 to 1.64) - NNT = 11

4 RCTs - a + global impression of change in spasticity RR = 1.45 (1.08 to 1.95) - NNT = 7

7 RCTs - for control of N and V after chemotherapy RR = 3.60 (2.55 to 5.09) - NNT = 3

## The Evidence for Cannabinoids

#### Adverse effects - above placebo

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~20%-30% sedation, feeling high, dizziness, speech disorders
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~10-20% ataxia/muscle twitching, low blood pressure, euphoria, dysphoria

~5-10% impaired memory, withdrawing due to side effects

~5% dissociation/acute psychosis

## Cannabis-based medicines for chronic neuropathic pain in adults (Review)

Cochrane Library Cochrane Database of Systematic Reviews

Mücke M, Phillips T, Radbruch L, Petzke F, Häuser W

more with 50% or greater pain relief - 21% VS 17%; risk difference (RD) 0.05 (95% confidence interval (CI) 0.00 to 0.09); NNTB 20 (95% CI 11 to 100); 1001 participants, eight studies low quality evidence

more with 30% or greater pain relief - 39% VS 33%; RD 0.09 (95% CI 0.03 to 0.15); NNTB 11 (95% CI 7 to 33); 1586 participants, 10 studies, moderate quality evidence

more withdrew due to adverse events - 10% VS 5%; RD 0.04 (95% CI 0.02 to 0.07); NNTH 25 (95% CI 16 to 50); 1848 participants, 13 studies, moderate-quality evidence

more nervous system adverse events - 61% VS 29%; RD 0.38 (95% CI 0.18 to 0.58); NNTH 3 (95% CI 2 to 6); 1304 participants, nine studies, low-quality evidence

more psychiatric disorders - 17% VS 5%; RD 0.10 (95% CI 0.06 to 0.15); NNTH 10 (95% CI 7 to 16); 1314 participants, nine studies, low-quality evidence

CD012182-2018

Long-term effects (especially smoking)

Largely Unknown

## What to do

ORAL nabilone for nausea and vomiting

OROMUCOSAL SPRAY nabiximols for spasticity and neuropathic pain

SMOKED - there is no evidence that any one formulation is more effective or safer than dried marijuana