

MEDICAL CANNABIS - A SHORT REVIEW

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ABSTRACT-

Cannabis and marijuana are used interchangeably, but in reality they are different. Cannabis is the name for all products derived from the plant *Cannabis sativa*, the plant has about 540 chemical substances. Marijuana on the other hand is one of these products derived from the cannabis plant which contains tetrahydrocannabinol that alters mental state and causes 'high'. But medical cannabis are certain chemical substances from cannabis plant known as cannabinoids and are used for medical purposes. They have been approved for use in various countries. The USFDA has approved several drugs that contain individual cannabinoids for example, Epidiolex was approved for treatment of seizure associated with Lennox-Gastaut syndrome or Dravet syndrome two rare and severe forms of Epilepsy, Dronabinol and Nabilone are used in Nausea and vomiting caused by cancer therapy and also Dronabinol is used to treat loss of appetite, weight loss in people with HIV/AIDS.

INTRODUCTION-

Recommendations for prescription opioids to individuals with acute and chronic pain who do not have cancer, sickle cell disease, or need for palliative or end-of-life care have been updated by the US Centers for Disease Control and Prevention (CDC).

The 2022 Clinical Practice Guideline offers advice on how to decide whether to start prescribing opioids for pain, which opioids to choose, how much to provide, how long to wait before following up, how to assess the risk of opioid use, and how to deal with any potential side effects. For many common types of acute pain, nonopioid therapy are at least as effective as opioids when deciding whether or not to start taking them. When possible, non-drug and non-opioid pharmacological therapies should be used to the fullest extent possible, and opioid therapy for acute pain should only be explored if it is believed that patient benefit would outweigh patient risk.[1] providers should go over with patients the known dangers and reasonable benefits of opioid medication before commencing it. Providers should work with patients to establish treatment goals for pain and function before beginning ongoing opioid therapy for those with subacute pain lasting 1 to 3 months or chronic pain lasting more than 3 months. It should also be thought about how opioid therapy will be discontinued if benefits do not outweigh risks. Once immediate-release opioids have been prescribed, they should only be taken for long as is necessary to treat pain as that is expected to be severe enough to require opioids. Providers should engage with patients to evaluate and carefully weigh the advantages and hazards of maintaining opioid medication within 1 to 4 weeks of beginning it for subacute or chronic pain; caution

should be exercised while increasing, continuing, or reducing opioid dosage. Before beginning and periodically throughout ongoing opioid therapy, providers should assess the risk of harms associated with opioids and should work with patients to incorporate appropriate risk-reduction measures, such as providing naloxone and reviewing potential interactions with any other prescribed medications or substances used. It's to avoid abrupt opioid withdrawal, especially in people who are taking heavy doses. Patients with opioid use best disorders should receive treatment with drugs that are supported by evidence, or arrangements should be made for such treatment.

OPIOIDS VS NON- OPIOIDS

According to a new meta-analysis, opioids were somewhat more effective than placebo and paracetamol (acetaminophen), but not NSAIDs [2]. At ~2 hours of follow-up in studies prescribing opioids during the ED visit: Opioids provided statistically greater pain relief than placebo (MD in pain score, -6.3 points) and paracetamol (-6.7 points), although these differences were not clinically meaningful. Opioids were neither statistically nor clinically more effective than NSAIDs (MD in pain score, -0.1 points) or systemic anaesthetics (-2.1 points). Opioids were possibly statistically and clinically less effective than local anaesthetics (MD in pain score, 17.3 points). Opioids were similarly effective as NSAIDs across conditions but more effective than local anaesthetics for soft tissue injury (MD in pain score, -21.4 points). At ≤ 0.5 and ~12 hours, opioids did not differ from nonopioids. Patients given opioids were more likely to have adverse events than peers given placebo (risk difference, 14.0%), paracetamol (7.2%), or NSAIDs (21.4%).

TREATMENT GAPS FOR OPIOID USE DISORDER NEARLY TREBLE THE RISK OF OVERDOSE

Patients receiving the lowest buprenorphine maintenance dosage and those receiving buprenorphine as monotherapy experienced the greatest effects.[3] Patients with opioid use disorders receiving buprenorphine treatment experienced a substantial rise in the likelihood of an opioid overdose during months when the medication was discontinued for more than 15 days in a row. Patients had a nearly threefold increase in the probability of an opioid overdose during months with a treatment gap compared to months without one (HR, 2.89; 95% CI, 2.20-3.79). Medical expenses increased as well in months with treatment gaps compared to months without them (estimated difference: \$196.41; 95% CI: \$110.53-\$282.30). Patients on the lowest maintenance dose of buprenorphine had the largest increase in overdose risk with gaps (HR of 3.62, 2.84, and 2.64 for those taking 8, >8, and >16 mg/day, respectively). Patients receiving buprenorphine monotherapy experienced a larger effect of gaps on overdose risk (HR, 4.30) than counterparts receiving buprenorphine-naloxone treatment (HRs, 2.71-2.80). The health functioning of the patients had improved, and they used fewer opiate painkillers[4]. 47.9% of patients reported having both physical and mental health concerns, while 28.9% exclusively had mental health issues. Only 9.1% pain was reported. The majority of patients (65.1%) and those who consistently used it during the day (55.0%) had been using medical cannabis for 0 to 12 months. Scores for all 5 health functioning domains increased after cannabis use (P .0001). The

majority of patients reported better physical functioning (76.0%), social functioning(84.0%), and body discomfort (90.0%).The greatest proportion of patients (67.2%) and those (78.1%) who reported no change in physical or emotional restrictions, respectively .Cannabis was assessed as being very or extremely significant to QoL by 88.6% of patients. The percentage of people who did not use opioids rose from 39.0% to 79.7% after starting cannabis.79.3% reduced among those who used opiates prior to cannabis .11.5% had better functioning because of opioid reduction.2.7% stopped both opioids and psychiatric medications. Patients who were unfamiliar with the effects of opioids who were treated for acute pain in the emergency department (ED) and sent home with an opioid prescription provided reliable accounts of their usage of the drugs in their 2-week diaries.[5] .Self-reported use is linked to long-term use and opioid use disorders and is used to determine whether a prescription is suitable. Social desirability bias can have an impact on self-reports. Fracture (27.4% of the group), back and neck pain (18.9%), and renal colic (18.3%) were the most prevalent acute painful diagnoses prompting ED visits

At release from the emergency department, patients received an average of 15 opioid prescriptions, and they all completed them. According to diaries, patients took a median of 6 opioid tablets, and a median of 7 opioid pills was estimated based on pill counts. The intraclass correlation value (ICC) of 0.992 indicates a strong correlation between the self-reported and estimated levels of consumption. Patients who utilised paper diaries (ICC, 0.985) or electronic diaries (ICC, 0.985) both showed this high connection (ICC, 0.996). (0.048 tablets from Bland-Altman) The mean discrepancy between the self-reported and calculated quantities was insignificant.

CONCLUSION-

Though there are multiple use of the medical cannabis including pain, decrease opioid use , Anxiety ,Epilepsy, HIV/AIDS symptoms, Inflammatory bowel syndromes, Movement disorders due to Tourette's syndrome ,Multiple sclerosis ,Nausea and vomiting related to cancer chemotherapy,post traumatic stress disorder(PTSD) and sleep problems.

But still health risks persists in using the same such as increased risk of motor vehicle crashes, low birth weight, cannabis withdrawal or cannabis use disorder, schizophrenia, psychoses and sometimes orthostatic hypotension limits it's use.

Though Bhang is used in India since centuries which is an ayurvedic preparation of cannabis plant still in India it needs valid prescription from and Allopathic doctor and comes under NDPS ACT which bans charas in resin form ,ganja flowering or fruiting tops of cannabis plant. instead of all this medical cannabis holds promise for relief of some of rare diseases and pain management beyond ones imaginations.

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