Note: This is primarily intended to inform physicians treating patients ≥ age 18 years for whom a recommendation for medical use of marijuana is being considered.

“Cannabis” is used interchangeably with “marijuana.” Cannabinoids refer to chemical components of cannabis (i.e., THC or cannabidiol [CBD], including synthetic versions).

Effectiveness

- There is **substantial evidence** that cannabis or cannabinoids are effective for:
  - Treatment of chronic pain in adults - primarily neuropathic pain.¹,²
  - Treatment of chemotherapy-induced nausea and vomiting.¹
  - Improving patient-reported multiple sclerosis (MS) spasticity symptoms.¹,²

- There is **moderate evidence** that cannabis or cannabinoids are effective for:
  - Treatment of short-term sleep outcomes (associated with obstructive sleep apnea, fibromyalgia, chronic pain, MS).¹
  - Treatment of drug resistant seizures with CBD in children and young adults with Dravet syndrome.³

- There is **limited evidence** that cannabis or cannabinoids are effective for¹:
  - Increasing appetite/decreasing weight loss associated with HIV/AIDS.
  - Improving provider-measured MS spasticity symptoms.
  - Improving Tourette syndrome symptoms.
  - Improving anxiety symptoms (in context of assessment of social anxiety symptoms).
  - Improving post-traumatic stress disorder (PTSD) symptoms.

- There is **no or insufficient evidence** that cannabis or cannabinoids are effective for all other diseases and conditions, due to lack of published clinical trials.¹

Side effects

- From clinical trials, the following side effects were reported significantly more often among participants receiving cannabinoids than among controls: dizziness, disorientation/confusion, euphoria, dry mouth, drowsiness/somnolence, nausea, fatigue/asthenia.²

Drug interactions

Note: The lack of a cited interaction does not preclude the possibility that a drug interaction exists (and no studies have yet reported an interaction with that particular drug).
• There is evidence of clinically important drug-drug interactions between cannabis or cannabinoids and the following medications: chlorpromazine, clobazam, clozapine, CNS depressants (e.g., barbiturates, benzodiazepines), disulfiram, hexobarbital, hydrocortisone, ketoconazole, MAO inhibitors, phenytoin, protease inhibitors (indinavir, nelfinavir), theophylline, tricyclic antidepressants and warfarin.4

General risks of marijuana use

Note: These mainly represent evidence from studies of recreational cannabis users focused on adverse health effects. Only content areas where there is “substantial” research evidence are presented. Furthermore, the studies informing the evidence statements below are “observational” in design, thus, for most of these statements, causality cannot be clearly established (e.g., cannabis use and schizophrenia may “travel together” rather than represent a causal relationship). Thus, these findings should be extrapolated with caution, especially in the context of medical marijuana use.

• There is substantial evidence:
  o That cannabis use is associated with increased risk of motor vehicle crashes.1,4
  o That cannabis users, including adolescent and young adult users, can develop cannabis use disorder.4
  o That adolescent and young adult cannabis users are more likely than non-users to use and be addicted to illicit drugs in adulthood.4
  o That frequent cannabis users are more likely than non-users to have memory impairment (lasting a week or more after last use).4
  o That THC intoxication can cause dose-related acute psychotic symptoms.4
  o That cannabis use is associated with development of schizophrenia, with highest risk among most frequent users.1,4
  o That frequent cannabis smoking is associated with chronic bronchitis.1,4
  o That cannabis smoke contains many of the same cancer-causing chemicals as tobacco smoke4; however, there is mixed evidence as to whether cannabis smoking is associated with lung cancer.4
  o That THC crosses the placenta and into fetuses of women who use cannabis during pregnancy4; and THC is present in breast milk and passes into breastfeeding infants.4

References


More information

www.colorado.gov/cdphe/categories/services-and-information/marijuana
email: marijuana.research@state.co.us