

Study: Medical cannabinoids may benefit children, long-term risks unclear

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Medical cannabinoids may benefit children undergoing chemotherapy and those who have epilepsy, according to a new study.

Authors emphasized the need to weigh the risks and benefits of the drug and called for more research on pediatric use.

“In this context, pediatricians, families, patients and policy makers continue to lack urgently needed information to make balanced decisions regarding the use of medical cannabinoids in children and adolescents,” authors wrote in the study “Medical Cannabinoids in Children and Adolescents: A Systematic Review” (Wong SS, Wilens TE. *Pediatrics*. Oct. 23, 2017, <https://doi.org/10.1542/peds.2017-1818>).

Cannabinoids are the chemicals in marijuana that can have a medicinal effect. The Food and Drug Administration (FDA) has approved two synthesized cannabinoids for medical use. There also are two plant-derived cannabinoid medications undergoing FDA-regulated trials, according to the study. More than half of states have legalized plant-derived cannabinoid, known as medical marijuana, for medical use.

In a 2015 [policy statement](#), the Academy said it “opposes ‘medical marijuana’ outside the regulatory process of the US Food and Drug Administration” but “recognizes that marijuana may currently be an option for cannabinoid administration for children with life-limiting or severely debilitating conditions and for whom current therapies are inadequate.”

To analyze the uses of cannabinoids to treat children, researchers performed a systematic review of literature that included 21 articles detailing 22 studies with 795 participants.

Four double-blind randomized controlled trials (RCTs) found cannabinoids helped reduce chemotherapy-induced nausea and vomiting (CINV). Studies also showed them to be more helpful than prochlorperazine, metoclopramide and domperidone.

One RCT also found a reduction in convulsive seizures. Additional studies on CINV, seizures, spasticity, tics, post-traumatic stress disorder and neuropathic pain “were not designed to evaluate the statistical significance of outcomes,” authors wrote.

“Beyond studies of CINV and epilepsy, the findings provided very limited evidence of variable quality supporting the use of cannabinoids for different clinical indications,” they said.

The authors suggested families and physicians consider possible side effects, including drowsiness, dizziness, somnolence, diarrhea and decreased appetite, and the potential for accidental overdose.

Research on long-term risks in children is limited, so the authors looked at risks of recreational cannabis use while noting there are differences in frequency, dosing and potency. Recreational use may impact the developing brain and has been linked to cognitive impairments. Studies also have found young users had increased risks of psychiatric harms and other substance use disorders.

“Additional larger, prospective, and controlled studies are required to better delineate the medical utility of cannabinoids in different pediatric disorders,” authors wrote. “This body of evidence has important implications in identifying the risks and benefits of medical cannabinoids in children and adolescents,

especially in the context of psychiatric and neurocognitive adverse effects that have been identified from pediatric studies of recreational cannabis use.”

Resources

- [Information for parents about the Academy’s stance on marijuana](#)
- [AAP technical report "The Impact of Marijuana Policies on Youth: Clinical, Research, and Legal Update"](#)
- [Substance Abuse and Mental Health Services Administration](#)
- [AAP information on marijuana](#)

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