Current State of Cannabis (Marijuana) Research
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Healthcare providers must be aware of any substances their patients may be using. That being said, it is important to review the current state of cannabis research. To date, 28 states and the District of Columbia have legislation regarding medical marijuana.1 This means that more than half of the country has cannabis available for medical use, so we ask: What do we know from the current research about the benefits or harms associated with cannabis?

Cannabis has been grown for many years and has multiple uses. The plant stalks may be used to make rope and fabrics and are often referred to as hemp. The cannabis with psychoactive effects has been bred into what we know as marijuana.2 Two of the main components of cannabis are tetrahydrocannabinol (THC) and cannabidiol (CBD). THC has a psychoactive effect; CBD does not.3 You may even find such products as hemp seeds and hemp protein powder at your local grocer.4

Cannabis was originally legal in the United States in the early 1900s. Over the course of several decades, various states started to outlaw the use of cannabis because of growing concerns about the effects of THC. This is illustrated in the 1936 movie Reefer Madness, which portrayed cannabis users as out-of-control, violent people.5

In 1961, the United States and more than 70 other nations entered into the Single Convention on Narcotic Drugs at the United Nations.6 This pact was an effort to control the use and trafficking of narcotics on an international level. Although cannabis is not a narcotic, it was included to protect the health of the public. Under this pact, participating countries are obligated to “restrict production, manufacture, possession and distribution of marijuana for medical and scientific purposes.”7 The Drug Enforcement Administration (DEA) is responsible for regulating the cultivation of marijuana for research purposes through licensing agreements and for establishing annual production quotas, pursuant to authority granted by the 1970 Controlled Substances Act (CSA), which implements the Single Convention.8 In all this time, the DEA has issued only a single license for cultivating marijuana for research.9 That license was issued to the University of Mississippi through contract with the National Institute on Drug Abuse (NIDA).10 In August 2016, however, the DEA finally announced that it will allow additional marijuana growers to register to produce and distribute marijuana for research purposes.11

In 1970, the Food and Drug Administration (FDA) added cannabis to the list of Schedule I drugs where it remains to this day. The criteria to be classified as a Schedule I include that the drug must have a high potential for abuse and no currently accepted medical use.12 This means that cannabis remains illegal on a federal level, despite the fact that the FDA approved two botanical drugs (dronabinol and nabilone) made from synthetic cannabis as far back as 1985.13 In summarizing its stand on marijuana, the FDA has stated:
Although the FDA has not approved any drug containing or derived from botanical marijuana, the FDA is aware that there is considerable interest in its use to attempt to treat a number of medical conditions, including, for example, glaucoma, AIDS wasting syndrome, neuropathic pain, cancer, multiple sclerosis, chemotherapy-induced nausea, and certain seizure disorders.

The FDA also has an important role to play in supporting scientific research into the medical uses of marijuana and its constituents in scientifically valid investigations as part of the agency’s drug review and approval process. As a part of this role, the FDA supports those in the medical research community who intend to study marijuana.

The FDA also supports research into the medical use of marijuana and its constituents through cooperation with other federal agencies involved in marijuana research. Conducting clinical research using marijuana involves interactions with other federal agencies:

- The FDA reviews the Investigational New Drug (IND) application and the research protocol submitted by the applicant.
- The Drug Enforcement Administration (DEA) reviews the registration application filed by the researcher.
- The National Institute on Drug Abuse (NIDA) within the National Institutes of Health provides research-grade marijuana for scientific study.

There are various grades of cannabis available through NIDA. THC and CBD concentrations are measured and available for researchers in a range from <1% to >10%. The only form of the drug listed on the NIDA’s website is the plant form. Of note, the strength of the cannabis available to patients through licensed dispensaries in various states have THC content approaching 30 percent, which is far greater than that which is available from the government for research. In addition to having access to stronger concentrations of THC, patients also have access to oils, tinctures, creams, and various forms of edible cannabis products that are not available to researchers in the United States.

The National Academies of Sciences, Engineering, and Medicine recently published a study which reviewed over 10,000 articles written about cannabis research over a 16-year period. Evidence showed that cannabis was effective in treating chronic pain, multiple sclerosis-related spasticity, and nausea and vomiting. The very lengthy report addresses the therapeutic and potential negative effects of cannabis with regard to cancer, cardio-metabolic risks, the respiratory system, immunity, injury and death, pregnancy, mental health, and psychosocial problems.

The study also notes the various ways and forms in which cannabis is ingested. A summary section points to the possibility of future research using different forms of the drug. In addition to providing conclusions of the reviewed evidence, the study states, “future research will need to employ data collection methods that distinguish between different types of cannabis and different routes of cannabis administration.”

The available research is limited, in part, because not all forms and concentrations of cannabis have been tested. As previously stated, the only cannabis available for research is the botanical plant. Research on cannabis continues, but with more than half of the states allowing for its medical use and some states now allowing recreational use, we may see the American people as unofficial investigators themselves. People might find which conditions are improved by their cannabis use and publicize it through various social media outlets, leading to “unscientific” research to benefit others. If the state of cannabis research improves, clinicians will be able to make evidence-based recommendations to their patients about the beneficial and harmful effects of cannabis consumption.

Consider the following risk management recommendations to reduce risks related to your patient’s use of cannabis:

- Discuss with your patient the type of cannabis they are consuming.
- Include cannabis in their list of medications.
- Consider adjusting the dosages of currently prescribed medications, as appropriate.
- Caution individuals with children or elders in the household to take precautions against accidental ingestion.
- Caution against use of other substances, such as sedatives and alcohol, with marijuana.

We hope you found this RisKey helpful. If you have questions or would like further resources on this topic, please contact your Coverys Risk Management Consultant.
References


3. Ibid.


8. Ibid.

9. Ibid.

10. Ibid.

11. Ibid.


18. Ibid.

19. Ibid. Page 398

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