



Eric Groce, DO

*The Health Effects of Cannabis and Cannabinoids:
The Current State of Evidence and Recommendations for Research*
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The National Academies of Sciences, Engineering, and Medicine has published “The Health Effects of Cannabis and Cannabinoids: The Current State of Evidence and Recommendations for Research,” which summarizes available scientific literature on the therapeutic effects of cannabis, other health effects, cannabis use and abuse and research opportunities. The 468-page book serves as an excellent initial source on the current state of research and provides summaries and recommendations for further research on a number of topics. While not exhaustive, this resource provides an excellent starting place for medical regulators, who face a complex landscape of often-conflicting information when addressing the topic of cannabis for medical use. It is a remarkably approachable, well-organized snapshot of the current state of research on these topics.

Particularly helpful for the clinician is the section on the therapeutic effects of cannabis, including a summary of current research and strength of recommendations for cannabis use in the treatment of 21 medical conditions. These topics range from chronic pain to Huntington’s Disease and Schizophrenia. As with all sections, the authors provide here an identification of research gaps, a summary and references to primary literature. This section is particularly useful for helping guide policy decisions, as in many state and local jurisdictions there is vigorous debate regarding the expansion of medical indications for cannabis. The references to medical literature (both primary literature and systematic reviews) provide insight into which conditions likely are benefited by the use of cannabis. For example, the authors note that oral cannabinoids are found to be modestly effective antiemetics for chemotherapy-induced nausea and vomiting and patient-reported spasticity in multiple sclerosis patients. However, they also acknowledge that there is “insufficient evidence to support the conclusion that cannabinoids are an effective treatment for cancers, including glioma.”

For medical regulators, the section on other health effects of cannabis is particularly helpful. Here, regulators will find in-depth discussion of current

literature on a variety of topics, including cannabis and its effect on cancer, cardio-metabolic risk, respiratory disease and immunity. Notable is a summary of cancer risks associated with cannabis use. Interestingly, there is limited evidence of a statistical association with cannabis use and germ cell tumors, but not esophageal or lung cancers. From a public health perspective, topics also include associated abuse of other drugs and association with injury and death.

In keeping with the well-organized nature of this work, each chapter concludes with a single-page highlighted “Summary of Chapter Conclusion.” For the busy reader, this summary provides an evidence-based summary of the topic in bullet-point format.

Finally, the book touches on cannabis research priorities, noting that they should include population-health impacts, basic science studies regarding harms and benefits and social effects on behavioral change. Challenges and barriers to research include regulatory and supply issues, funding issues and policy divides between state and federal regulations. While this section is likely most applicable to researchers and universities, it provides a glimpse of likely future work to be done.

Recognizing that regulatory and policy decisions are undertaken after careful consideration of many available information sources, this reference book is a very valuable addition to discussions regarding cannabis for medical use. By collecting and summarizing—and critiquing by level of evidence—currently available research, this work fills a need for an approachable and organized reference.

About the Author

Eric Groce, DO, practices Family Medicine in Denver, Colorado, and is affiliated with Colorado Permanente Medical Group. He formerly served as President of the Colorado Medical Board.