Marijuana as Medicine? Book Seeks the Science Beyond the Controversy

Developing manuscript based on the report, "Marijuana and Medicine: Assessing the Science Base"

SUMMARY


The National Academy Press published the book and released it on December 15, 2000. The book can be ordered through the National Academy Press website.

Key Results

The book, which was written by freelance writer Alison Mack and Janet E. Joy, a senior program officer at the Institute who had served as the study director and co-author for the 1999 Academy/Institute report, addresses the following topics:

- The medical benefits of marijuana (alleviating symptoms such as nausea, pain, and movement disorders).
- The physical and psychological side effects of use (including effects on immune, cardiovascular, and reproductive systems as well as mood, cognitive performance, motivation, and psychiatric disorders).
- The issue of potential harm from marijuana, including marijuana as a "gateway" drug.
- A disease-by-disease survey of the efficacy of marijuana (including its uses in AIDS, cancer, Alzheimer's Disease, spinal cord injury, and glaucoma).
- The development of pharmaceuticals from marijuana (such as FDA-approved Marinol, which is THC—tetrahydrocannabinol, the main psychoactive substance in marijuana—in capsule form).
- The legal complexities involved with use and sanction.
Key Recommendations

The book recaps the six recommendations for research and clinical trials in the 1999 Academy/Institute report:

- Research should continue into the physiological effects of synthetic and plant-derived cannabinoids (the group of compounds related to THC, the primary psychoactive ingredient in marijuana) and the natural function of cannabinoids found in the body.

- Clinical trials of cannabinoid drugs for symptom management should be conducted to develop rapid-onset, reliable, and safe delivery systems.

- Psychological effects of cannabinoids (such as anxiety reduction and sedation, which can influence medical benefits) should be evaluated in clinical trials.

- Studies to define the individual health risks of smoking marijuana should be conducted, particularly among populations in which marijuana use is prevalent.

- Clinical trials of marijuana use for medical purposes should:
  - Involve only short-term marijuana use (less than six months).
  - Be conducted only in patients with conditions for which there is reasonable expectation of efficacy.
  - Be approved by institutional review boards.
  - Collect data about efficacy.

- Short-term use (less than six months) of smoked marijuana for patients with debilitating symptoms must meet the following conditions:
  - Documentation that all approved medications have failed to provide relief.
  - Reasonable expectation that symptoms will be relieved by rapid-onset cannabinoid drugs.
  - Administration under medical supervision in a manner that allows for assessment of treatment effectiveness.
  - An oversight strategy comparable to an institutional review board process that could provide guidance within 24 hours of a submission by a physician to provide marijuana to a patient for a specified use.

Background on the Academy/Institute Report

The White House Office of National Drug Control Policy sponsored the Academy/Institute study beginning in 1997, at a time of increasing pressure from researchers, physicians, policymakers, and patients for more research, and at a time that
some states were introducing or enacting legislation on the use of medical marijuana (e.g., California's "compassionate-use" laws).

Immediately following release of the original report, the Clinton administration reversed the federal policy of keeping tight control over government-grown research-quality marijuana, making it available to more scientists who wanted to study its medical effects.

**Funding**

The Robert Wood Johnson Foundation (RWJF) provided $41,742 to fund the project from August 1999 to January 2000.

The Institute of Medicine contributed $35,000 for the project. The National Academy Press, publisher for the National Academies, printed 4,000 copies of the book, and launched a marketing plan with print ads, radio spots, Internet publicity and marketing, and direct mail.

---

**Prepared by:** Jan Hempel  
Reviewed by: James Wood and Robert Narus  
Program Officer: Joseph F. Marx  
Grant ID# 35537
BIBLIOGRAPHY

(Current as of date of the report; as provided by the grantee organization; not verified by RWJF; items not available from RWJF.)

Books and Reports