

RESEARCH

KNOWLEDGE, ATTITUDES, AND PERCEPTIONS OF RESIDENT PHYSICIANS REGARDING MARIJUANA

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Information regarding providers' perceptions about either the use of marijuana as a medicine or the role of physicians in recommending marijuana to patients is limited.¹ Providers are in general supportive of medical use of marijuana in patients with chronic diseases, particularly in cancer patients; however, with significant practical concerns.² The growing marijuana use in the United States makes it imperative for physicians to understand marijuana's health effects.³

There is an insufficient amount of literature on the knowledge, attitudes, and perceptions of physicians regarding marijuana and how physicians feel about either the use of marijuana as a medicine or the role of physicians in recommending marijuana. Even though primary care physicians provide much of the health care for patients with the conditions for which marijuana is largely being recommended, the studies that focus on primary care physicians and their attitudes toward medical marijuana are limited.¹ Research in Colorado suggests that family physicians are recommending medical marijuana at relatively lower rates than other counterparts. Perhaps a continuity relationship with patients may influence primary care providers' behavior related to medical marijuana and may lead to more judicious recommendation of medical marijuana.¹ Further studies of other physician specialties and similar research in other states would confirm that these findings are generalizable beyond family physicians in Colorado.

Methods

The objective of this study was to determine the knowledge, attitude, and perception of internal medicine resident physicians regarding marijuana use, to extract common threads or beliefs, and to identify their educational needs. Our study population consisted of residents in the department of Internal Medicine in a large academic and community-based system in the state of South Carolina.

All of our resident physicians practiced and trained in the hospital and ambulatory care setting and had a variety of exposure to marijuana use among their patients.

We surveyed 41 Internal Medicine Residents with a 10-item self-administered anonymous questionnaire assessing knowledge, attitudes, and perceptions about marijuana's medicinal and recreational use, prescribing preferences, and legalization implications. All questions had answer choices based on a 5-point Likert Scale. The survey was self-administered by paper and pencil in a group meeting. The study protocol was approved by the institutional review board of Greenville Health System. All participation was anonymous and voluntary. No incentive was provided for participation.

Results

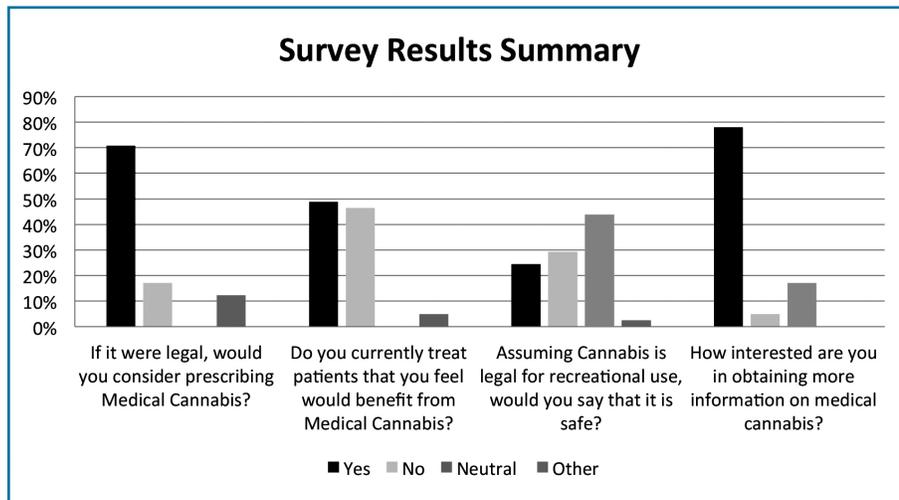
Our results indicated that approximately 70% of resident physicians would prescribe medical marijuana to patients in order to treat certain illnesses. Approximately 80% of the participants in our survey wanted more education on marijuana use to inform them further (see figure). Internal Medicine resident physicians in our project demonstrated a strong desire for educational opportunities about medical marijuana and the intent to treat chronic diseases with medical marijuana where it might be an option.

Discussion

Previous research on physicians' attitudes regarding marijuana has yielded similar results as ours.¹ Further studies of other physician specialties and other states would confirm the generalizability of the findings from our project and other similar efforts. Currently, there is little in the form of curricular content or continuing medical education about medical marijuana available to the physicians in the United States.^{1,3} The lack of research on the health

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effects of marijuana also contributes to the insufficient knowledge and discomfort regarding marijuana on the physicians’ part.³

Most primary care providers and trainees will benefit from knowledge about the health effects of marijuana.^{5,6} We anticipate our findings to further strengthen the need of curricular integration of education on medical use of marijuana and its health effects into the medical education. The issue also remains if an increase to the access to marijuana can reduce the use of opioid prescriptions and thereby reduce the risk of opioid use disorder.⁴ Thus, the need of physicians’ education regarding marijuana is urgent. This need is especially critical as there is evidence to indicate lack of preparedness on the part of the physicians to prescribe marijuana in the states where legalization of medical marijuana has occurred.⁶ Strict guidelines to determine who is a candidate for medical marijuana therapy and formal training requirement for physicians before recommending medical marijuana for patients will be steps in the right direction.

The provision of medical marijuana has been associated with fewer opioid prescriptions, less opioid-related substance abuse, and fewer opioid overdose deaths.⁴

An important fact to explain these findings is that although marijuana offers a lower risk of addiction and virtually no risk of overdose, relative to opioids, it is still effective in treating pain. Thus, conclusion can be drawn that medical marijuana may be an underutilized tool to fight the opioid crisis. Previous work also suggests that medical marijuana laws are associated with lower opioid-related mortality strengthening the arguments in favor of considering medical applications of marijuana.⁷

At present, 33 states have approved marijuana for medical use—10 of which have legalized it for recreational use. However, marijuana for any purpose is still illegal at the federal level. The South Carolina Senate is considering legalization of marijuana for medical use. The timing is ripe therefore for the providers in South Carolina to be educated and trained on marijuana’s health effects. We are optimistic that the South Carolina physician workforce can be more prepared to prescribe medical marijuana judiciously and educate patients and the South Carolina community effectively regarding marijuana use.

Our study emphasizes resident physicians’ interest in learning more about marijuana. We recommend

integration of education about marijuana in undergraduate and graduate medical education, including biochemical effects, clinical relevance, and legal history of marijuana. Areas where evidence is lacking should also be emphasized. These educational efforts can further be streamlined to specific areas and scope of practice. Competencies in medical knowledge and clinical skills related to marijuana can be incorporated in various boards’ examinations.³ Equally important is the availability of continuing medical education activities and regularly updated clinical practice guidelines for the practicing physicians. Such endeavors will ensure preparation of health care workforce regarding medical marijuana. Data from Colorado indicates that 92% of primary care physicians agreed to have access to medical marijuana-related continuing medical education.¹ Certain states—Maryland, Massachusetts, and New York—require state-based physician certification to recommend medical marijuana. Similar practices could also be considered in other states where marijuana has been legalized, to address the knowledge gaps about the effectiveness of marijuana for state designated qualifying conditions and to provide accurate information to the providers about the potential for drug interactions.

As we move toward greater acceptance of the medicinal benefits of marijuana, there is an increasing need for the establishment of evidence-based guidelines to assist clinicians in their prescribing practices in order to optimize patient care and quality of life. Furthermore, it is imperative that physicians and physicians-in-training be trained in those specific guidelines on marijuana either through curricular integration in undergraduate and graduate medical education or through continuing medical education.^{3, 5, 6}

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