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Primary Care Providers' Communication About Medical Cannabis With Older Adults: A Cross-Sectional Survey

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Abstract

Purpose: Healthcare providers often hesitate to discuss medical cannabis (MC) due to limited understanding, risks and benefits, and misinformation. This reluctance is notable with older adult patients, despite MC's potential benefits. This study investigates whether primary care providers (PCPs) routinely inquire about MC when treating older adults and the frequency of such inquiries. **Methods:** A 23-question survey was emailed to 575 physicians, pharmacists, nurse practitioners, and physician assistants who completed a Pennsylvania Department of Health-approved MC course. The survey was conducted in 2022 to 2023, and the participants were drawn from a pool of individuals who completed the course between 2018 and 2022. PCPs need to be practicing in the Tri-state area and caring for older adults. Results were cross-tabulated to examine the relationship between healthcare practitioners' inquiries about MC and patients' questions about MC. McNemar and Chi-square tests were used for analysis. **Results:** Survey results revealed that PCPs were more likely to inquire about alcohol and tobacco use than cannabis with older adults ($P < .0001$). Patients were more likely to initiate conversations about MC use ($P = .037$). PCPs did not frequently inquire about cannabis use amongst their patients or consider it as a therapeutic option. **Conclusion:** This study underscores the prevalent reluctance among PCPs to initiate discussions about MC treatment with older adults. Further investigation is needed to identify how to improve communication regarding the risks and benefits of MC.

Keywords

primary care, medications, geriatrics, community health, qualitative methods

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Introduction

The use of cannabis as a therapeutic treatment is increasing in the US, though its use is not consistently accepted.[1] While evidence exists as to the benefits of cannabis in certain conditions,[2] there also exists evidence of the risks associated with use in general[3] and specific populations.[4,5] Nonetheless, as of April 2023, 38 states, along with the District of Columbia and several territories, have approved cannabis for medicinal purposes[6] and the DEA is currently entertaining a proposal to reschedule marijuana from a Schedule I controlled substance to a Schedule III Controlled Substance.[7] This shift signifies society's growing acceptance of its therapeutic benefits. Yet, practitioners still need the necessary knowledge about the risks and the potential benefits of cannabis to recommend it or advise patients on its use, leading to an information gap.[1,8]

Patients and healthcare providers face a noticeable gap in seeking accurate information about medicinal Cannabis (MC).[9,10] Philpot surveyed a cohort of 62 providers regarding their attitudes towards MC,[11] identifying that these providers acknowledged the legitimacy of MC and supported its use with more than half of them considering MC beneficial for treating many conditions. Of significance, however, was that many providers were unsure about its effectiveness, and over

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one-third of providers did not feel comfortable discussing the benefits and risks of cannabis with their patients. Additionally, over half indicated they were either unprepared or reluctant to address patient inquiries about MC.

Interestingly, cannabis use among older adults has risen significantly. By 2018, it reached 4.2%, indicating a growing inclination among this demographic toward incorporating cannabis into their treatment regimens.[12,13] This trend is expected to continue, especially with the increasing legalization of cannabis in the United States but little is known about the willingness of healthcare providers to discuss MC with older adults.

The reluctance or hesitancy observed among healthcare providers to initiate discussions about MC hinders patients' access to comprehensive and reliable knowledge.[14] Kleidon et al[15] recently examined how older adults communicate with their primary care provider (PCP). They found that only 23% of older adults in the Philadelphia area reported their PCP asked them if they used cannabis, yet 80% of the respondents reported they were comfortable speaking with their PCP about cannabis. O'Rourke and colleagues found that patient-initiated conversations about cannabis were higher than provider-initiated conversations.[1] This lack of potential communication may lead older adults to seek information from less reliable sources.[8]

Therefore, the purpose of this study was to examine the communication practices and knowledge of healthcare providers in the Philadelphia Tri-state area regarding MC in older adults.

Methods

Design

This was a cross-sectional survey study of PCPs caring for older adults. The survey was emailed to over 500 practitioners, including physicians, pharmacists, nurse practitioners, and physician assistants who had completed the 4-h Pennsylvania Department of Health-approved medical marijuana course offered by 2 local universities. This course is designed to educate physicians, pharmacists, nurse practitioners, and physician assistants seeking to register with the Pennsylvania Department of Health's Medical Marijuana Program. It is also open to other healthcare professionals interested in expanding their knowledge of medical cannabis. The course covers state and federal regulations, the endocannabinoid system, cannabis pharmacology, and best practices for patient evaluation. Participants also learn about potential drug interactions, adverse events, and addiction.

The survey was conducted in 2022 to 2023, and the participants were drawn from a pool of individuals who completed the course between 2018 and 2022, with at least 6 months after completion of the class. The survey was crafted using a modified version of a questionnaire from the study conducted by Kleidon et al.[15] The adapted survey included questions related to practitioners' knowledge, comfort level, and patterns of practice in communicating with older adults about MC. The survey was pilot-tested by 2 pharmacy students to ensure clarity and effectiveness before wider distribution.

Practitioners were asked to complete the survey electronically and were provided an opportunity to consent to participate in the research. All practitioners who completed the survey were compensated for their time with a $50 Amazon gift card. The survey was anonymized, but if participants were interested in the gift card, they completed a separate form. All materials were reviewed and approved by the Institutional Review Board of Saint Joseph's University (IRB# 1902272).

Study Objectives

The primary objective of this study was to determine if PCPs inquire about MC with their older adult patients. The secondary objective was to evaluate the knowledge and comfort level of PCPs regarding MC, as they communicate with older adults.

Setting and Participants

To be included in the study, practitioners must have 1) been actively practicing within the Philadelphia Tri-state area (Pennsylvania [PA], Delaware, New Jersey) and 2) caring for older adults. Participants were recruited by email invitation. The source of the emails were the attendees of the University of the Sciences and the Philadelphia College of Osteopathic Medicine Medical Marijuana programs (attendees from 2018 to 2022). The email list had 575 potential respondents including physicians, nurse practitioners, physician assistants, and pharmacists. While pharmacists are not typically considered PCPs, PA legislation mandates pharmacists or physicians be present in medical cannabis dispensaries, ensuring that patients have access to medical expert guidance and counseling on medication use, thus functioning in a capacity to influence the selection of MC products and dose. The study aimed to recruit 100 participants. The sample size of 100 practitioners strikes a balance between obtaining meaningful insights and managing practical constraints, such as available resources and time limitations for busy practitioners. The survey was distributed over 21 months, from January 2022 to October 2023.

Survey and Measures

The survey consisted of 23 questions that were demographic, situational, and opinion-based. The 6 demographic questions were used to screen out PCPs not meeting the

inclusion criteria. After these were satisfactorily answered, 15 Likert scale questions and 2 open-ended questions were presented to the survey respondents. A copy of the survey used is included as Supplemental Material 1.

Statistical Analysis

Survey responses are described using the total number of completed surveys from eligible respondents. Descriptive statistics (mean percentages) were calculated for the quantitative data and the qualitative data were analyzed by grouping common responses into categories. Categories were defined by the primary author and then reviewed by a co-author and discussion about differences occurred until there was consensus. Additionally, survey results were cross-tabulated to examine the relationship between the frequency of PCPs' inquiries towards their patients about MC, and the frequency with which patients asked their providers about MC. McNemar's and Chi-square tests were used to analyze the results and the alpha value was set at 0.05.

Results

Out of the 575 emails sent out to potential participants, 218 responses were received, resulting in an initial 38% response rate. Out of the 218 responders, 86 met the criteria for inclusion and were considered in the analysis, leading to a 15% usable response rate. Reasons for exclusion included practitioners who did not care for older adults within their practice or who practiced outside of the tri-state area. Sixty-six (77%) of the included respondents were physicians (44% Osteopathic practitioners and 33% Allopathic physicians), with 14 (16%) of respondents being pharmacists and 6 (7%) either nurse practitioners or physician assistants. No other demographic questions were asked of the respondents.

Practitioners were prompted to indicate if they had asked their patients about 3 different substances: tobacco, alcohol, and cannabis. Within the past year, 93% of respondents reported they inquired about the use of tobacco and 96% about alcohol use. However, a significantly lower percentage (58%) of respondents reported asking their older adult patients about cannabis use ($\chi^2 = 4.36$, d.f. = 1, $P = .037$).

Table 1 illustrates the frequency with which older adults inquired about medical cannabis from practitioners in a given week. Nearly 74% of respondents reported that their patients asked them about MC as often as once a week to upwards of 10 times a week. Only 26% of practitioners reported that their older adult patients "hardly ever/never" asked about medical cannabis.

Table 2 presents data on the initiation of marijuana discussions between prescribers and patients. There is a statistically significant association between the initiator of the discussion regarding marijuana use indicating that their older adult patients are more likely to initiate the conversation ($\chi^2 = 7.364$, d.f. = 4; $P = .006$).

Table 1. Frequency of Older Adult Patients Asking About Medical Cannabis Respondent (N = 86).

How often do your older adult patients ask you about medical cannabis?	Number of respondents (%)
1-3 times a week	35 (41)
4-6 times a week	13 (16)
7-10 times a week	8 (9)
More than 10 times a week	7 (8)
Hardly ever/never	23 (26)

Table 2. (N = 86) Comparison of Prescribers' and Patients' Initiation of Marijuana Discussion.

Assessing Marijuana ask	Prescribers who ask patients	Patients who ask prescribers
Ask	50	63
Did not ask	36	23

Table 3 presents respondents' knowledge and comfort level about MC use. It shows that most respondents reported they were moderately or highly knowledgeable about, were moderately or extremely comfortable with it, and were comfortable discussing its benefits and risks with patients. The data also show they believed that older adults are comfortable discussing these aspects.

Additionally, 92% of respondents agreed that the process to certify patients in the MC program is difficult and that MC obtained through a state program is safer and more effective than cannabis obtained illegally (Data not shown). These findings suggest a positive attitude among primary care practitioners towards discussing and utilizing MC as a therapeutic option.

Discussion

The primary objective of this study was to determine if PCPs inquire about MC use with their older adult patients. Additionally, the study aimed to explore PCPs' practices and knowledge concerning their communication with older adults about MC. The results showed that PCPs asked about MC use among older adults approximately 58% of the time, which was significantly less frequent than their inquiries about tobacco or alcohol. The study also found that the older adult is more likely to start the conversation. These findings suggest distinct communication patterns between PCPs and older adult patients regarding different substances, indicating a potential hesitancy or lack of routine incorporation of MC-related conversations into standard healthcare discussions.

Table 3. Respondents Self-Reported Level of Knowledge and Comfort Regarding the Use of Medical Cannabis (N = 86).

	Knowledge and comfort ratings		
	HIGH	MEDIUM	NONE
	1-2	3-4	5
How much knowledge do you have about medical cannabis?[a]	60 (70)	19 (23)	7 (7)
How much knowledge do you have about the risks and side effects of cannabis?[a]	58 (68)	21 (24)	7 (8)
How comfortable do you think you are in discussing the benefits and risks of cannabis with your patients?[b]	42 (75)	13 (23)	1 (0)
How comfortable do you think older adults are in discussing the benefits and risks of cannabis with you?[b]	37(66)	16(28)	3(5)
How prepared are you to answer patient questions about the uses and health risks associated with medical cannabis?[b]	37 (66)	16 (28)	3 (5)

[a]Knowledge Scale: 1-Very knowledgeable; 2-Moderately knowledgeable; 3-Somewhat knowledgeable; 4-Not very knowledgeable; 5-Not at all knowledgeable.
[b]Comfort Scale: 1-Extremely comfortable; 2-Moderately comfortable; 3-Somewhat comfortable; 4-Not very comfortable; 5-Not at all comfortable.

The findings of the study suggest that while these healthcare providers generally have some knowledge about MC, there are self-reported gaps in their understanding. This lack of knowledge can impact their ability to provide evidence-based recommendations to patients who are considering using MC. About 70% of our respondents indicated that they were knowledgeable/very knowledgeable about cannabis. This is inconsistent with Kruger's findings, wherein they reported only about 39% of respondents were moderately to extremely knowledgeable about cannabis.[8] We account for this difference since our population was drawn from clinicians who completed the Pennsylvania Department of Health education program whereas Kruger's population was a general physician population drawn from a university-affiliated health system. However, since our population reported higher levels of knowledge, and comfort, the low initiation of a conversation with patients is concerning. While O'Rourke attributes the lack of communication to a lack of knowledge and comfort with the topic, the discomfort may be attributed to changes in policy and law surrounding cannabis along with the lack of strong clinical guidelines and evidence to support its use.[1] Nonetheless, our results continue to show a persistent gap in knowledge and communication regarding cannabis use among providers. This indicates that educational efforts could play a crucial role in improving providers' understanding of MC, potentially bridging the gap between patient interest and provider knowledge.

The study also highlights the varying comfort level of providers toward communicating with older adults about MC. In our study, similar to the Philpot study, providers acknowledged the legitimacy of MC and supported its use.[11] However, our results show only about two-thirds of providers felt comfortable discussing the benefits and risks of cannabis with older adult patients compared to the less than the 50% reported by Philpot. This is most likely again to our sample being those PCPs who actively chose to learn about MC via the 4-h training program.

Schauer et al's study revealed that practitioners' perceptions in states where physicians' views on medical cannabis align with state law vary. Our study confirmed Schauer's results, which found that despite the increasing legalization and acceptance of MC across various states, there remains a notable level of hesitancy among practitioners. This hesitancy exists despite efforts to educate and inform practitioners about the potential benefits of MC for patients.

An intriguing dynamic surfaced when exploring the initiation of MC treatment discussions. In contrast to traditional top-down communication in healthcare settings, our results show that older adult patients were more proactive in raising inquiries about MC therapy than were practitioners. This highlights a crucial aspect of patient-centered care, emphasizing the significance of acknowledging and addressing patient-initiated inquiries. Schauer et al's[9] study also found a similar trend, reporting that 75% of clinicians asked their patients about MC use, with nurse practitioners (NPs) more likely to inquire.[9] While our study had a low NP response rate, it raises the possibility that our results could differ if there were more NPs involved. This dynamic underscores the need for PCPs to be proactive in addressing cannabis use, providing evidence-based information, and integrating it into routine screenings for substances.

The observed disparity in inquiry frequency between cannabis and other substances reflects a broader issue within healthcare systems regarding the recognition and integration of cannabis' therapeutic potential. This oversight may stem from historical stigmatization and legal restrictions on cannabis, which have hindered its

acceptance as a legitimate medical option. However, the increasing legalization and normalization of cannabis use underscore the importance of reassessing its role in clinical care. The study conducted by Holman et al[16] found that nearly half of the participants in their study reported substituting cannabis for other pharmaceuticals or substances. This finding aligns with a growing body of evidence suggesting that MC may serve as a viable alternative or adjunct to traditional medications for various conditions.[17] The high rates of substitution for opioids and non-opioid prescription drugs highlight the potential of cannabis in addressing the opioid crisis and reducing the reliance on potentially harmful pharmaceuticals. The study's findings reveal a significant number of patients who did not inform their PCPs about substituting cannabis, highlighting the communication challenges. This reluctance may stem from limited knowledge or stigma. It is believed that demographic factors, like age and gender, influenced disclosure likelihood, indicating potential communication pattern differences based on demographics, vital for clinical practice. In light of this providers must initiate open and non-judgmental discussions with their patients about cannabis use. By incorporating inquiries about cannabis use into routine assessments, providers can better understand their patient's needs and provide more comprehensive care.

Our study has several notable limitations. The relatively small sample size and low usable response rate (15%) limit the generalizability of our findings, even within our intentionally biased population of practitioners who completed a regional MC training program. This regional focus, coupled with the inclusion of pharmacists, may further restrict the broader applicability of our results to general PCPs nationwide.

Our study's focus on communication initiation, while valuable, does not fully capture the nuanced depth and quality of MC discussions between practitioners and patients. The reluctance to discuss cannabis with older adults likely stems from a complex interplay of factors beyond individual providers' knowledge, and may be influenced by institutional factors, such as perceived lack of support or approval for such conversations. The complexity of this issue is illustrated by the policy of the U.S. Department of Veterans Affairs (VA). Since cannabis remains classified as a Schedule 1 Controlled Substance under federal law, VA health care providers cannot recommend MC but can discuss marijuana use as part of comprehensive care planning.[18] This subtle distinction, however, may lead practitioners to avoid addressing the subject altogether, fearing potential legal or professional repercussions. Such policy-driven constraints highlight the broader challenges healthcare providers face in navigating MC discussions. This is not dissimilar to the phenomenon that has been observed with other treatment modalities, such as medications for opioid use disorder.[19]

To address these limitations and enhance the robustness of future research, subsequent investigations should employ larger, more diverse samples extending beyond the Tri-state region. Such studies could explore whether general primary care practitioners, across various professions and regions, exhibit similar communication patterns regarding MC. Future research should also delve deeper into the content and context of MC discussions, providing a more comprehensive understanding of communication dynamics within healthcare settings, particularly concerning older adults. Additionally, future studies should consider the impact of federal regulations on MC discussions, especially in light of the Drug Enforcement Agency's recent consideration to move marijuana to a Schedule III Controlled Substance.[7]

Conclusion

This study brings attention to a notable trend among practitioners, revealing a common hesitancy to proactively engage in conversations about MC treatment with their older adult patients. The findings indicate a pervasive reluctance and a notable lack of communication when addressing or contemplating MC therapy, thereby hindering the advancement of this patient care option. This study underscores the necessity for further investigation into the intricacies of discussing MC within healthcare settings. By unraveling these nuances, PCPs may be better positioned to provide older adults with reliable information on the use of medical cannabis and to engage in more transparent dialogue, thereby advancing patient care and facilitating the integration of MC as a viable therapeutic option for older adults.

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N/A

Data Availability Statement

The datasets generated during and/or analyzed during the current study are available from the corresponding author on reasonable request.

Declaration of Conflicting Interests

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Supplemental Material

Supplemental material for this article is available online.

References

1. O'Rourke R, Lima ML, Jetten J. Healthcare professionals and medical cannabis: a scoping review informed by the theoretical domains framework. *J Public Health (Berl)*. 2022;30:1901-1913.
2. National Academies of Sciences, Engineering, and Medicine; Health and Medicine Division; Board on Population Health and Public Health Practice; Committee on the Health Effects of Marijuana: An Evidence Review and Research Agenda. The Health Effects of Cannabis and Cannabinoids: The Current State of Evidence and Recommendations for Research. National Academies Press; 2017.
3. Gorelick DA. Cannabis-related disorders and toxic effects. *N Engl J Med*. 2023;389(24):2267-2275.
4. Hudson A, Hudson P. Risk factors for cannabis-related mental health harms in older adults: a review. *Clin Gerontol*. 2021;44(1):3-15.
5. Cousijn J, Núñez AE, Filbey FM. Time to acknowledge the mixed effects of cannabis on health: a summary and critical review of the NASEM 2017 report on the health effects of cannabis and cannabinoids. *Addiction*. 2018;113(5): 958-966.
6. National Conference of State Legislators. State Medical Cannabis Laws. Accessed September 24, 2024. https://www.ncsl.org/health/state-medical-cannabis-laws
7. Justice Department submits proposed regulation to reschedule marijuana. Office of Public Affairs | Justice Department Submits Proposed Regulation to Reschedule Marijuana | United States Department of Justice. May 16, 2024. Accessed November 6, 2024. https://www.justice.gov/opa/pr/justice-department-submits-proposed-regulation-reschedule-marijuana
8. Kruger DJ, Mokbel MA, Clauw DJ, Boehnke KF. Assessing health care providers' knowledge of medical Cannabis. *Cannabis Cannabinoid Res*. 2022;7:501-507.
9. Schauer GL, Njai R, Grant AM. Clinician beliefs and practices related to Cannabis. *Cannabis Cannabinoid Res*. 2022;7(4):508-515.
10. Karanges EA, Suraev A, Elias N, Manocha R, McGregor IS. Knowledge and attitudes of Australian general practitioners towards medicinal cannabis: a cross-sectional survey. *BMJ Open*. 2018;8(7):e022101. doi:10.1136/bmjopen-2018-022101
11. Philpot LM, Ebbert JO, Hurt RT. A survey of the attitudes, beliefs and knowledge about medical cannabis among primary care providers. *BMC Fam Pract*. 2019;20(1):17.
12. Han BH, Sherman S, Mauro PM, Martins SS, Rotenberg J, Palamar JJ. Demographic trends among older cannabis users in the United States, 2006-13. *Addiction*. 2017;112(3):516-525. doi:10.1111/add.13670
13. Han BH, Palamar JJ. Trends in Cannabis use among older adults in the United States, 2015-2018. *JAMA Intern Med*. 2020;180(4):609-611. doi:10.1001/jamainternmed.2019.7517
14. Carlini BH, Garrett SB, Carter GT. Medicinal Cannabis: a survey among health care providers in Washington state. *Am J Hosp Palliat Care*. 2017;34(1):85-91.
15. Kleidon AM, Peterson AM, Warner-Maron I, Glicksman A. Attitudes, beliefs, and perceptions on Cannabis among older adults aged 65 and older: a cross-sectional survey. *J Prim Care Community Health*. 2023;14:21501319231177284.
16. Holman A, Kruger DJ, Lucas P, Ong K, Bergmans RS, Boehnke KF. Healthcare provider and medical cannabis patient communication regarding referral and medication substitution: the Canadian context. *J Cannabis Res*. 2022;4(1):32. to cannabis use disorder in primary care: focus on youth and other high-risk users. Can Fam Physician. 2014;60(9):801-808, e423-e432.
17. Heng M, McTague MF, Lucas RC, Harris MB, Vrahas MS, Weaver MJ. Patient perceptions of the use of medical marijuana in the treatment of pain after musculoskeletal trauma: a survey of patients at 2 trauma centers in Massachusetts. *J Orthop Trauma*. 2018;32(1):e25-e30.
18. US Department of Veterans Affairs VHA. Va.gov: Veterans Affairs. 2017. Accessed September 25, 2024. https://www.publichealth.va.gov/marijuana.asp
19. Lai B, Croghan I, Ebbert JO. Buprenorphine waiver attitudes among primary care providers. *J Prim Care Community Health*. 2022;13:21501319221112272.