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Agitation in Alzheimer's Disease as a Qualifying Condition for Medical Marijuana in the U.S.

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Abstract

Objectives—Determine the extent to which states/localities include dementia as a qualifying condition for medical marijuana and how common this indication is.

Methods—Review of authorizing legislation and medical marijuana program websites and annual reports for the states/localities where medical marijuana is legal.

Results—Of the 24 states/localities where medical marijuana is legal, dementia is a qualifying condition in 10 (41.7%), primarily for "agitation of Alzheimer's disease." In the 5 states where information was available regarding qualifying conditions for certification, dementia was the indication for <0.5% of medical marijuana certifications.

Conclusions—Dementia is somewhat commonly listed as a potential qualifying condition for medical marijuana. Currently, few applicants for medical marijuana list dementia as the reason for seeking certification. However, given increasingly open attitudes towards recreational and medical marijuana use, providers should be aware that dementia is a potential indication for licensing, despite lack of evidence for its efficacy.

Keywords

dementia; neuropsychiatric symptoms; agitation; medical marijuana; healthcare policy

INTRODUCTION

Marijuana is the most commonly used illicit drug in the United States (1). In addition to broader societal acceptance of marijuana use, the Baby Boomer cohort specifically has greater rates of lifetime illicit drug use than previous cohorts of older adults, so the

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prevalence of marijuana use among older adults is expected to grow (2). Medical marijuana is legal in 23 states and the District of Columbia (D.C.) (3), although it still remains illegal under federal law.

Another consequence of the aging cohort of Baby Boomers is that the number of cases of dementia will grow, and along with it the burden of the neuropsychiatric symptoms of dementia (NPS). While the number of persons affected by NPS continues to increase, there are limited pharmacological options to treat them (4). Several states include “agitation of Alzheimer’s dementia” as a qualifying condition for use of medical marijuana, despite extremely limited evidence for benefit from cannabinoids (5). The only randomized, placebo-controlled trial of marijuana for dementia (6), specifically tetrahydrocannabinol for dementia-related NPS, was negative, though the trial was small (50 patients), short-term (3 weeks), and used a relatively low-dose. A more recent study was positive, but open-label in design and even smaller (n=10 completers) (7).

That a state might allow use of medical marijuana for patients with dementia raises several issues. First, it is important to monitor how common this indication is in terms of both the number of states allowing it and, among these states, how common it is. Next, it is important that clinicians in these states be prepared to discuss medical marijuana use by their patients with dementia, should patients or families request input. Finally, most patients with dementia may not have the capacity to make their own medical decisions, so it is important to consider how, when, and by whom the decision to use medical marijuana is being made on their behalf. In this brief report, we focus on the first issue by determining, among all the states that allow medical marijuana, which specific states permit use related to dementia and the proportion of licenses provided for this indication.

METHODS

States/localities that allow medical marijuana generally require a physician to certify that the patient has a qualifying “debilitating medical condition” (e.g., ref (8)), though physicians do not technically prescribe marijuana, as this is not allowed by federal law. Among those states where medical marijuana is approved, we determined which states include dementia as a qualifying condition to be granted a medical marijuana license. Then, through internet search or direct request, we determined the proportion of licenses granted for this indication in the most recent year for which data was available (2014 for most states). We did not include the 16 states that have only approved use of the nonpsychoactive cannabis extract cannabidiol (CBD). Use in these states is almost entirely limited to “intractable epilepsy”; none allow for use in dementia.

RESULTS

Of the 24 states/localities (including D.C.) where medical marijuana is legal, dementia is considered a qualifying condition in 10 (41.7%): “agitation of Alzheimer’s disease” is the specific indication in 9 states (Arizona, Delaware, Illinois, Maine, Maryland, Michigan, New Hampshire, Oregon, and Rhode Island), while Washington, D.C., allows a license for “any condition for which treatment with medical marijuana would be beneficial, as determined by

the patient's physician" (9). No states provide guidelines as to how the diagnosis of Alzheimer's disease (versus another form of dementia) should be established.

Among the 5 states where both dementia is a qualifying condition and information on these conditions is publicly available (Table 1), this indication accounts for <0.5% of licenses. Additional information about the demographic or clinical characteristics of licensees is not available.

DISCUSSION

Although agitation of Alzheimer's dementia is a qualifying condition for medical marijuana in over 40% of states/localities that allow medical marijuana, very few licenses are currently granted for this indication. Given the extremely distressing nature of neuropsychiatric symptoms of dementia and the limited treatment options available (4)—especially when antipsychotics, which have the most evidence of benefit, are associated with increased mortality—caregivers and providers will continue to look for alternative options. With the growing societal acceptance of marijuana use and attitudes towards use by Baby Boomers, it is not surprising that medical marijuana would be considered to treat distressing dementia-related behaviors.

It is notable that, in every state that includes dementia-related agitation as a qualifying condition, it is for Alzheimer's dementia specifically, which then means that treatment administered for another type of dementia would be illegal. However, the states provide no guidelines for arriving at that diagnosis nor require evidence to substantiate it. It is unclear why legislators would have specifically intended to limit medical marijuana to Alzheimer's dementia; rather, the language may reflect an inaccurate conflation of dementia with Alzheimer's disease. Nevertheless, as is currently legislated without clear guidelines to establish the diagnosis of Alzheimer's dementia, it is likely that patients with non-Alzheimer's dementia are receiving medical marijuana.

It is also likely that more patients with dementia are receiving medical marijuana than just those with agitation. Some patients may receive medical marijuana to treat the cachexia of advanced dementia, as nearly every state includes cachexia as a qualifying condition. Others could be receiving it for a comorbid qualifying condition such as glaucoma or cancer. While not the focus of this brief report, it is possible that medical marijuana use among patients with dementia is more common than the agitation-specific use focused on here.

As with other uses for medical marijuana, providers have almost no data with which to advise patients and families on the potential risks and/or benefits associated with treatment, though marijuana has both short-and long-term adverse effects on cognition (10). In addition, dementia is unique among the qualifying conditions in that, almost by definition, the patients are unlikely to have the cognitive ability to decide to use independently. While it is not unusual for surrogate decision makers to make decisions on behalf of patients with dementia, such decisions are ideally made following full consideration of the risks and benefits, informed by the evidence as it is currently understood. In contrast, "medical" marijuana is a treatment of unknown risk and benefit to patients with dementia that these

states have decided to allow caregivers to administer to some of the states' most at-risk, disadvantaged citizens.

As the public grows more accepting of both recreational and medical marijuana use and the impact of dementia on Baby Boomers (either as caregivers or patients themselves) increases, all providers—and especially geriatric psychiatrists—should be prepared for discussions about the use of medical marijuana. Thus far, the only randomized, placebo-controlled trial of cannabinoids for neuropsychiatric symptoms of dementia was negative (6), and overall there are far more indications for medical marijuana than there is evidence to support them (11). Currently, since medical marijuana for patients with dementia is specifically approved for agitation in patients with Alzheimer's dementia, it is important to monitor two types of "indication creep": first, whether use expands to other types of dementia; and second, whether it is used for other symptoms like anxiety, irritability, or wandering. Given the vulnerable status of older adults with dementia, it is critical that states monitor which citizens they are permitting to be treated with this therapy, specifically including the extent of cognitive impairment among the recipients with dementia and how frequently this certification is requested by surrogate decision-makers. Clinicians should be aware that the growing acceptance of marijuana may lead caregivers to consider use of marijuana for dementia and related behaviors and be prepared to discuss this topic with patients and their families.

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REFERENCES

1. [Accessed January 15, 2016] Center for Behavioral Health Statistics and Quality: Behavioral health trends in the United States: Results from the 2014 National Survey on Drug Use and Health (HHS Publication No. SMA 15-4927, NSDUH Series H-50). 2015. http://www.samhsa.gov/data/sites/default/files/NSDUH-FRR1-2014/NSDUH-FRR1-2014.pdf
2. Colliver JD, Compton WM, Gfroerer JC, et al. Projecting drug use among aging baby boomers in 2020. Ann Epidemiol. 2006; 16:257–265. [PubMed: 16275134]
3. [Accessed January 11, 2016] ProCon.org: 23 legal medical marijuana states and DC: laws, fees, and possession limits. http://medicalmarijuana.procon.org/view.resource.php?resourceID=000881
4. Kales HC, Gitlin LN, Lyketsos CG. Assessment and management of behavioral and psychological symptoms of dementia. BMJ. 2015; 350:h369. [PubMed: 25731881]
5. Walther S, Halpern M. Cannabinoids and dementia: a review of clinical and preclinical data. Pharmaceuticals. 2010; 3:2689–2708. [PubMed: 27713372]
6. van den Elsen GAH, Ahmed AIA, Verkes RJ, et al. Tetrahydrocannabinol for neuropsychiatric symptoms in dementia: A randomized controlled trial. Neurology. 2015; 84:2338–2346. [PubMed: 25972490]
7. Shelef A, Barak Y, Berger U, et al. Safety and Efficacy of Medical Cannabis Oil for Behavioral and Psychological Symptoms of Dementia: An-Open Label, Add-On, Pilot Study. J. Alzheimers Dis. 2016; 51:15–19. [PubMed: 26757043]
8. [Accessed January 15, 2016] Michigan Medical Marihuana Registry Program: Frequently asked questions. 2008. http://www.michigan.gov/documents/lara/lara_MMP_FAQ_6-28-13_426011_7.pdf

9. [Accessed January 11, 2016] Department of Health, Government of the District of Columbia: Medical Marijuana Program: Physician Frequently Asked Questions. 2015. http://doh.dc.gov/node/822902

10. Volkow ND, Baler RD, Compton WM, et al. Adverse health effects of marijuana use. N Engl J Med. 2014; 370:2219–2227. [PubMed: 24897085]

11. Hill KP. Medical marijuana for treatment of chronic pain and other medical and psychiatric problems: a clinical review. JAMA. 2015; 313:2474–2483. [PubMed: 26103031]

Table 1

States with dementia-related agitation as a qualifying condition for medical marijuana.

State (year of approval)	Medical marijuana licenses for dementia-related agitation, N (%[a])
Arizona (2010)	33 (0.1)
Delaware (2011)	0 (0.0)
Illinois (2013)	7 (0.2)
Maine (1999)	…[b]
Maryland (2014)	…[c]
Michigan (2008)	48 (0.05)
New Hampshire (2013)	…[b]
Oregon (1998)	…[b]
Rhode Island (2006)	24 (0.1)
Washington, DC (2010)	n/a[d]

[a] % of state's total licenses granted in 2014

[b] No information by indication in 2014 annual report

[c] Patient registration to begin in 2016

[d] A qualifying condition is "any condition for which treatment with medical marijuana would be beneficial, as determined by the patient's physician"; there are no specific qualifying conditions. (http://doh.dc.gov/sites/default/files/dc/sites/doh/publication/attachments/120430FAQPhysicians%20Final_0_0.pdf)