

Since 1996, 33 U.S. states, the District of Columbia, Guam, Puerto Rico, the U.S. Virgin Islands, and all Canadian provinces have passed legislation legalizing the use of marijuana for medical purposes. Another 13 states allow use of low delta-9 tetrahydrocannabinol/high cannabidiol products for medical reasons in some situations or as a legal defense to its use. Yet cannabis remains a Schedule I Controlled Substance, impacting not only the legality of a healthcare provider's 8(i)-10(d5-6(-)]TJ 9(e)a,8 sification of cannabis as a Schedule I Controlled Substance therefore directly limits the amount of moderate- to high-quality human evidence regarding the effectiveness of cannabis for certain conditions, dosage, adverse effects, or safety. Regardless of the limited evidence, individuals are using medical cannabis products more frequently, and nurses are left without evidence-based, clinical resources when caring for them. To address this lack of resources, the National Council of State Boards of Nursing Board of Directors appointed members to the Medical Marijuana Nursing Guidelines Committee to develop recommendations to guide nurses' care of patients using medical marijuana. This article presents their recommendations, which were published in July 2018, and various updates since that publication.

- Explore the regulatory and legislative history of medical marijuana.
- Discuss current legislative and legal approaches tocy 0-4(a)27(l)24(o) 6(i)7(s)1n10(e) TJ 0 Tc 0 Tw 22.376 0 Td (-)Tj -0.017 Tc -0.0

ations or as a legal defense to its use (National Conference of State Legislatures [NCSL], 2019). All provinces/territories of Canada (Government of Canada, 2016) have passed legislation legalizing the use of canabis for medical purposes.

With this legalization comes an increasing number of patients who use medical marijuana along with a larger population who use cannabis obtained through other means to self-treat various symptoms. Evidence supporting cannabis use to manage medical conditions is limited by legal restrictions on using cannabis for research purposes; thus, nurses are left without evidence-based, clinical resources when caring for patients who use medical marijuana products.

Statutory authorization of cannabis use for certain conditions is influenced by the limited available research, but more so influenced by advocacy groups and anecdotal evidence. Regardless of existing evidence or lack thereof, individuals are using cannabis and nurses will care for these patients more frequently. To address the lack of guidelines for nurses when caring for individuals using cannabis, the National Council of State Boards of Nursing Board of Directors appointed members to the Medical Marijuana Nursing Guidelines Committee to develop guidelines and recommendations to guide nurses' care of patients using medical marijuana, and those guidelines were published in July 2018 (National Council of State Boards of Nursing, 2018).

This article presents principles of safe and knowledgeable practice guidelines when caring for patients using medical marijuana, as recommended by the committee, including (a) a working knowledge of the current state of legalization of medical cannabis use and their jurisdiction's MMP; (b) current approaches to cannabis availability, dispensing cannabis, and qualifying conditions with and without evidence; (c) an understanding of the endocannabinoid system and its pharmacokinetics; and (d) identifying dosage, methods of administration, adverse reactions, and safety and ethical considerations for patient use of medical marijuana. This article uses several terms related to cannabis, medical marijuana, and their official programs. See Table 1 for a list of definitions for the terms used in this article.

Over the past few decades, the federal government and individual jurisdictions have instituted varying laws, rules, and regulations regarding the availability and dispensing of cannabis for medical purposes.

Federal Legislation

The Comprehensive Drug Abuse Prevention and Control Act (1970), was enacted to protect the public, stating "illegal importation, manufacture, distribution, and possession and improper use of controlled substances have a substantial and detrimental effect on the health and general welfare of the American people."

Specifically, the CSA, Title II of the Comprehensive Drug Abuse Prevention and Control Act of 1970, created the schedules of controlled substances.

Because cannabis is included in Schedule I of the CSA, not only does that imply that cannabis has no accepted medical value and present a high potential for abuse, it also places severe restrictions on cannabis research (Comprehensive Drug Abuse Prevention and Control Act, 1970). Numerous federal bills have been introduced in an effort to amend the CSA by rescheduling cannabis to allow for more research. Various petitions have been filed with the U.S. Drug Enforcement Administration (DEA) to reschedule cannabis, and several lawsuits have challenged the constitutionality of including cannabis in the CSA. No bill, petition, or lawsuit has prevailed in rescheduling cannabis.

Again in 2016, congressional representatives called on the DEA to reschedule cannabis (Bernstein, 2016). Subsequently, the U.S. Food and Drug Administration (FDA) requested a scientific and medical evaluation and scheduling recommendation from the U.S. Department of Health and Human Services (Rosenberg, 2016a). After review, the department concluded that "marijuana has a high potential for abuse, has no accepted medical use in the United States, and lacks an acceptable level of safety for use even under medical supervision" (Denial of Petition to Initiate Proceedings, 2016). Based on this report, the DEA denied the petition to reschedule cannabis as a Schedule II Controlled Substance (Rosenberg, 2016b).

The DEA, however, did recognize the lack of scientific study on cannabis and announced a policy change to expand the number of DEA-registered cannabis manufacturers (Rosenberg, 2016a). This expansion was expected to provide an increased supply of cannabis for FDA-authorized research purposes. Thirty-three entities applied to the DEA to become cannabis manufacturers for research, yet as of July 2019, no applications have been reviewed by the DEA (Scottsdale Research Institute, LLC, 2019). In June 2019, a petition sought to compel the DEA to process the applications, claiming that it has unlawfully failed to act on medical cannabis research applications since 2016 (Scottsdale Research Institute, LLC, 2019). A federal court in July 2019 ordered the DEA to respond within a month (U.S. Court of Appeals, 2019). The DEA responded by publishing a policy statement, "providing notice of pending applications" to register as marijuana manufacturers for researchers and that the "DEA intends to propose new

TABLE 1

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Authorize. Any act of certification, attestation, or other method for a practitioner to affirm that a patient may benefit from medical cannabis.

Cannabidiol (CBD). A major cannabinoid that indirectly antagonizes cannabinoid receptors, which may attenuate the psychoactive effects of tetrahydrocannabinol.

Cannabinoid. Any chemical compound that acts on cannabinoid receptors. These include endogenous and exogenous cannabinoids.

Cannabinol (CBN). A cannabinoid more commonly found in aged cannabis as a metabolite of other cannabinoids.

Cannabis. Any raw preparation of the leaves or flowers from the plant genus,

Certify. For the purpose of this article, to "certify" is the act of

products for medical reasons in some situations or as a legal defense to its use (NCSL, 2019). However, this type of program is not considered an MMP.

Procuring Certification for Medical Marijuana

Since a healthcare provider cannot prescribe cannabis, each MMP includes a list of medical conditions or symptoms, known as qualifying conditions, for which an individual may use medical marijuana (NCSL, 2019). The healthcare provider determines whether the individual has a qualifying condition and completes a certification for the MMP. Generally, MMPs include various provisions regarding the process for procuring a certification for the use of cannabis as well as the amount of cannabis distributed to an individual, and legal protections extend to patients, designated caregivers, and healthcare providers (NCSL, 2019).

Some MMPs require a bona fide healthcare provider—patient relationship to certify a patient as having a qualifying condition. Other MMPs require a preexisting and ongoing relationship with the patient as a treating healthcare provider, and some note the relationship may not be limited to issuing a written certifi-

cation for the patient or a consultation simply for that purpose. Additionally, a few MMPs specify that an advanced practice registered nurse can certify a qualifying condition (NCSL, 2019). Some MMPs require a specific course or training for a provider to participate in certifying an MMP qualifying condition (NCSL, 2019).

Patients with a certification of a qualifying condition must register with their local state MMP. A registered patient can obtain cannabis from a jurisdiction-authorized cannabis dispensary. Procurement and administration of cannabis for medical purposes are limited to the patient and/or the patient's designated caregiver. The MMP will specify whether designated caregivers are permissible as well as the applicable process for registration as a designated caregiver (NCSL, 2019). In some jurisdictions, the MMP allows an employee of a hospice provider or nursing or medical facility, a visiting nurse, a personal care attendant, or a home health aide to act as a designated caregiver for the administration of medical marijuana (NCSL, 2019).

The laws regarding MMPs are frequently changing. Nurses caring for patients using medical marijuana should review the unique characteristics of a jurisdiction's MMP that may affect their

practice. The relevant statute can be located through the jurisdiction's department of health and MMP. Useful links are provided through the NCSL (2019).

Reconciling State and Federal Laws

Many questions arise regarding the conflict between the current federal prohibition and state MMPs. Although the use of marijuana pursuant to authorized MMPs appears to conflict with federal law and regulations, the 10th Amendment gives the state a certain degree of autonomy where Congress cannot commandeer

- Chronic pain (resulting from fibromyalgia) (Skrabek, Galimova, Ethans, & Perry, 2008)
- Neuropathies (resulting from HIV/AIDS, multiple sclerosis, or

2006a; FDA, 2006b). These drugs are synthetic cannabinoids primarily interacting on the CB1 receptor, similar to that of THC. Dronabinol is indicated for anorexia associated with weight loss in patients with AIDS and for nausea and vomiting associated with cancer chemotherapy in patients who have failed to respond adequately to conventional antiemetic treatments. Nabilone is indicated for nausea and vomiting only.

Sativex, another pharmaceutical marijuana product, contains a 1:1 ratio of THC and CBD and is administered as an oral mucosal spray. Sativex is indicated for adults with moderate to severe spasticity due to multiple sclerosis who have not responded adequately to other anti-spasticity medication (GW Pharmaceuticals, n.d.). Although approved for use in over 25 countries, this product is not approved in the United States.

Epidiolex, an oral CBD plant-derived product recently approved by the FDA, is based on four clinical trials in patients aged 2 years or older with either Lennox-Gastaut syndrome or Dravet syndrome (FDA, 2018). Following Epidiolex's approval by the FDA, the DEA reclassified Epidiolex as a Schedule V drug (low potential for addiction or abuse) (DEA, 2018b).

Cannabis Administration Methods

Synthetic and plant-derived products approved by the FDA have

Adverse Effects

Dai and Richter (2019) recently published their study—the first

for patients who use medical cannabis. The principles of essential knowledge regarding legislation and legalization of cannabis, along with an understanding of cannabis pharmacokinetics, administration, safety, and ethical considerations presented in this article, will create a strong foundation for safe and knowledgeable nursing care of patients using medical cannabis.

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	Exclusively, with the patient, without any interference from family, caregivers, or other practitioners involved in the patient's care	 Gain an understanding of the ethical and safety considerations regarding a patient's treatment with cannabis. 						1 2 3 4 Comments:							
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a.	Examine current evidence, which is scientifically rigorous, statistically reportable, and based on patient														
b.	populations. Use personal judgment when providing patient care to patients using medical														

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c. Create a strong foundation for safe and knowledgeable nursing care of patients using medical cannabis through essential knowledge of legislation and legalization

d. Disregard standards of practice based on professional values and/or a code of

