Dear Dr. Jeff:

Our state is considering legalizing marijuana. Clearly, we will be admitting residents who are already using marijuana and some others for whom it might be recommended. I know that the details vary from state to state, but do you have any general or specific recommendations for our nursing home?

Dr. Jeff responds: As of this writing, 23 states have legalized marijuana for medical use under various circumstances and with various limitations and regulations. Several others are considering legislation or ballot propositions. Additionally, many localities have decriminalized possession of small quantities for personal use while retaining laws against sales. Legislation dates back to Alaska and Oregon in the late 1990s and includes states that have legalized marijuana but failed to create the regulations needed to make the laws effective and clear. Colorado, Washington, Oregon, and Alaska also have legalized recreational use, production, and distribution. From the viewpoint of a skilled nursing facility, these represent two quite different situations.

Despite these legislative activities, the Drug Enforcement Administration still classifies marijuana (or rather, tetrahydrocannabinols, which are believed to be the major psychoactive components in marijuana) as a Schedule 1 controlled substance, meaning only available for research purposes but without approved medical uses. Two cannabinoid preparations, dronabinol and nabilone, have been approved by the Food and Drug Administration for the treatment of nausea and vomiting in cancer patients receiving chemotherapy and for anorexia in AIDS patients. These are synthetic oral preparations, not marijuana extracts, and were placed on DEA Schedule II.

Dronabinol, sold in the United States as Marinol, was moved from DEA Schedule II to Schedule III, allowing prescribers to authorize up to five refills, due to observational studies of its low potential for abuse or addiction. Thus, cannabinoid preparations are already available and used, albeit infrequently, in nursing homes all over the United States. However, due to the relative lack of success using this medication in patients with anorexia and weight loss unrelated to HIV or cancer treatments, along with its expense, its use has not become common. The FDA is fast-tracking a cannabinoid oromucosal spray to treat pain in patients with advanced cancer. But delta-9-tetrahydrocannabinol (THC) remains illegal. Federal “Just Say No” policies date to the Reagan Administration and seem unlikely to change, despite changes at the state level.

A Long History

The plant genus Cannabis has been cultivated by humans since antiquity, both for the strength of its stalks (hemp) and for the bioactive properties of its seeds, leaves, flowers, and buds. Medicinal uses for cannabis, and particularly the sativa species, were widely described in ancient medical texts since the pharmacopoeia of Emperor Shen-Nung in 2737 B.C. It was considered a fundamental treatment in many herbal medication systems, along with extracts from opium poppies and ephedra plants. Its use is described on Egyptian papyri and was apparently used topically to treat hemorrhois, including those of at least one Pharaoh. Cannabis preparations were used by Indian, Greek, and Arab physicians. A shaman from the Uighur region was buried 2700 years ago with bowls of cannabis at his head and feet, which have been confirmed to contain THC. And some scholars have suggested that the kaneh bosome described in Exodus 30:23 as one major ingredient of holy anointing oil (later used by Jesus and his followers to heal the sick – see Mark 6:13) – and which is variably translated as reeds, sweet cane, calamus, or other plants – is actually cannabis.

Cannabis for both medical and recreational use was legal in the United States until 1937. Extracts of cannabis were routinely sold in pharmacies for both ingestion and topical use. Nevertheless, it was not commonly prescribed nor – despite the miraculous properties ascribed by some enthusiasts – regarded as particularly effective for the treatment of common conditions. The analgesic properties of cannabis were known and explored in ancient times, when its numbing properties were used for anesthesia, but cocaine was considered a much more effective topical anesthetic for mucosal pain than cannabis smoke. There was little opposition from organized medicine when marijuana was outlawed, nor has there been any particular pressure from major medical societies for its legalization.

Limited Data

Medical use of marijuana is legal in many countries, but utilization is not very extensive. Although potential uses have been described for many different conditions, including glaucoma, neuropathic pain, cancer, multiple sclerosis, and seizure disorders, for most of these conditions the use of cannabis derivatives appears likely to be of symptomatic relief for a limited group of patients with refractory conditions rather than a routine or preferred treatment. Of course, anything that might relieve suffering should be seriously examined, and potentially useful treatments should not be denied to those who may benefit. Unfortunately, useful data to evaluate the risks and benefits of marijuana for the treatment of any of the proposed conditions are extremely limited. Although more than 200 researchers have been approved to use marijuana for research purposes, many of these studies relate to detection and evaluation of abuse potential. Only 16 researchers are conducting trials on smoked marijuana in human beings. Most published studies on therapeutic potential or adverse effects to date have been small in scale and poorly designed to answer clinicians’ questions.

A 2007 study in the British Journal of Pharmacology (Br J Pharmacol 2007;152:655-62) raised the exciting prospect that cannabis might be an effective treatment for Alzheimer’s disease. The authors noted that THC and other cannabinoid receptors have been shown to have neuroprotective effects against beta-amyloid aggregation, inhibit the phosphorylation of tau protein, and decrease inflammatory and oxidative damage to neurons. Furthermore, THC may be a cholineesterase inhibitor in the brain, thus offering a triffecta for Alzheimer’s in a single drug. The brain has an entire cannabinoid system with binding sites present on a variety of neurons. Unfortunately, a recent review article of cannabis for the treatment of a variety of neurodegenerative diseases, and a Cochrane review specifically aimed at Alzheimer’s disease, both concluded that there is insufficient evidence to draw conclusions regarding the efficacy of cannabis for long-term treatment. But there is no doubt that the acute use of inhaled cannabis preparations inhibits short-term memory and that the potential for cannabis-induced sensory alterations and hallucinations represents a severe risk for dementia patients who already are susceptible to delirium.

Different Smokes for Different Folks

Understanding medical marijuana is complicated by the simple fact that there are many different strains of marijuana and that THC is only one of at least 468 compounds present in a typical Cannabis sativa plant (not counting possible pesticides or other substances used in its growth and preparation). The concentrations and ratios of these substances vary from plant to plant and certainly between C. sativa and C. indica, which may be more sedating and also contain more of the nonpsychoactive elements believed to control seizures and muscle spasms. States that have legalized medicinal marijuana have generally allowed physicians to prescribe it on an as-needed basis and allowed patients to adjust the amount ingested—whether eaten or smoked—based on their symptoms. Because there is no standardization, with sale currently by product weight alone, and even the ratio of seeds to leaves or buds varying from sale to sale (not to mention twigs, soils, and bugs frequently present as well), consumers have only limited control over purchased products. (The Denver Post currently employs a pot critic to review locally available strains, comparable to their wine critic.)

Some strains are known or believed to have much higher THC concentrations, and some plants grown primarily for hemp production have been bred to have very low THC concentrations to protect agricultural laborers from having contact with the plants. Some strains produce oilier THC, which may be present on the exterior of the plant. Dosage also varies with the route of administration as does the onset of biological action, which is much more rapid when absorbed directly across pulmonary membranes than through the gastrointestinal tract. Obviously, all this makes actual prescribing by a physician or nurse practitioner for administration by licensed nursing staff in specific doses at specific intervals virtually impossible. Also, vendor pharmacies in most states are not licensed to distribute cannabis, which is generally sold through specialized outlets. New York state has proposed an integrated license from production through transport and sale, which would effectively exclude standard pharmacy supply systems from involvement with medical marijuana. Reimbursement through standard insurance mechanisms is also effectively impossible.

Too Much To Overcome

Given all these barriers, most facilities would be wise to use medical marijuana as such in the nursing home. The early experience in states that have legalized marijuana for medical purposes has suggested that only a few physicians write the majority of prescriptions and that the typical user of medical marijuana is a 41-year-old male using marijuana for a chronic pain
Another prediction (or at least a dream) includes a stronger focus on prevention, with immunizations that go beyond just flu and pneumonia vaccines and include zoster and tetanus-diphtheria-pertussis as routine vaccinations. Likewise, we will focus more on prevention of pressure areas and contractures, even at what is thought of as the end of life (as one never knows what might happen to or with our quite resilient older individuals during this time). Elsewhere, as more individuals live to 100 years or older, we may need to put more emphasis on prevention so that those years can be lived comfortably and with some quality.

Karl Steinberg, MD, CMD, editor in chief, Caring for the Ages, Oceanside, CA:

We will see more of a move toward value-based payment and population health in the PA/LTC setting in 2015, and this trend will continue in years to come. With some of the new models, including later generations of accountable care organizations, many of our patients will be able to go directly from emergency department (or doctor’s office) to skilled care in an SNF without a required hospital stay – just as our Medicare+HMO patients have been able to do for decades. That is a very good thing, because the hospital is not a good place to be when patients don’t need to be there (with all due respect to our hospital and hospitalist colleagues). At the same time, it will be possible for a long-term custodial SNF resident to be bumped up to a skilled level without having to go to the hospital, which is also a very positive change.

I also predict that the pilot programs for dual eligibles (Medicare/Medicaid) will be expanded, and we will see a continuing exodus of less functionally impaired SNF residents into residential care (assisted living, board-and-care facilities, etc.). This is another good development and a better way to spend our Medicaid tax dollars.

Meanwhile, as desperately as the assisted living industry tries to cling to the “we are not medical” mantra, we’ll see movement for increasing regulation in this arena – maybe even federal regulations at some point – as the level of chronic illness continues to increase in that setting.

From the clinical side, I think we will continue to see less unnecessary use of antipsychotics, less use of sliding-scale insulin, better antibiotic stewardship (with less checking of urine studies for isolated single-symptom situations like cloudy or foul-smelling urine, a fall, or mental status changes, and thus less inappropriate treatment of asymptomatic bacteruria), and more access to palliative care services and appropriate, informed advance care planning in our buildings.

Compiled by senior contributing writer Joanne Kaldy, a freelance writer in Harrisburg, PA, and a communications consultant for AMDA.

Dr. Nichols is president of the New York Medical Directors Association and a member of the Caring for the Ages Editorial Advisory Board. Comment on this and other columns at www.caringfortheages.com under “Views.”