Medical Marijuana and Nursing Practice: Current Legislation, Scientific Literature Review, and Nursing Implications

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NCSBN Marijuana Regulatory Guidelines Committee

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1850: In the US, marijuana was sold over the counter and was commonly used for a variety of illnesses.

1936: Every state had passed a law to restrict possession of marijuana, eliminating its availability as an over-the-counter drug.

1937: The Marihuana Tax Act of 1937 was passed to prohibit all non-medical use of marijuana in the US.
1970: Controlled Substances Act (Schedule I to V)

- Marijuana was Schedule I category, prohibiting its use for any purpose

1996: California voters approved Proposition 215 to legalize medical marijuana

- White House opposed the proposition & threatened to revoke the prescription-writing abilities of doctors who recommended or prescribed marijuana

2000: In response to government’s aversion to Proposition 215, a group of physicians challenged this policy, prevailed in court, decision made to allow physicians to recommend – but not prescribe – medical marijuana.

Do you think the use of marijuana should be made legal, or not? (%)

All adults

<table>
<thead>
<tr>
<th>Year</th>
<th>Legal (%)</th>
<th>Illegal (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1969</td>
<td>12</td>
<td>88</td>
</tr>
<tr>
<td>1980</td>
<td>16</td>
<td>84</td>
</tr>
<tr>
<td>1990</td>
<td>31</td>
<td>69</td>
</tr>
<tr>
<td>2000</td>
<td>32</td>
<td>68</td>
</tr>
<tr>
<td>2010</td>
<td>44</td>
<td>56</td>
</tr>
<tr>
<td>2015</td>
<td>53</td>
<td>47</td>
</tr>
</tbody>
</table>

http://www.people-press.org/2015/04/14/in-debate-over-legalizing-marijuana-disagreement-over-drugs-dangers/#current-opinion-on-legalizing-marijuana
Support for Legalization of Marijuana by Generation

% saying the use of marijuana should be made legal


PEW RESEARCH CENTER

http://www.people-press.org/2015/04/14/in-debate-over-legalizing-marijuana-disagreement-over-drugs-dangers/#current-opinion-on-legalizing-marijuana
Newsweek Interactive | 2018 Marijuana Legalization Efforts

2018 Initiatives

Explored the current trends and issues related to marijuana use and its relationship to nursing regulation.

**2016 NCSBN Committee: Regulatory Implications of Legal Cannabis**

Charged to Develop guidelines for nurses, recommendations for education, guidelines for BONs.

**2017 NCSBN Committee: Marijuana Regulatory Guidelines Committee**

- Guidelines for APRNs: Certifying a Medical Marijuana Program Qualifying Condition
- Recommendations: Cannabis-Specific Education Content for APRN Nursing Programs
- Guidelines for Nurses: Care of a Patient Using Medical Marijuana
- Recommendations: Cannabis-Specific Education Content for Pre-Licensure Nursing Programs
- Guidelines for the Board of Nursing: Complaints Involving a Licensee and Cannabis

**2018 Guidelines**

- Guidelines for APRNs: Certifying a Medical Marijuana Program Qualifying Condition
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California Proposition 19, the Marijuana Legalization Initiative (2010)


Official summary: Allows people 21 years old or older to possess, cultivate, or transport marijuana for personal use. Permits local governments to regulate and to commercial production and sale of marijuana to people 21 years old or older. Prohibits people from possessing marijuana on school grounds, using it in public, smoking it while minors are present, or providing it to anyone under 21 years old. Maintains current prohibitions against driving while impaired.

Summary of estimated fiscal impact: Savings of up to several tens of millions of dollars annually to state and local governments on the costs of incarcerating and supervising certain marijuana offenders. Unknown but potentially major tax, fee, and benefit assessment revenue to state and local government related to the production and sale of marijuana products.
Drafted a paper and developed evidenced based guidelines & recommendations
Paper development

• Reviewed scientific literature
• Graded scientific literature
• Drafted paper
• Confirmed draft paper premise with
  • National Academy of Sciences 2017 Report
  • Review by a Cannabis expert
Federal Legislation and Actions

• Schedule I Controlled Substances
  – to have no accepted medical value & present a high potential for abuse
  – This classification prohibits
    • practitioners from prescribing cannabis
    • most research using cannabis except under rigorous government oversight
Medical Marijuana Programs & Conflict with Federal Law

• At present there is no controlling case law holding that Congress intended to preempt the field of regulation of cannabis use under its supremacy powers
U.S. Department of Justice (DOJ) position papers

• 2009 - discourages federal prosecutors from prosecuting people who distribute or use cannabis for medical purposes in compliance with applicable jurisdiction law

• 2011, 2013, 2014 – similar guidance

• 2018 – above memos rescinded
  — federal prosecutors should follow the well-established principles in deciding which cases to prosecute
Requests to Reschedule Cannabis

• Numerous federal bills
  – None passes out of House or Senate

• 2016 congressional representatives called on DEA to reschedule
  – Denied
  – Announced a policy change to expand number of DEA registered cannabis manufacturers
State Legislation and Actions

- locate through the jurisdiction’s Department of Health and MMP
- useful links are provided through the National Council of State Legislatures
<table>
<thead>
<tr>
<th>Type of Provision</th>
<th>Jurisdictions</th>
</tr>
</thead>
<tbody>
<tr>
<td>MMP</td>
<td>AK, AR, AZ, CA, CO, CT, DC, DE, FL, HI, IL, LA*, MA, MD, ME, MI, MN, MT, ND, NH, NJ, NM, NV, NY, OH, OR, PA, RI, VT, WA, WV</td>
</tr>
<tr>
<td>Allow cannabidiol products (often for intractable seizures; often the use is restricted to clinical studies)</td>
<td>AL, GA, IA, IN, KY, MO, MS, NC, OK, SC, TN, TX, UT, VA, WI, WY</td>
</tr>
<tr>
<td>Allow APRNs to certify a qualifying condition referred to in medical marijuana statute</td>
<td>HI, ME, MA, MN, NH, NY, VT, WA</td>
</tr>
<tr>
<td>No cannabis statutes</td>
<td>ID, KS, NE, SD</td>
</tr>
<tr>
<td>Recreational use of cannabis</td>
<td>AK, CA, CO, DC, MA, ME, NV, OR, VT, WA</td>
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</tbody>
</table>
Medical Marijuana Programs (MMPs)

• Schedule I Controlled Substance
  – Health care provider cannot prescribe cannabis

• Process to obtain cannabis for medical use
  ✓ Patient must have a qualifying condition
  ✓ Health care practitioner certifies that the patient has one of the state qualifying conditions
  ✓ Patient registers with MMP
  ✓ Patient visits medical marijuana dispensary
<table>
<thead>
<tr>
<th>Most Common Qualifying Conditions</th>
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<tbody>
<tr>
<td>• ALS</td>
</tr>
<tr>
<td>• Alzheimer’s disease</td>
</tr>
<tr>
<td>• Arthritis</td>
</tr>
<tr>
<td>• Cachexia</td>
</tr>
<tr>
<td>• Cancer</td>
</tr>
<tr>
<td>• Crohn’s disease and other</td>
</tr>
<tr>
<td>• irritable bowel syndromes</td>
</tr>
<tr>
<td>• Epilepsy/seizures</td>
</tr>
<tr>
<td>• Glaucoma</td>
</tr>
<tr>
<td>• Hepatitis C</td>
</tr>
<tr>
<td>• HIV/AIDS</td>
</tr>
<tr>
<td>• Nausea</td>
</tr>
<tr>
<td>• Neuropathies</td>
</tr>
<tr>
<td>• Pain</td>
</tr>
<tr>
<td>• Parkinson’s disease</td>
</tr>
<tr>
<td>• Persistent muscle spasms</td>
</tr>
<tr>
<td>• (including multiple sclerosis)</td>
</tr>
<tr>
<td>• Posttraumatic stress disorder</td>
</tr>
<tr>
<td>• Sickle cell disease</td>
</tr>
<tr>
<td>• Terminal illness</td>
</tr>
</tbody>
</table>
Literature Review

 Therapeutic Effects of Cannabis

• Dearth of randomized clinical trials
• Use of cannabis and cannabinoids is best considered for patients who
  ✓ could benefit from complementary use
  ✓ where currently accepted first- and second-line medications or therapies show
    • no or insufficient effect
    • demonstrate dangerous adverse events in selected patients
Moderate- to High- Quality Evidence for Effective Treatment with Cannabis

1. Cachexia
2. Chemotherapy-induced nausea and vomiting, pain (resulting from cancer or rheumatoid arthritis)
3. Chronic pain (resulting from fibromyalgia)
4. Neuropathies (resulting from HIV/AIDS, MS, or diabetes)
5. Spasticity (from MS or spinal cord injury)
Moderate- to High- Quality Evidence for Effective Treatment with Cannabis supported by a single clinical study

1. Reduction of seizure frequency (Dravet syndrome and Lennox-Gastaut syndrome)
2. Reduction of posttraumatic stress disorder (PTSD) nightmares
3. Improvement in tics (Tourette syndrome)
Improvements Due to General Effects of Cannabis

• General effects of cannabis—sedation, appetite stimulant, and euphoriant

• 3 general effects of cannabis may mask symptoms and increase a subjective sense of well-being

• Could improve self-reported quality of life in some patients
Adverse Effects of Cannabis - General

- Increased heart rate, increased appetite, sleepiness, dizziness, decreased blood pressure, dry mouth/dry eyes, decreased urination, hallucination, paranoia, anxiety, impaired attention, memory, and psychomotor performance
- Fatigue, nausea, asthenia, vertigo
- Suicidal ideation (contradictory)
Adverse Effects of Cannabis (continued)

- **Adolescence** – recreational use is correlated with poor grades, high drop-out rates, lower income, lower percentage of college degree completion, greater need for economic assistance, unemployment, and use of other drugs

- **Fertility** - No human studies are available

- **Pregnancy** - no reliable data for neurodevelopmental outcomes with early exposure to cannabis in neonatal life, through either breastfeeding or secondhand inhalation
Adverse Effects of Cannabis (continued)

- **Altered Cognition** – research exists to suggest that patients who suffer from diseases with neurologic symptomology may show greater cognitive impairment

- **Mania and predisposition to mania** – significant relationship between cannabis use and subsequent exacerbation and onset of bipolar disorder manic symptoms

- **Schizophrenia** - no research exists that can conclude that cannabis use causes schizophrenia
Abuse, dependence, overdose, and withdrawal

• **Overdose** - Cannabinoid receptors are effectively absent in the brainstem cardiorespiratory centers

• **Induced psychosis** - ingestion of large doses of THC

• **Cannabis Use Disorder** - problematic pattern of cannabis use leading to clinically significant impairment or distress

• **Hyperemesis** - seen in patients <50yo with a long history of marijuana use

• **Cannabis withdrawal syndrome** - irritability, nervousness, sleeping difficulties, dysphoria, decreased appetite, restlessness, depressed mood, physical discomfort, strange and vivid dreams, craving, and anxiety
Methods of administration

• Smoking and oromucosal sprays
  – most studied methods

• Vaporized cannabis, edibles, dabbing
  – insufficient evidence

• Oral administration
  – delayed effects
Nurses and cannabis

• Some MMPs specify that an APRN can certify a qualifying condition

• Some MMPs allow an employee of a hospice provider or nursing or medical facility, or a visiting nurse, personal care attendant, or home health aide to act as a designated caregiver for the administration of medical marijuana

• Many nurses will come into contact with a patient who uses cannabis
Development of Guidelines & Recommendations

- Guidelines for APRNs: Certifying a Medical Marijuana Program Qualifying Condition
- Recommendations: Cannabis-Specific Education Content for APRN Nursing Programs
- Guidelines for Nurses: Care of a Patient Using Medical Marijuana
- Recommendations: Cannabis-Specific Education Content for Pre-Licensure Nursing Programs
NCSBN Guidelines for APRNs: Certifying a Medical Marijuana Program Qualifying Condition

- Essential knowledge
- Clinical encounter & identification of a qualifying condition
- Informed & shared decision-making
- Documentation & communication
- Ethical considerations
- Special considerations
Essential Knowledge

- Legalization of medical & recreational cannabis
- Medical Marijuana Program (MMP)
- Endocannabinoid system
- Cannabis pharmacology & the research associated with medical use of cannabis
- Safety considerations for patient use of cannabis
Clinical Encounter and Identification of a Qualifying Condition

- Clinical assessment
- Current treatment
- Medication reconciliation
- Mental health, alcohol and substance use history
- Experience with cannabis
- Decision for MMP not be predicated on existence of qualifying condition alone
- Determine ongoing monitoring and evaluation
Informed and Shared Decision-making

- Provide information to the patient and family members/caregivers
  - Scientific evidence, adverse effects, variable effects, lack of produce standardization, safety consideration, individualized goals, requirement for monitoring and evaluation

- Together, the APRN and the patient shall make the decision whether or not to proceed with certifying the qualifying condition
Documentation and Communication

- Document assessment, reasoning underlying the therapeutic use of cannabis for the qualifying condition, goals of therapy, means to monitor and evaluate response, education provided

- Communicate the patient’s plan of care for use of medical marijuana to other health team members
Ethical Considerations

- APRN shall approach the patient without judgment regarding their choice of treatment or preferences in managing pain and other distressing symptoms because of serious or life-limiting illnesses.

- Avoid conflict of interest.

- Shall not certify a MMP qualifying condition for oneself or a family member.
Special Considerations

Important to investigate and follow any

- specific employer policies and procedures
- terms of the collaborative agreement
- standard of care arrangement
- facility policy procedures regarding certifying a qualifying condition
NCSBN Recommendations:
Cannabis-Specific Education Content for APRN Nursing Programs

Follows the APRN Guidelines
NCSBN Guidelines for Nurses: Care of a Patient Using Medical Marijuana

- Essential knowledge
- Clinical encounter considerations
- Medical marijuana administration considerations
- Ethical considerations
Essential Knowledge

- Legalization of medical & recreational cannabis
- Medical Marijuana Program (MMP)
- Endocannabinoid system
- Cannabis pharmacology & the research associated with medical use of cannabis
- The nurse shall be aware of the facility or agency policies regarding administration of medical marijuana
Clinical Encounter Considerations

- Assessment related to adverse and variable effects of cannabis
- Communicate the findings of encounter to other health care providers and document
- Identify the safety considerations for patient use of cannabis (storage, disposal)
Medical Marijuana Administration Considerations

- Nurse shall not administer cannabis to a patient unless specifically authorized by jurisdiction law.

- Instances where the nurse may administer cannabis or synthetic THC to a patient:
  - FDA approved synthetic THC drugs (dronabinol and nabilone) as per facility formulary and policy.
  - As a registered MMP designated caregiver.
Designated Caregiver

- Majority of jurisdictions allow a designated caregiver to assist a patient with medical use of cannabis
- Must meet specific qualifications and be registered with the MMP
- Some jurisdictions allow an employee of a hospice provider, nursing, or medical facility or a visiting nurse, to become a designated caregiver to assist in the administration of medical marijuana
- Check MMP statute or rules
- Check facility policy
Ethical Considerations

- Nurse shall approach the patient without judgment regarding their choice of treatment or preferences in managing pain and other distressing symptoms because of serious or life-limiting illnesses.
NCSBN Recommendations: Cannabis-Specific Education Content for Pre-Licensure Nursing Programs

Follows the Nursing Care of Patient Using Medical Marijuana Guidelines
Process for development of Guidelines for the Board of Nursing: Complaints Involving a Licensee and Cannabis

✓ Reviewed scientific literature
✓ Reviewed 2017 Marijuana-Impaired Driving: A Report to Congress
✓ Interviewed pharmacology experts
✓ Drafted guidelines
✓ Reviewed guidelines with NCSBN attorney
✓ Approved by the NCSBN BOD
NCSBN Guidelines for the Board of Nursing: Complaints Involving a Licensee and Cannabis

1. Licensee who tests positive for THC

2. APRN licensee’s certifying of a MMP qualifying condition

3. Licensee’s administration of cannabis to a patient outside of designated caregiver provisions of the MMP
Licensee who tests positive for THC or its metabolite

BON should have knowledge of

- Current state of legalization of medical & recreational cannabis
- Standards for, and limitations of, current laboratory testing related to cannabis use and impairment
- Guidelines for complaint which includes
  - positive test for THC, PLUS allegations of impairment/lack of fitness to practice while working
  - positive test for THC, does NOT include allegations of impairment/lack of fitness to practice while working
Standards for, and limitations of, current laboratory testing related to cannabis use and impairment

- Cannabis has over 100 different cannabinoids
- Tetrahydrocannabinol or THC
  - most notable cannabinoid
  - primary psychoactive component of cannabis
  - primarily responsible for cognitive effects of cannabis
- Testing for THC includes testing for THC metabolites
Standards for, and limitations of, current laboratory testing related to cannabis use and impairment

- Positive test indicates presence of THC or THC metabolite
- Alcohol, a water-soluble substance has a steady metabolism
- THC, a fat-soluble substance, is NOT metabolized at a steady rate & therefore can be detected in the blood long after ingestion
- Peak THC levels can occur when low impairment is observed, and high impairment can be observed when THC levels are low

2017 report to Congress concluded that current laboratory tests cannot provide any objective threshold that establishes impairment based on a specific level of THC or THC metabolite concentration
Per se laws

- Per se laws are not necessarily based on scientific evidence of impairment, instead they are based on laboratory threshold or cut-off values.
- Some jurisdictions have per se driving laws:
  - Specify it is illegal to drive with any or more than a specific concentration of a specific drug(s) in blood or urine.
- A per se law regarding THC is not evidence-based at this time.
- Absent impairment or other indicators of a SUD, principles of public protection may not be served by a per se violation for a positive test for THC which results in a BON action or request for a substance use evaluation/fitness to practice evaluation.
Right Touch Regulation

- When a regulatory body’s decisions affect the safety of the public, a delicate balance must be maintained between mitigating the risk of harm and applying discipline in a fair and consistent manner.

- According to Right-Touch Regulation, regulatory discipline should be:
  - Proportionate
  - Consistent
  - Targeted
  - Transparent
  - Accountable
  - Agile
Legal use notwithstanding, ingestion of cannabis can be a violation of NPA or rules where on-the-job impairment creates an actual or potential impairment of the ability to practice nursing with reasonable skill and safety.

BON should follow specific board processes for evaluation of impairment/lack of fitness to practice.

COMPLAINT A

- Positive laboratory test for THC or its metabolite
- Use in a state where cannabis is legal or illegal
- Allegations of impairment/lack of fitness to practice while working
COMPLAINT B

- Positive laboratory test for THC or its metabolite

- Allegations of impairment/lack of fitness to practice while working

BON should consider

- Current laboratory tests cannot detect impairment
- Location of licensee use
  - Legal for medical or recreational purposes in BON state
  - Licensee traveled where cannabis use is legal
  - Use in jurisdiction where no legal cannabis use
COMPLAINT B - 1

✓ Positive laboratory test for THC or its metabolite

☑ Allegations of impairment/lack of fitness to practice while working

✓ Use in a state where cannabis is legal

BON should consider

▪ Current laboratory tests cannot detect impairment
▪ All aggravating and mitigating factors
▪ Evaluation for board action
  ▪ Case-by-case basis using principles of right-touch regulation
COMPLAINT B - 2

✓ Positive laboratory test for THC or its metabolite
☐ Allegations of impairment while working
☐ Use in a state where cannabis is legal

BON should consider
- Current laboratory tests cannot detect impairment
- All aggravating and mitigating factors
- Case-by-case basis using principles of right-touch regulation
  - A non-disciplinary letter of concern and/or administrative fine may serve to warn the licensee of the BON’s concern regarding use of cannabis in a state where not legal
    - Include a specific warning regarding future positive test and the potential for a substance use evaluation or discipline
Key points

- Public opinion is changing
- Legalization is progressing
- Legal inconsistencies remain
- Research is limited by the government
- Limited clinical research regarding efficacy
Key points

- Cannabis education of licensees is necessary
- MMPs vary widely
- Nurse administration of cannabis is limited
- No quantifiable value of THC can verify impairment
- Case-by-case analysis using right-touch regulation
Discussion & Questions