Supporting Medical Cannabis: 
The Pharmacists’ Perspective

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Disclosure

Melani Bersten reports:

– Employed as a dispensing pharmacist by Minnesota Medical Solutions
– No specific brand names or products will be discussed or promoted in this presentation
– Medical cannabis extracts are Schedule I (federal) and Schedule II (MN)
– All information presented is still under investigational use only and not currently approved by the FDA for any condition. The information presented today is not intended to replace a personalized medical evaluation with a licensed healthcare provider.
Learning Objectives

Upon successful completion of this activity, the audience should be able to:

1. List the currently approved qualifying conditions and dosage forms available in MN
2. Compare the safety and efficacy of the 2 major cannabinoids in qualifying conditions
3. Identify methods of supporting medical cannabis patients
July 2017 - Quarterly Review

Celebrating 2 years since program implementation

• Total active patients: 6,184
• Active providers: 910

http://www.health.state.mn.us/topics/cannabis/about/stats.html
August 1st Updates

Topical route approved
  – Lotion/balm/patch

PTSD as a qualifying condition
  – Meeting DSM-5 criteria
MN Cannabis Program

• Registered provider (MD/DO/PA/APRN) certifies patient’s qualifying condition
• Patients (and caregivers) register with the MN Department of Health
• Approved patients consult with pharmacist employed by manufacturer
Currently Approved Conditions

- Intractable pain (69%)
- Muscle spasms (17%)
- Cancer (12%) (severe pain, cachexia, nausea/vomiting)
- Seizures (6%)
- Inflammatory bowel disease (4%)

- Terminal illness
- HIV/AIDS
- Glaucoma
- Tourette’s syndrome
- ALS
- PTSD

* Patients can be certified for more than one qualifying condition
Associated Symptoms

Appetite, nausea, vomiting

Pain
  – Bone, nerve, muscle, or joint, local or systemic

Spasms, cramps
  – Injury or degenerative neurological disorder

Sleep
  – Initiation or maintenance

Mood
  – Anxiety and depression (co-morbidities)
Consultations

Education and Optimization
First Time Consultation = Education

Review required self-evaluation
  – Current medical conditions and medications
  – Baseline symptoms and QOL

Assess goals of therapy
  – Associated symptoms

Start low, and go slow
  – Based on previous cannabis use
Follow Up = Optimization

Review true use and technique

Assess safety and efficacy

Provide recommendations to change dose, ratio, formulation or timing
Counseling Points

• Anticipated onset and duration (formulation and chemotype specific)
• Administration
• Storage
• Traveling
• Diversion
Formulations
Approved Formulations

Local:
– Topicals: lotion, balm, creams and bars

Systemic:
– Oils for vaporization
– Oral liquids (tinctures, solutions, suspensions, sublingual sprays)
– Capsules
– Patches
# Formulation Kinetics

Possible reference ranges to be used as an estimate only

<table>
<thead>
<tr>
<th>Delivery Method</th>
<th>Onset</th>
<th>Duration</th>
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<tbody>
<tr>
<td>Inhaled</td>
<td>1 to 5 min</td>
<td>2 to 6 hrs</td>
</tr>
<tr>
<td>Sublingual</td>
<td>15 to 60 min</td>
<td>2 to 12 hrs</td>
</tr>
<tr>
<td>Topical</td>
<td>15 min to 2 hrs</td>
<td>1 to 8 hrs</td>
</tr>
<tr>
<td>Oral/swallowed</td>
<td>1 to 3 hrs</td>
<td>4 to 24 hrs</td>
</tr>
</tbody>
</table>
Major Cannabinoids

THC

CBD
Chemotypes

THC Dominant

CBD Dominant

Balanced
Dosing: Start Low, Go Slow

THC for symptoms
– Start between 1 to 2.5 mg in the evening

CBD for cushioning mind altering effects
– Reduces THC-induced anxiety, sedation, and incr HR
– Start between 5 to 25 mg once daily after meals
Titrations

Increase by ‘1’ as tolerated
– One pill or one puff

Vaporizer = PRN or “rescue”
PO = increased more carefully because effects are not immediate
Adverse Effects

- Anxiety
  - Reduced tear flow
  - Altered sense of time
  - Decreased eye blink rate
  - Bronchitis
  - Dizziness
  - Reddened eyes

- Dry mouth
  - Changes in visual perceptions
  - Decreased sperm count
  - (and possibly associated caries and periodontitis)

- Sedation
  - Slowed pupillary response to light
  - Reduced coordination
  - Ataxia
  - Cough
  - Dysphoria

## Cannabinoids for Symptoms

<table>
<thead>
<tr>
<th></th>
<th>THC</th>
<th>Balanced</th>
<th>CBD</th>
</tr>
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<tbody>
<tr>
<td>Pain</td>
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<td>X</td>
<td>X</td>
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<tr>
<td>Spasms</td>
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<td>X</td>
<td></td>
</tr>
<tr>
<td>Sleep</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Appetite</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Mood</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>CINV</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Seizures</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>
Precautions

THC in pediatric population
Pregnant/nursing patients
Unstable psychiatric and cardiac conditions
History of substance abuse/dependence
Clinically Meaningful Interactions

Additive impairment: drowsiness, dizziness, difficulty focusing

Increased fall risk: orthostasis, vertigo, lightheadedness, altered time perception
Barriers to Medical Cannabis
Voluntary Participation

Providers refuse to learn about medical cannabis because they don’t have to:

• Dosing
• Effectiveness
• Safety
• Drug interactions
Federal Status: Schedule 1

- Public schools
- Universities/colleges
- Nursing homes/assisted living/group homes
- Long term care facilities
- Hospitals

= Transitions of care
Caregivers

- Must pass background check for disqualifying felonies to pick up or help administer
- Caregivers CANNOT be patients
- Max of 6 caregivers per patient
Supporting medical cannabis patients
Communication

With all members of the healthcare team:

– Certifying provider vs primary care, specialists, physical and occupational therapies, CAM
– Transitions of care
– Changes in medical conditions or medications
Education

For patients and their supporting members:

– “Educate to self-medicate”
– Risk of over-medicating (intoxication), abuse and dependence
– Teleconsultations available via phone or Skype
– 24/7 side effect reporting
Support Groups

A safe and comfortable environment to discuss medical cannabis

– Confidential
– Informative
– Inspiring
Questions?

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