Presenter Disclosures

• **Presenter:** Shelita Dattani

• I have no current or past personal relationships with commercial entities relevant to this presentation

• I have not received a speaker’s fee for this learning activity

• Director of Practice Development at Canadian Pharmacists Association

---

Learning Objectives

By the end of this presentation the participant will be able to:

• Apply treatment guidelines and/or recommendations with respect to cannabis as an adjunctive therapeutic modality for certain conditions

• Utilize information related to adverse effects, pharmacokinetics and drug interactions with cannabis in the development of a patient care, assessment and monitoring plan

• Explain the broader role of pharmacists in supporting patient care related to cannabinoid use
Medical Cannabis Knowledge

What is your current knowledge level with respect to the use of cannabis as a medical treatment?

a) Excellent
b) Very good
c) Some/limited
d) Poor

Why the Interest in Cannabinoid Medicine?

• Increased awareness of the endocannabinoid system and its physiological functions
• Available pharmaceutical agents for certain indications may have limited efficacy or intolerable side effects
• Many patients report improvement in symptoms and quality of life
• Evidence growing for some indications to support use as a therapeutic option

FAQs – Pharmacists Are A Trusted Source of Information

1. What is in cannabis?
2. What kinds of cannabis products are available?
3. Is it safe for anyone vs safe for EVERYONE to take cannabis?
4. Will cannabis work for my medical condition?
5. How do I get cannabis?
6. How and when should I take it?
7. How much cannabis should I take?
8. What are the possible side effects and do they occur with all “types” of cannabis?
9. Can I become tolerant to the effects of cannabis? Can I get dependent on cannabis and go through withdrawal if I stop taking it?
10. Can I get addicted to cannabis?
11. Will cannabis interact with other medications I take?
12. How can my pharmacist help me with my cannabis?
13. Where can I find more information?
Background: Regulating Physiologic Function

Neural Development
Stress Regulation & Emotional State
Memory
Synaptic Plasticity & Learning
Bone Development & Density
Appetite
Digestion
Metabolism & Energy Homeostasis
Wake/sleep Cycles
Psychiatric Disease
Psychomotor Behaviour
Cardiovascular Function
Pain
Reproduction
Inflammation
Immune Function

FAQ: What is in cannabis?

Cannabis (Sativas, Indicas, or Ruderalis)

More than 500 chemical compounds

- More than 100 cannabinoids
- Terpenes & Flavonoids

Less than 100 compounds

Non-cannabinoids

Physiocannabinoids

Psychoactive

- Delta-9-tetrahydrocannabinol (THC)
- Cannabidiol (CBD)

Mechanism of action:

- Partial CB1 and CB2 agonist
- Not well understood - affects activity of other enzymes, receptors, ion channels

Psychoactive:

- Yes, through activity at CB1
- Less - seems to oppose the action of THC on CB1

Comparison of THC & CBD

<table>
<thead>
<tr>
<th>THC</th>
<th>CBD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mechanism of action: Partial CB1 and CB2 agonist</td>
<td>Not well understood - affects activity of other enzymes, receptors, ion channels</td>
</tr>
<tr>
<td>Psychoactive: Yes, through activity at CB1</td>
<td>Less - seems to oppose the action of THC on CB1</td>
</tr>
<tr>
<td>May be effective for: Relief of chronic neuropathic pain and muscle spasm, controlling nausea and stimulating appetite</td>
<td>Anti-inflammatory, analgesia, anti-emetic, antipsychotic, antidepressant, antiepileptic</td>
</tr>
</tbody>
</table>

TIP

The ratio of THC (delta-9-tetrahydrocannabinol) to CBD (cannabidiol) in the plant influences the therapeutic effects.

THC responsible for feeling “high”: can cause psychoactive adverse events

Information for Health Care Professionals: Cannabis (marihuana, marijuana) and the cannabinoids, Health Canada 2013 (Information for Health Care Professionals: Cannabis (marihuana, marijuana) and the cannabinoids, Health Canada 2013)
FAQ: What kinds of cannabinoids are available?

Types of Cannabinoids

- **Endocannabinoids**: endogenous cannabinoids that are naturally produced in the human body (e.g., AEA, 2-AG)
- **Phytocannabinoids**: cannabinoids produced naturally by the cannabis plant (THC, CBD, many others). Found in cannabis plant material and extracts.
- **Prescription cannabinoids**: pharmaceutical grade cannabinoid-containing prescription medications (nabilone, nabiximols).
- **Synthetic cannabis**: manufactured illicit products containing highly potent CB1/CB2 receptor agonists (Spice, K2).

FAQ: What kinds of cannabis products are available?

Prescription cannabinoids and medical cannabis

<table>
<thead>
<tr>
<th>What Kinds of Cannabis Products Are Available?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Summary of Prescription Cannabinoid Medications</strong></td>
</tr>
<tr>
<td>Nabilone</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Nabiximols</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Dronabinol (Marinol™)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Cannabidiol (Epidiolex™)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

Cannabis...

For Medical Purposes:
- Plant-based cannabis that is authorized for medical use by a prescriber
- Not classified as a drug or Natural Health Product, no DIN or NPN, not prescribed
- Typically provided as either dried plant material or as an oil, multiple methods of administration
- LPs offer many different plant "strains", different THC & CBD concentrations and ratios
- Can be costly and not tax-exempt
- Patient may obtain from a licensed producer (LP) or self-grow/authorize another to grow
- Patient may authorize physician, pharmacy or caregiver to order from LP

For Recreational/Non-medical Purposes:
- Also plant-based
- Also can be provided as dried plant material, oil, multiple methods of administration
- Also offered in many strains, concentrations and ratios
- Now legal in dual stream — access depends on province
- Myth: Cannabis for medical purposes is THC only and cannabis for recreational purposes is CBD only

FAQ: Is it safe for everyone to take cannabis?

Relative and Absolute Contraindications

<table>
<thead>
<tr>
<th>Generally avoid using cannabis if patient:</th>
<th>Use with caution if patient:</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Is under the age of 18*</td>
<td>a) Have a concurrent active mood or anxiety disorder</td>
</tr>
<tr>
<td>b) Has a personal history or strong family history of psychosis</td>
<td>b) Smokes tobacco</td>
</tr>
<tr>
<td>c) Has a current or past cannabis use disorder, or other substance use disorder</td>
<td>c) Are heavy users of alcohol or taking high doses of opioids or benzodiazepines or other sedating medications prescribed or available over the counter</td>
</tr>
<tr>
<td>d) Is pregnant, planning to become pregnant, or breastfeeding</td>
<td>d) Have risk factors for cardiovascular disease</td>
</tr>
<tr>
<td>e) Has a known allergy to cannabis, THC, CBD or any other cannabinoid</td>
<td></td>
</tr>
<tr>
<td>f) Has a cardiovascular disease</td>
<td></td>
</tr>
<tr>
<td>g) Has a respiratory disease</td>
<td></td>
</tr>
</tbody>
</table>

*Cannabis may be used with caution in situations where evidence suggests that benefits outweigh risks

Assessing for Contraindications: Validated Risk Assessment Tools

[Image of validated risk assessment tools]

https://www.cpha.ca/cannabis-screening-tools
FAQ: Will cannabis work for my medical condition

Navigating The Evidence So Far...

- Challenged by bias and lack of high-level research
- Paucity of robust evidence investigating the use of cannabis and/or cannabinoids for therapeutic purposes
- Prescription cannabinoids have received most focus, rather than plant-based cannabis
- Key evidence on efficacy includes:
  - RCTs, systematic reviews and meta-analysis
  - Clinical practice guidelines
  - Curated and peer-reviewed summaries of best available evidence
- Even best available evidence still has limitations.
  - Short duration of studies
  - Lack of standardized measures (for pain)
  - Blinding/placebo control challenges
  - Use of cannabinoids as third or fourth-line adjunctive, not as a replacement
  - Studies have used different cannabis (strains, extracts, different prescription cannabinoids) making study comparisons challenging

“Indications”

Recommendations and guidelines based on best-available evidence do not always align. There are four conditions/symptoms where current best available evidence suggests, overall, the use of cannabis and/or cannabinoid medications may be effective in situations where potential benefits outweigh the risks:

- Improving patient-reported multiple sclerosis spasticity symptoms
- As antiemetics in the treatment of chemotherapy-induced nausea and vomiting
- Treatment of chronic neuropathic pain in adults
- Pediatric seizure disorders (Dravet syndrome, Lennox-Gastaut syndrome)

CFP Prescribing Guidelines

- Strongly recommend against all medical cannabinoids for most conditions, exceptions are:

<table>
<thead>
<tr>
<th>Condition</th>
<th>Consider only</th>
<th>Recommend</th>
<th>Do not recommend</th>
</tr>
</thead>
<tbody>
<tr>
<td>MS Spasticity</td>
<td>If trials of other therapies ineffective</td>
<td>nabiximols &gt; nabimol</td>
<td>medical cannabis</td>
</tr>
<tr>
<td>CINV</td>
<td>As adjunct, if trials of other therapies ineffective</td>
<td>nabimol &gt; all cannabinoids</td>
<td>nabiximols or medical cannabis</td>
</tr>
<tr>
<td>Refractive, Neuropathic pain, palliative cancer pain</td>
<td>As adjunct, if trials of other therapies ineffective</td>
<td>nabimol &amp; nabiximols &gt; medical cannabis</td>
<td>--</td>
</tr>
</tbody>
</table>
Anecdotal Evidence For Use of Cannabis

- Appetite stimulant (HIV/AIDS, cancer)
- Irritable Bowel Syndrome (IBS), Inflammatory Bowel Disease (IBD), Crohn's Disease
- Motor disorders (Parkinson's Disease, Huntington's Disease, Tourette's Syndrome, Dystonia)
- Post-Traumatic Stress Disorder (PTSD), Anxiety, Depression
- Sleep Disturbances
- Glaucoma
- Pain associated with rheumatic conditions: e.g., fibromyalgia, rheumatoid arthritis
- Amyotrophic Lateral Sclerosis
- Cancer, including glioma
- Anorexia Nervosa
- Dementia
- ...and much more

(Information for Health Care Professionals; Cannabis (marihuana, marijuana) and the cannabinoids, Health Canada 2013)

Other Canadian Resources

Cannabis and Opioid Sparing Effects?

- General association still unclear
- Most data based on survey, epidemiology or population level data
- VA Canada – veterans with opioid prescriptions ↓ in 2017-2018 vs. 2012-2013 while number of veterans with authorization for cannabis ↑ in 2017-2018 vs. 2012-2013
- Reduction in opioid prescribing in US states with legalized medical cannabis

Cannabis and Opioid Sparing Effects?

- 25% reduction in opioid OD death based on ICD codes reported in US states with legalization of medical cannabis
- Some retrospective observational trials w/ patient self-reported surveys show ↓ in opioid use or substituting cannabis for opioids
- Cannot determine causation or assess impact of other variables


FAQ: How do I get cannabis?

Cannabis Timeline – A Quick Primer

MMAR – 2001
permits the use of cannabis for medical reasons

MMPR – 2013
created conditions for commercial industry to produce and distribute cannabis for medical purposes – authorized by MDs

2015 – Government of Canada commits to legalizing non-medical cannabis

2016 – Decision in Allard vs Canada - requiring people to get cannabis only from LP’s violates Canadian charter of rights and freedoms – ACMPR replaces MMAR and allows Canadians to possess and grow cannabis for medical purposes – the Task Force on legalization is created and publishes report on key considerations for legalization

2017 – Government introduces Bill C-45 to legalize, regulate and restrict access to cannabis – Bill C-45 also amends the CDSA to allow for legalization of cannabis

2018 – Cannabis Act becomes law on Oct 17, 2018

Regulations in force

2019 – Regulations amended to cover edibles, topicals, extracts
Regulations under the Cannabis Act

- Three kinds of products containing cannabis are regulated under Act:
  - Cannabis for medical purposes: purchased from LP, with HCP authorization
  - Non-medical cannabis: purchased through permitted retailers w/o HCP authorization — cannot make health claims
  - Health products with cannabis: prescription medications, medical devices, NHPs and VHPs — can make health claims if authorized
- Health Canada has also added phytocannabinoids to the Prescription Drug List (PDL), providing a mechanism for reporting adverse events

FAQ: How do I get cannabis?

Two Streams

- Recreational
  - Federal and provincial laws
  - Personal use
- Medical cannabis
  - Federal laws
  - Authorized by a physician or nurse practitioner

Obtaining Medical Cannabis In Canada — The Process

1. PT consults authorized HCP
2. HCP provides medical document
3. Apply for home growing
4. Pt registers with LP and places order
5. LP sends medical cannabis to PT

Pt = patient
HCP = healthcare provider
LP = licensed producer
Labelling

- Opaque packaging
- Manufacturer information
- Cannabis class vs. strain vs. chemovar
- Brand name
- Lot Number and exp. Date
- Storage conditions
- "Keep out of reach of children"
- Weight or volume
- THC and CBD per unit
- Carriers

Source: Ontario Cannabis Store – Sample label

Understanding Products Available In The Market

Regulated system

- Products labeled with proportion of THC and CBD
- Increase in THC in cannabis in general
- Medical strains – range of ratios

Unregulated Products

- Driven to produce cannabis with high THC and low CBD
- Risk of impurities through unregulated distribution system
- Over 600 illicit synthetic cannabinoids have been described
Cannabinoid Pharmacokinetics

- **Distribution:** Highly lipophilic and widely distributed in body tissues. Highly plasma protein bound. Accumulates in adipose tissue and slowly released.

- **Metabolism:** Long terminal half-life metabolized in the liver, extensive first-pass metabolism, main active metabolite 11-hydroxy Δ9-THC which parallels action of drug.

- **Excretion:** Excreted via biliary tract into feces, along with urinary excretion of acid metabolites.

FAQ: How and when should I take cannabis?

### Pharmacokinetics and Routes of Administration

<table>
<thead>
<tr>
<th>Route of Administration</th>
<th>Inhalation (smoked or vaporized)</th>
<th>Oral Ingestion (oil, capsule, others)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bioavailability</td>
<td>15-50%</td>
<td>6-20%</td>
</tr>
<tr>
<td>Onset of physiologic effect</td>
<td>5-10 minutes</td>
<td>30-60 minutes (up to 3 hours)</td>
</tr>
<tr>
<td>Peak physiologic effect</td>
<td>10-20 minutes</td>
<td>2-4 hours (but can be 6 or more)</td>
</tr>
<tr>
<td>Duration of physiologic effect</td>
<td>24 hours (up to 24 hours)</td>
<td>Adults: 4-6 hours (up to 24 hours)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Children: 6-12 hours (up to 36 hours)</td>
</tr>
</tbody>
</table>

Inhaled bioavailability varies based on number, depth, duration, frequency of inhalations, amount of time substance held in lungs, or presence of vaporizer (if vaporized).

Oral bioavailability is reduced due to extensive first-pass metabolism, administration with food may alter bioavailability (can increase absorption).

RxTx Ottawa (ON): Canadian Pharmacists Association; c2018. CPS online: Cannabis; Available from: www.myrxtx.ca

FAQ: How much cannabis should I take?

### General Dosing Considerations

- Average reported daily dose = 1-3 g total weight/day
- Do not need to experience euphoria for symptom management!
- Generally start with low THC, higher CBD potency
- Minimize risk of adverse effects by allowing for sufficient time between a repeated dose
- Start low, go slow!

**TIP**

Inhaled doses of THC as low as 2.5 to 3 mg of THC have been associated with therapeutic benefit and minimal psychoactivity.
FAQ: Do the side effects occur with all “types” of cannabis?

FAQ: Can I become tolerant to the effects of cannabis? Can I get dependent on it? Will I go through withdrawal if I stop taking it?

<table>
<thead>
<tr>
<th>Tolerance</th>
<th>Dependence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Defined as either:</td>
<td>As manifested by either:</td>
</tr>
<tr>
<td>- A need for markedly increased cannabis to achieve intoxication or desired effect, or</td>
<td>- The characteristic withdrawal syndrome for cannabis, or</td>
</tr>
<tr>
<td>- A markedly diminished effect with continued use of the same amount of substance</td>
<td>- Cannabis taken to relieve or avoid withdrawal symptoms</td>
</tr>
<tr>
<td>- Reversible after discontinuing cannabis</td>
<td></td>
</tr>
<tr>
<td>With chronic, high-dose use:</td>
<td>With abrupt discontinuation:</td>
</tr>
<tr>
<td>- Downregulation of CB-1 receptors</td>
<td>- May result in irritability, restlessness, headache</td>
</tr>
<tr>
<td></td>
<td>- 5-7 days on 7-12 days, peak in 2-6 days, finish within 2 weeks</td>
</tr>
<tr>
<td></td>
<td>- (but can last up to 4 weeks)</td>
</tr>
<tr>
<td></td>
<td>- Limited evidence to guide dose tapering</td>
</tr>
</tbody>
</table>

FAQ: Can I get addicted to cannabis?

Cannabis Use Disorder

<table>
<thead>
<tr>
<th>Definition</th>
<th>Signs it may be occurring</th>
</tr>
</thead>
<tbody>
<tr>
<td>A problematic pattern of cannabis use leading to clinically significant impairment or distress</td>
<td>- Cannabis is taken in larger amounts or over a longer period than was intended</td>
</tr>
<tr>
<td></td>
<td>- Persistent desire or unsuccessful efforts to cut down or control use</td>
</tr>
<tr>
<td></td>
<td>- Craving/strong desire/urge to use cannabis</td>
</tr>
<tr>
<td></td>
<td>- Failure to fulfill work/school/home commitments</td>
</tr>
<tr>
<td></td>
<td>- Continued use despite harm to relationships</td>
</tr>
<tr>
<td></td>
<td>- Using in physically hazardous situations</td>
</tr>
<tr>
<td></td>
<td>- Some limited evidence that CBT and other forms of psychotherapy may help with CUD</td>
</tr>
</tbody>
</table>
FAQ: Will It interact with my medications

Drug-Drug Interactions

Pharmacodynamic
- THC and CBD metabolized by CYP2C9, 3A4
- CBD also metabolized by CYP3A4 and can inhibit CYP2C9, 3A4, and CYP2D6
- CBD inhibits metabolism of clozapin used in epileptic patients
- CYP2D6 induction when smoking
- Increased risk of hepatotoxicity with CBD and VPA – likely CYP mediated

Pharmacokinetic
- Potential for additive dizziness, drowsiness and sedation when taken with meds with similar AE’s (e.g. opioids, BZDs, anticholinergic, antihypertensives)
- Start low and go slow

Variations in CYP expression? Pharmacogenomic implications?
Cautions warranted for ALL drugs that have a narrow therapeutic index
Many case reports of DDIs available

FAQ: How can my pharmacist help me with cannabis?

Professional Responsibilities
- Pharmacists have an ethical duty towards patients and society
- Professional responsibility to serve and protect the public by putting patients first
  - Maintaining the patient’s best interest at the core of all activities
  - Educate and enable patients to make informed choices, involving them in decision-making
  - Educate patients to support their ability to provide self-care
Role of the Pharmacist – What Should You Ask?

Ask ALL patients about cannabis use:
You’ll want to know:
• Indication
• Prior use?
• Perceptions and beliefs regarding cannabis
• Desired outcomes? Realistic?
• Dual Use? Both medical and recreational?
• Amount authorized?
• Method of administration?
• Source of product (licensed producer or grown at home)?
• HOW you ask is just as important as what you ask

Role of the Pharmacist – What Is The Care Plan?

• Assess for all cannabis use – if part of treatment plan, pharmacists can help enhance patient and prescriber understanding of risks and benefits within the context of the overall medication regimen
• Who/what conditions it is appropriate for based on limited evidence
• Safe and effective use based on limited evidence
• Monitoring effective response, side effects, adverse effects and drug interactions
• Monitor for cannabis withdrawal
• Education on important aspects of medical cannabis consumption (e.g. driving, travelling, use in youth, avoid smoking, limited/reduced use – these are elements of LRCUG relevant to cannabis for medical purposes ) Management and counseling of patients requesting help for cannabis use disorder
• If starting a trial of cannabis – develop a plan for an exit strategy – not all patients will respond
• Develop a care plan – include goal setting, evaluation of risks, monitoring, followup – document all the way!!!

CANNABIS FOR MEDICAL PURPOSES
How to Start the Conversation

How do you bring up discussing cannabis as a therapeutic option with your patient? Use these tips to help guide the conversation.

ASK & ASSESS

ASK

Why do you think cannabis might be an option for you, and what do you think it might offer or help with?

What else have you tried for your condition?

What do you think might help you the most?

What else would you like to know about cannabis?

ASSESS

General consensus pre-existing conditions, stages other conditions use history potential for dependence, tolerance in patient's current use.

Understanding of potential benefits and risks of cannabis for their condition.

Pre-existing pain (migraines, fibromyalgia, headaches, arthritis), anxiety, insomnia, sleep, appetite.

Documentation of prior medicinal and non-medicinal therapies and dispensed drug therapies. Cannabis is usually chronic or fraught like addictive therapies.

Understanding of potential benefits and risks of cannabis for their condition.

Pre-existing pain (migraines, fibromyalgia, headaches, arthritis), anxiety, insomnia, sleep, appetite.

Documentation of prior medicinal and non-medicinal therapies and dispensed drug therapies. Cannabis is usually chronic or fraught like addictive therapies.

Education on important aspects of medical cannabis consumption (e.g. driving, travelling, use in youth, avoid smoking, limited/reduced use – these are elements of LRCUG relevant to cannabis for medical purposes ) Management and counseling of patients requesting help for cannabis use disorder

If starting a trial of cannabis – develop a plan for an exit strategy – not all patients will respond

Develop a care plan – include goal setting, evaluation of risks, monitoring, followup – document all the way!!!
• Could symptoms be due to cannabis?
  • New regimen has much higher THC concentration – rapid increase in THC likely causing AE’s

**Robertina**

Her MD recommended more balanced THC/CBD so she purchased 17 (THC 10 mg/mL and 10 mg/mL CBD) oil. She initiated 0.4 mL bid (4 mg THC/4 mg CBD) at Day 12.

Within two hours Roberta started feeling anxious, confused, drowsy, disconnected. She called you for advice:

**ASK/ADVERTISE**

- Could symptoms be due to cannabis?
- New regimen has much higher THC concentration – rapid increase in THC likely causing AE’s

**How to help patients manage AE’s**

**ADVISE AND ACT**

- Roberta is now on much higher THC dose, contributing to AE’s
- Recommend reduced dose (and corresponding volume) to minimize AE’s
- Slowly titrate up over next two weeks
  - 1 mg (0.1 mL) THC at 7 pm
- Monitor for pain control/AE’s – titrate up as tolerated by 1 mg THC (0.1 mL increments) q1-3 days
- Once nighttime sx’s managed, take an additional 1 mg (0.1 mL) during day and titrate up to manage daytime pain
- Goal = Reduction in pain intensity and/or improvement in daily function
  - Document intervention and communicate plan to MD including recommended course
  - See Roberta in 7 days for follow-up to assess pain control and adverse effects
Roberta’s Care Plan – Recap

- Goals of Therapy
  - Reduce burning pain in feet/legs, improvement in daily function, improve sleep
- Drug Therapy Problems
  - Roberta continues to have pain despite being optimized on at least three other medications; is worried about getting “addicted” to opioids

Recommendation
  - Trial of high CBD/low THC oil with slow titration

Monitoring
  - Pain frequency/intensity and continued need for other pain medications during titration period

Follow Up
  - Follow up in within 2 weeks of starting titration - continued pain and adverse effects if/rapid THC increase at day 12 of titration period
  - Work with Roberta to reduce dose and gradually titrate up as tolerated
  - Followup within 7 days to further assess pain control and AE’s

Documentation
  - Details from medical authorization, name of product selected, % THC and CBD, all titration interventions, communicate to prescriber
Helping with vomiting (adjunct to emetogenic regimen) but continues w/ breakthrough nausea

• Smoking ½ joint again bid-tid for about 3 days post-chemo to help with nausea and sleep

• Comes to pharmacy with new rx for lorazepam 1 mg HS PRN for sleep and also asks for cough suppressant

Current regimen effective and well tolerated – increased coughing may be due to smoking

• Also rule out possibility of infection/pneumonias patient on immunosuppressive chemo – does he have a productive cough, fever, malaise?

• Use of benzodiazepine may increase risk of cognitive impairment/sedation if added to cannabis
What might be the best option to discuss with Amar at this time?

A. Avoid initiation of lorazepam
B. Increase cannabis oil in evening and for several days post-chemotherapy
C. Change smoked cannabis to vaporization - less irritating and potentially less toxic to airways

- Discuss vaporization techniques
  - 1 inhalation when sx’s appear and in early evening
  - Increase number of inhalations by 1-3 hours until sx’s improve or ae’s
- Document and communicate
  - Document all interventions in patient record
  - Communicate changes and consult with prescriber re: direction
  - Also consult with prescriber to r/o pneumonia
- Monitor
  - Book follow-up appointment after next round of chemo to assess control of sleep and nausea and tolerance of AEs

Amar’s Care Plan – Recap

- Goals of Therapy
  - Reduce nausea and vomiting and improve sleep
- Drug Therapy Problems
  - Amar continued to suffer from N/V despite optimizing other antiemetics
  - Amar’s nausea was not relieved from nabuline and he could not tolerate ae’s
  - Smoking “joint” relieved nausea but increased cough and feeling “high”
- Recommendation – Trial of THC: CBD oil in 1:1 ratio for CINV including titration schedule
  - Monitoring – Nausea and vomiting frequency, sleep improvement, adverse effects from cannabis
  - Follow-up – Breakthrough nausea so back to smoking “joint” post chemo
  - Recommend vaporization for breakthrough nausea with titration schedule
- Book follow-up after next round of chemo

*Document details from medical authorization (S), name of product(s) selected, % THC and CBD, all titration interventions including adverse effects and management, communicate to prescriber
Recreational Cannabis

• Patients may choose to take cannabis recreationally or non-medicinally
• “Lower-Risk Cannabis Use Guidelines” developed by CAMH to help non-medical users reduce their risks
• Pharmacists can play public health role in addition to managing medication therapy of patients taking cannabis

Recreational Cannabis – What To Discuss

• Assess for contraindications
• Assess for actual or potential DTPs
• Discuss and provide Lower Risk Use Guidelines
• Educate on safer methods of consumption
• Educate on tolerance, dependance, use disorder
• Incorporate screening for CUD into practice – might present subtly at first
• Advise re source

Cannabis and Traveling

• Illegal to take cannabis and cannabis products across Canadian border
• Patients may legally travel anywhere in Canada with cannabis products if:
  – Products purchased from a legal source
  – Have an active customer identification card and a valid sticker attached
If traveling by air, be prepared to:
• Show medical documentation, including ID and sticker
• Undergo private screening

Recreational Cannabis

Steven and Lien

- Steven is a pharmacist and is uncomfortable personally with the legalization of cannabis
- Steven performs a medication review with his patient Lien who tells Steven that she is using cannabis “illicitly” for back pain and it’s been helping her – she hasn’t told her MD because he doesn’t believe that cannabis does anything but make people “high” and forget about pain
- Lien last smoked cannabis two hours ago and drove to the pharmacy – she doesn’t want Steven to report her

Steven is concerned that Lien is driving while high

Putting it all Together

- Lien smokes illicit cannabis to self-medicate for her chronic back pain and it might be helping her
- Lien is driving “high”, putting herself and others at risk
- Inhaled cannabis: impair driving for four hours
  - Six hours after oral ingestion, 12 hours after inhalation or oral ingestion if patient experiences euphoria (impairment can last 24 hours)
- Two prohibited levels for THC: it is a less serious offence to have between 2 nanograms (ng) and 5 ng of THC per ml of blood. It is a more serious offence to have 5 ng of THC or more per ml of blood (no correlation with impairment)
- Steven has a role in educating Lien on the dangers of driving high
- Steven asks Lien’s physician to recommend a referral to a medical cannabis clinic

https://www.justice.gc.ca/eng/cj-jp/sidl-rlcfa/

Recreational Cannabis Use – Edibles

- Sandy has recently purchased edible chocolate cannabis product – she tried some an hour ago and called you because she was feeling dizzy with a rapid heart rate
- Is Sandy self-medicating for a medical condition with recreational cannabis?
- Ask Sandy about the source of her product
  - Edibles not yet available legally (as of September 2019)
  - Unregulated online? Given to her or made herself?
- Does she know concentration or relative concentrations of THC/CBD?
  - Delayed onset of “high” with edibles, don’t repeat dose prior to onset – increase risk of aE’s
  - Does Sandy have a relative or absolute contraindication that could be exacerbated by cannabis use?
- Go to quiet comfortable place, be with friends/family
Having the “pot talk” with your teens

If you haven’t already, sit down with your kids and have the “pot talk” together.

Cover these 8 topics to help guide informed choices.

1. What is cannabis?
2. Cannabis is a complicated plant
3. Cannabis and your growing brain
4. Tools can be tricky
5. Stay away from marijuana
6. Stop it now
7. Some alternatives to smoking
8. Cannabis doesn’t mix with alcohol, other medications and some

www.pharmacists.ca
FAQ: Where Can I Get More Information?

Patient Friendly Resources

Caution with online searches which often lead to websites that may not be agnostic (cannabis clinics, cannabis advocacy/news sites).

Health Canada patient resources: https://www.canada.ca/en/services/health/campaigns/cannabis/health-effects.html


Pharmacists are a great resource!

Take Home Pearls

- Guidelines and evidence can help health care providers and patients make shared decisions about cannabis use – whether medical or non-medical
- Limited real world safety data – significant opportunity for pharmacists to provide leadership in care
- Important role for pharmacists to provide an, informed safe and stigma free opportunity to work with other care providers and guide patients

Questions?