Opioid Prescribing in the Emergency Department

Dr. Maureen Allen BN,CCFP-EM(PC)
Assistant Professor Dalhousie University
Emergency Medicine
March 2017
No Disclosures
What I hope you learn from this session

• A comprehensive approach to pain that helps you manage the risk associated with prescribing high risk pain pharmacology.

• Better understanding of tolerance and dependency and how this differs from addiction (and why it matters).

• Strategy for safe dispensing of opioid analgesics from the emergency department.
“Houston we have a problem”

- Opioids have been a game changer
- But so have Benzodiazepines
- Prescription drug mortality has increased 6 fold since 1980’s

Benzodiazepines

- Often prescribed for unrecognized withdrawal (Increase pain, poor sleep and anxiety)
- 45,000 Nova Scotian’s take them
- 25% take more than 2 BZD
- 20% on BZD are also taking opioids
- 25% who use BZD and Opioids take > 90mg MEDD
- Clonazepam not detectable on UDT
Percentage of deaths attributed to specific opioid in Nova Scotia

- **Hydromorphone**
- **Methadone**
- **Morphine**
- **Oxycodone**
- **Fentanyl**
- **Codeine**

NS Medical examiner’s office, accessed Nov 2015
What’s driving the epidemic

- Legitimate script’s (FP, NP, Dentists, Vet’s, Specialists including CP and PC)
- Illicit (Canada post, organized crime)
- Lack of affordable access to alternative treatment for chronic pain or psychological pain
- Problematic use not addressed early or if addressed at all is often mislabeled as addiction
- Poverty, elder abuse (Diversion)
- 60% of patients who have an active substance use disorder have chronic pain


Question #1

- Legitimate pain protects patients from addiction to their opioid. (Cancer pain, fracture pain etc.)

  - TRUE
  - FALSE
Opioid Addiction

• Is a *Life-threatening complication* of opioid use *NOT* a moral failing
• Cause of *pain doesn’t matter*
• Risk factors *do*
Take home points

• If we use opioids for pain we need to **risk stratify** for harm, **monitor** for problematic use and **immediately respond** to the life-threatening complication of addiction

• We do this already for all kinds of dangerous drugs

• Prescribing opioids should be based on **SAFETY** and **not** **moral or ethical reasoning**

• If we’re thinking of adding a BZD ask ourselves “Is this withdrawal?”
Question #2

• Addiction is the same as tolerance and dependency.

• TRUE
• FALSE ✔
3. Prescribing opioids: What we need to know

- Opioids
- Tolerance
- Dependency
- Withdrawal

100% will get this

PROBLEMATIC USE
“Unstable angina”

ADDICTION “AMI”

Why do you use opioids?
- Pain
- Energy

Control Cravings and Withdrawal

ORT

PREVENTION (50-90mg MED)

This is NOT ADDICTION

MONITORING (UDT, PMP)

TREATMENT
What is “Problematic use”?

More Predictive for “problematic use”

- Request more or stronger opioids
- Hoarding drugs when symptoms improve
- Request specific drugs
- Acquiring analgesics from more than one source
- Unapproved dose escalation more than twice
- Unapproved use of analgesia to treat other symptoms

More Predictive for addiction

- Selling drugs
- Forgery
- Stealing prescription pads
- Altering a delivery route
- Buying from an illicit source
- Abusing illicit drug
- Multiple dose escalations
- Multiple lost prescriptions

PROBLEMATIC USE IS NOT ADDICTION

“UNSTABLE ANGINA”

4 C’s

- Compulsive use
- Cravings
- Continued use despite consequences
- *Altering a route (chewing, injecting)*
Important difference between tolerance, dependency and addiction

- **Tolerance and Dependency** are a **predictable** result of opioid prescribing but **Addiction IS NOT**

- **Dependency and tolerance** develops early and will **remit** when opioids are discontinued, regardless of the pain being managed.

- Opioid addiction is a **rare** complication of opioid use which develops much more **slowly**, lasts much longer, and disrupts multiple brain processes.

- **Once addiction develops** it is a separate often chronic medical illness that will **not remit** simply with opioid discontinuation and will carry a **high risk of relapse** for years without proper treatment.
Physiological processes associated with opioids

• Dependency and Tolerance (expected) 0-5 days

• Sensitization (*CNCP, **OIP) <8 days

• Addiction (Life-threatening complication) Months

*CNCP: Chronic non-cancer pain
**OIP: Opioid Induced Pain

Question #3

• Opioid replacement therapy (ORT) is just a substitute for heroin or opioids.

  • True ✔
  • False
All you smokers and recovering nicotine addicts
Nicotine

Why do you use BZD?

• Anxiety
• Energy
• Be cool

Why do you use cannabis?
Why do you use BZD?

100% will gets this

• Nicotine
• Tolerance
• Dependency
• Withdrawal

PROBLEMATIC USE
“Unstable angina”

ADDITION “AMI”

Control Cravings and withdrawal

This is NOT ADDICTION

PREVENTION

MONITORING

NRT

Control Cravings and withdrawal

RECOVERY

NOT everyone gets this

Everyone gets this
Fact checking in 2017

• Opioid addiction is a life threatening **COMPLICATION** of opioid use **NOT** a **moral failing**.

• Opioid analgesics are effective in acute pain

• Limited effectiveness in Chronic pain

• Extended release dosing of >100mg MEDD increase mortality and morbidity

• Opioids are widely diverted and improperly used

• Risk of opioid related complications including death increase when sedatives (BZD) are added

• Some individuals and conditions are more vulnerable than others to these risks


Reality check

• Many physicians admit they are not confident about how to prescribe opioids safely, how to detect abuse or emerging addiction or even how to discuss these issues with their patients.

• But.. I believe we’re all doing the best we can at this moment.

• Including the patient with addiction and chronic pain as well as the prescriber.

**New Guidelines NeP: 2016**

**“Habits and Behaviours” we give our patients**

<table>
<thead>
<tr>
<th>STEP 1</th>
<th>Gabapentinoids</th>
<th>TCA</th>
<th>SNRI</th>
</tr>
</thead>
<tbody>
<tr>
<td>STEP 2</td>
<td>Tramadol</td>
<td>Opioid analgesics</td>
<td></td>
</tr>
<tr>
<td>STEP 3</td>
<td>Cannabinoids</td>
<td></td>
<td></td>
</tr>
<tr>
<td>STEP 4</td>
<td>Fourth-line Agents*</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Topical Lidocaine (second line for post-herpetic neuralgia), methadone, lamotrigine, Tapentadol, botulinum toxin.**

**Limited RCT evidence to support add-on combination therapy.**

---

- Golberg et al. JAMA, 2004;292 2381-95.
- Ware, Mark. Marijuana as medicine; does it have a future? *Clin Pharmacol Ther* 83(4): 515-517; 2008.
PHARMACOLOGY
TREATMENT
GOALS

ACUTE PAIN
80-100% Pain reduction
MINIMIZE Sedation
Improve Function

CHRONIC PAIN AND
CHRONIC PAIN FLARE-UP
30-40% Pain reduction
AVOID Sedation
Improve Function

CANCER PAIN OR PAIN AT THE END OF LIFE
80-100% Pain reduction
May Cause Sedation
May Compromise Function


OPIOID ANALGESICS

• **Mu agonists** (Delta and Kappa)
• **Some** have **dual activity** (Tramadol, Methadone, Tapentadol, Suboxone)
• With or without **acetaminophen**
• Short-acting
• Long-acting
• **Metabolites** matter (active or inactive)
• **Renal** and **liver function** also matter
Location of Mu receptors

- Human brain
- Brain stem
- Spinal cord
- Peripheral terminals
- Small intestine (gut motility)
Opioid analgesics: Therapeutic and abuse-producing effects

• Mu-opioid receptors densely concentrated in brain
• Produce analgesia and euphoria
• Pavlovian conditioning (Learned association between pain and drug relief) “Habit and behaviour” patient’s use to find calm
• Conditioned urge (panic) for relief often leads to early, inappropriate use
Acute Pain (Opioid naïve and tolerant)

- Maximize non-opioid and non-pharmacological therapy’s
- Risk stratify for harm (opioids)
- Manage the risk (Harm reduction)
- **3 day supply** of low dose, short-acting opioids (10-20 tablets)
- Avoid acetaminophen containing opioids
- Yes…..Tramadol is a mu agonist

<table>
<thead>
<tr>
<th><em>SHORT-ACTING OPIOID</em></th>
<th>MORPHINE EQUIVALENCY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ORAL DOsing</td>
</tr>
<tr>
<td>Morphine (Caution with renal insufficiency)</td>
<td>5mg</td>
</tr>
<tr>
<td>Codeine (Caution with renal insufficiency)</td>
<td>50mg</td>
</tr>
<tr>
<td>Hydromorphone</td>
<td>1mg</td>
</tr>
<tr>
<td>Oxycodone</td>
<td>2.5mg</td>
</tr>
<tr>
<td>Tramadol (Caution with SSRI)</td>
<td>50mg</td>
</tr>
</tbody>
</table>

Chronic pain and Chronic pain flare-up

• Opioid trial **not** recommended from the emergency department

• If you do prescribe opioids **risk stratify** (UDT, PMP, ORT) and reduce when flare-up is over

• No IV (Altering routes)

• You want to promote “habits and behaviours” that produce calm and predictability in the long term
Key Harm reduction strategy’s

• **Avoid** prescribing **extended release**, long acting preparations of opioids **as first line**.

• **Avoid** prescribing opioids to patients who are **already taking sedatives**, particularly benzodiazepines.

• **Avoid** prescribing opioids to patients with **alcohol dependency**, or patients who are **regular benzodiazepine or sedative users**, especially if they have a **known substance abuse history** or **history of mental illness**.

• If prescribing opioids, prescribe a **small number** of pills to last the patient 2-3 days.
Key Harm reduction strategy’s

• Do not give known IV drug user’s oral opioids. There is a risk that these patients will crush the tablets and use them intravenously, which can result in infectious and thrombotic complications.

• Recurrent abdominal pain and vomiting: Consider opioid withdrawal or Hyperemesis Cannabinoid Syndrome

• Tell patients to discard unused pills to pharmacy especially if they have adolescents living with them.

• Never let your patient tell you how to prescribe a dangerous drug
Reducing Harms with Opioid Analgesics
A 6 step Approach

• **LISTEN** to their pain story
• **ACKNOWLEDGE** suffering
• **EXAM** carefully for any new pathology or progression of a pre-existing disease
• **MAXIMIZE** non-opioid and non-pharmacological therapy’s
• **RISK STRATIFY** for harm if opioids are used
• **MANAGE** the risk with the patient and stakeholders
Summary

• Acute pain and chronic pain may feel the same but they’re different
• Be aware of the “Habits and Behaviours” you give your patients
• Opioid use should be about SAFETY
• Never let a patient tell you how to prescribe a dangerous drug
• Problematic substance use is not addiction
• Opioid addiction is a life threatening complication of opioid use; it is NOT a moral failing
On line (Youtube) and community resources

• Brainman stops his opioids
• Brainman understands pain in less than 5 minutes
• Never, ever give up. Arthur’s transformation
• TED talk
• Addiction services
• Pain self-management program