Managing Pain in the Setting of Co-morbid Substance Use Disorder

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ASPMN
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Conflict of Interest Disclosure

- Presenters do not have any conflicts of interest

Dedication

- This presentation is dedicated to:

  Ellyn Schreiner, MPH, RN-BC, CHPN, a dedicated pain and hospice nurse/educator and former president of the American Society of Pain Management Nursing (2015-2016). Ellyn was originally scheduled to moderate this session. She died from complications of COVID-19 April 14, 2020.
Target Audience

• The overarching goal of PCSS is to train a diverse range of healthcare professionals in the safe and effective prescribing of opioid medications for the treatment of pain, as well as the treatment of substance use disorders, particularly opioid use disorders, with medication-assisted treatments.

Educational Objectives

• At the conclusion of this activity participants should be able to:
  • Develop treatment strategies to treat acute and chronic pain in individuals with opioid use disorder receiving medications for opioid use disorder.
  • Discuss pain management strategies for individuals with pain who are currently engaged in illicit substance use.
  • Describe challenges in pain management strategies for individuals with substance use disorder in remission not utilizing medications for opioid use disorder

Scope of the Problem

• 67,367 overdose deaths (20.7 per 100,000)
• 47,590 involved opioids
• Increases in deaths from cocaine/psychostimulants

Multiple drugs may have contributed to mortality
2018: Treatment Need > Treatment Received

- Estimated 21.2 million people age 12 or older (7.8%) need treatment > estimated 3.7 million people age 12 or older (1.4%) received treatment

Opioid Use Disorder (OUD) – DSM-V

A problematic pattern of opioid use leading to clinically significant impairment or distress

- Opioids taken in larger amounts for longer than expected
- Unsuccessful attempts to cut down or control use
- Craving or strong desire/urge to use opioids
- Significant time spent in activities to obtain, use, or recover from effects
- Use in hazardous situations
- Continued use despite recognition of related social/interpersonal problems
- Failure to fulfill major role obligations
- Important social, occupational, or recreational activities given up due to use
- Use despite knowledge of physical/psychological problems
- Tolerance and withdrawal (not applicable when taken as medically indicated)

Baseline Considerations

- Does the patient have active substance use?
- Is the patient in withdrawal or at risk for withdrawal?
- Is the patient in remission from substance use (including alcohol)?
  - On medications for treatment
  - In abstinence-based program
- Does the patient have adequate support systems?
Screen for Opioid Withdrawal
Clinical Opioid Withdrawal Scale

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resting pulse rate</td>
<td>0-60; 1 = 61-100; 3 = 102-300; 4 = 320</td>
</tr>
<tr>
<td>Sweating</td>
<td>0 (no report) - 4 (sweat streaming off face)</td>
</tr>
<tr>
<td>Restlessness</td>
<td>0 (barely off) - 5 (unable to sit still for more than a few seconds)</td>
</tr>
<tr>
<td>Pupil size</td>
<td>0 (pronounced) - 5 (ant (ant nm of iris is visible)</td>
</tr>
<tr>
<td>Bone or joint aches</td>
<td>0 (no pain) - 4 (rubbing joints/muscles, can’t feel comfortable)</td>
</tr>
<tr>
<td>Renal noise / hearing</td>
<td>0 (absent) – 2 (consciously running/trauma)</td>
</tr>
<tr>
<td>GI upset</td>
<td>0 (no GI symptoms) – 5 (multiple episodes of vomiting/nausea)</td>
</tr>
<tr>
<td>Tremor</td>
<td>0 (absent) – 4 (gross tremor/muscle twitching)</td>
</tr>
<tr>
<td>Xerostomia</td>
<td>0 (absent) – 4 (staining several times per minute)</td>
</tr>
<tr>
<td>Anxiety / Irritability</td>
<td>0 (normal) – 4 (difficulty participating in assessment due to anxiety)</td>
</tr>
<tr>
<td>Gooselike skin</td>
<td>0 (smooth skin) – 5 (prominent p卡拉皮)</td>
</tr>
<tr>
<td>Score</td>
<td>5-12 = mild; 13-24 = moderate; &gt; 25 = severe withdrawal</td>
</tr>
</tbody>
</table>

Physical Examination

<table>
<thead>
<tr>
<th>Examination</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eyes</td>
<td>Examine pupil size to determine pinpoint or dilated; inspect sclera for signs of jaundice to identify potential liver dysfunction</td>
</tr>
<tr>
<td>Nose</td>
<td>Inspect for excoriation, perforation of nasal septum, or epistaxis which may be signs of insufflation injury</td>
</tr>
<tr>
<td>Ears</td>
<td>Inspect for ruptured tympanic membrane or signs of infection which may be secondary to neglect/violence/trauma</td>
</tr>
<tr>
<td>Oropharynx</td>
<td>Inspect for poor repair, gum disease, or abscess. Assess oropharynx for signs of infection</td>
</tr>
<tr>
<td>Cardiopulmonary</td>
<td>Evaluate for murmurs, arrhythmias or pulmonary abnormalities</td>
</tr>
<tr>
<td>Abdomen</td>
<td>Evaluate for hepatomegaly or hernia</td>
</tr>
<tr>
<td>Extremities</td>
<td>Examine for musculoskeletal abnormalities such as fractures, traumatic amputations, indurated trauma. Evaluate for edema potentially indicating renal dysfunction</td>
</tr>
<tr>
<td>Skin</td>
<td>Examine for abscesses, rashes, cellulitis, thrombosed veins, scars, track marks from injection, or burns</td>
</tr>
</tbody>
</table>

Psychological Screening:
A Vital Role for Nurses

- Use open-ended questions
- Active listening
- Be empathetic, accepting, holistic
- Reduce Stigma
  - Words we use
  - Our behaviors
- Take time to hear their story or requests of concerns
### Suicide Evaluation and Triage

**Risk Stratified Interventions**

<table>
<thead>
<tr>
<th>Risk Level</th>
<th>Risk / Protective Factor</th>
<th>Suicidality</th>
<th>Possible Interventions</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>Psychiatric disorders with severe symptoms, or acute precipitating event; protective factors not relevant</td>
<td>Potentially lethal suicide attempt or persistent ideation with strong intent or suicide rehearsal</td>
<td>Admission generally indicated unless a significant change reduces risk. Suicide precautions</td>
</tr>
<tr>
<td>Moderate</td>
<td>Multiple risk factors, few protective factors</td>
<td>Suicidal ideation with plan, but no intent or behavior</td>
<td>Admission may be necessary depending on risk factors. Develop a crisis plan. Give emergency/crisis numbers</td>
</tr>
<tr>
<td>Low</td>
<td>Modifiable risk factors, strong protective factors</td>
<td>Thoughts of death, no plan, intent or behavior</td>
<td>Outpatient referral, symptom reduction. Give emergency/crisis numbers</td>
</tr>
</tbody>
</table>

### Protective Factors

**Protective factors, even if present, may not counteract significant acute risk**

**Internal:** ability to cope with stress, religious beliefs, frustration tolerance

**External:** responsibility to children or beloved pets, positive therapeutic relationships, social supports
Pain Management – General Considerations in the Context of OUD

Overall Goal – Harm Reduction

Harm reduction approach
- Root in public health
- Do not endorse illicit drug use – accept as reality
- Minimize the ‘harmful consequences
- What is ideal?
- What is realistic?

Consider...

- If active use, refer for addiction treatment if possible
- Close collaboration with prescribing facility is essential for patients with pain also enrolled in methadone or buprenorphine/naloxone maintenance programs
  - Maintenance medication dosed once daily not likely to manage pain

Pain Management

- Maximize use of multimodal analgesia to include non-opioids and when possible nonpharmacologic treatment
- Prescribe opioid therapy for pain ONLY if you have:
  - Experience or can collaborate with addiction medicine
  - Nursing and/or social work support to co-manage
  - Ability to prescribe small amounts frequently (every three days or one week)

Key references:
- Nonopioid pharmacologic treatments for chronic pain. AHRQ Publication No. 20-EHC010 April 2020
- Noninvasive nonpharmacological treatment for chronic pain. AHRQ Publication No. 20-EHC009 April 2020

Consider...

- Utilize universal precautions for opioid prescribing
- Recognize fears that may arise in patients- AT risk for relapse
- Support patients by ensuring safe, appropriate pain management

Employ Non-Pharmacologic Strategies (if available)

- Online Pain Self-Management¹
- Cognitive Behavioral Therapy (CBT)²
- Mindfulness-Oriented Recovery Enhancement³
- Mindfulness Meditation⁴
- Combination CBT and acceptance based therapy⁵

¹Wilson et al. Addict Behav. 2018; 80(7): 7
Ensure Prescriptions for Opioid Reversal

- Prescribe naloxone rescue kits for ALL patients who are:
  - On high dose opioids
    - > 50 mg morphine equivalent daily
  - At risk for overdose
    - Frail, organ dysfunction, etc.
  - Diagnosed with substance use disorder
    - Active use
    - On MOUD
    - In remission not on MOUD
  - Safety risks in the home


Acute Pain Management Strategies- OUD Active Use

- Utilize opioid sparing medications
- Consider initiation of MOUD if patient willing to start
  - No special waiver needed if admission was NOT related to OUD
- Intravenous Patient Controlled Analgesia (IV-PCA) may be best option to determine dose needs or use scheduled instead of as needed opioids
- May still have withdrawal symptoms – treat with clonidine or tizanidine

4 Gowing et al., Cochrane Database Syst Rev. 2014;3:CD002024
Discharge Planning

- Develop safe discharge plan
- Refer to outpatient treatment if patient willing to engage
  - If not and have started MOUD inpatient will have to discontinue prior to discharge
  - Avoid a gap in care
- Prescribe naloxone for overdose prevention due to higher risk for overdose due to loss of tolerance

American Society of Addiction Medicine. 2020. [Link to source]

Chronic Pain Management Strategies – OUD Active Use

Utilize Non-Opioid Analgesics
Multimodal Analgesia

- Opioids may not be consideration unless
  - Serious illness
  - End of Life
- If opioids necessary consider
  - Frequent visits
  - Dispensing small amounts of medications
  - Frequent Urine toxicology screens
  - Friends/family to help
  - Assessment of home situation

Acute Pain Management
Individuals on Medications for Opioid Use Disorder (MOUD aka MAT)

Medications for Opioid Use Disorder (MOUD)

<table>
<thead>
<tr>
<th>Medication</th>
<th>Action</th>
<th>Dose</th>
<th>Where obtained</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methadone</td>
<td>Full mu agonist</td>
<td>60-120 mg (usual doses – may be higher or lower) PO once daily</td>
<td>Must be administered through a federal Opioid Treatment Program</td>
<td>Patient goes daily for observed dosing. May graduate to take doses home on weekends or have weekly pick-ups. Provides analgesia for 6-12 hrs. More than once daily dosing necessary for pain management. Many drug/drug interactions. Can cause QTc prolongation.</td>
</tr>
<tr>
<td>Buprenorphine/naloxone</td>
<td>Partial mu agonist</td>
<td>8-24 mg sublingual or transmucosal daily</td>
<td>Prescribed by physicians, nurse practitioners, and physician assistants in ambulatory office setting who have waiver</td>
<td>May provide analgesia if given in split doses (every 8 or 12 hours). If pure mu opioids administered, need higher doses. Implants can be removed prior to six months. Fewer interactions than methadone.</td>
</tr>
<tr>
<td>Naltrexone</td>
<td>Full mu antagonist</td>
<td>50 mg orally daily</td>
<td>Injection administered by any prescriber</td>
<td>Also used for alcohol use disorder. Blocks the effects of opioids – not a good choice for those with pain requiring opioid therapy.</td>
</tr>
</tbody>
</table>


Acute Pain Management and MOUD – Evidence

- No prospective designed studies
- Evidence based on limited controlled retrospective studies, case series
- Findings:
  - Continuation of methadone and buprenorphine during acute pain events is feasible
  - Discontinue naltrexone
  - Higher doses of opioids may be necessary in this population
  - Use of multimodal analgesia recommended but reported use is inconsistent

Veazie et al. Department of Veterans Affairs. VA ESP Project 450 (850 – 2019).
Methadone - Acute Pain

- Verify methadone dose from Outpatient Treatment Program (OTP)
  - If cannot verify (night/weekend), then can prescribe up to 40 mg daily (best in divided doses) or per institution policy

- Options for acute pain management with methadone only
  - Add additional doses of methadone to provide pain management – ex: 10 mg in afternoon and evening. Clearly document on prescription/chart for ‘pain management’
  - If can not use oral, utilize methadone IV at 50% of oral dose
  - Utilize methadone in split dosing (q6 – 12 hours) – clearly document AND discuss with OTP

Medical sources:

Methadone - Perioperative Pain

- Continue methadone for opioid maintenance if possible
  - May need to decrease/hold dose in cases of hemodynamic instability
- Utilize multimodal analgesia including regional analgesia
  - If utilizing opioids utilize least amount/lowest dose while maintaining analgesia. **May however need higher doses than those without OUD**
- Consider EKGs especially if utilizing other QTc prolonging medications
- Arrange for discharge plan if prescribing opioids for discharge (communicate with OTP)
- Prescribe naloxone for overdose prevention
- Ensure education on tapering opioids post-discharge

Medical sources:

Buprenorphine - Acute Pain

- Mu opioid receptors occupied by buprenorphine but not activated
  - If patient requires opioids for pain – WILL REQUIRE higher doses to overcome occupied mu receptors
  - If buprenorphine discontinued takes up to 72 hours to disassociate from mu receptors
  - If patient admitted on buprenorphine with pain crisis/trauma/surgery

Medical sources:
Buprenorphine - Acute Pain

- No consensus guidelines - suggested options
  - Continue buprenorphine – and split/increase doses and use multimodal analgesia
  - Continue buprenorphine (with possible wean to 12 mg daily) and treat with multimodal analgesia and immediate release mu-opioid agonists
  - Wean or discontinue buprenorphine prior to a surgery and use multimodal analgesia and mu-opioid agonists to treat pain – restart buprenorphine after acute pain resolves


Buprenorphine Continuation

- Continue buprenorphine therapy and consider divided doses every 6-8h and can increase dose to maximum of 32 mg daily
- Utilize multimodal analgesia
- Treat acute pain with mu-opioid agonists such as fentanyl, hydromorphone or morphine or sublingual or intravenous buprenorphine if available
- Ensure monitoring for respiratory depression

You can override the mu receptors with higher doses of opioids


Buprenorphine Discontinuation

- May consider discontinuing on the day of surgery and it may require higher doses of opioid to overcome buprenorphine
- If wean over 3-5 days, if pain/intolerable withdrawal, use methadone 30 mg daily, immediate release or extended release opioid prior to admission
- If pain resolves allow for mild withdrawal - resume buprenorphine

Must weigh risks discontinuing buprenorphine – higher risk for overdose if discharged without restarting buprenorphine


**Naltrexone - Acute Pain**

- Discontinue naltrexone IM 4 weeks or oral naltrexone 72 hours prior to planned surgery
- In event of trauma/acute pain/unplanned surgery may need to use 6-20x of usual dose of mu opioid to obtain efficacy
- Utilize multimodal analgesia to maximize analgesia without use opioids
- Do not restart naltrexone until one week to 10 days after the last opioid dose


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**Naltrexone - Acute Pain**

- Discharge planning include plan for restarting naltrexone
- Safety plan for administration, tapering, storage and disposal if discharged with opioids
- Naloxone for opioid reversal
- Education about increased risk for overdose due to decreased tolerance


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**Chronic Pain Management Strategies for those on MOUD**
General Principles

- Utilize multimodal analgesia
- Opioid therapy should be used only in cases of unresolved pain due to trauma, surgery or injury, progressive disease, end-of-life
  - Ensure use of universal precautions for opioid prescribing (treatment agreements, urine drug screens, prescription drug monitoring program checks, frequent follow-up and reassessment, communication with prescriber of MOUD)
- Utilize nonpharmacologic measures if available
- Always ensure there is a prescription for naloxone for opioid reversal

Methadone for OUD and Pain

- Collaborate with Opioid Treatment Program (OTP) as only these programs can prescribe methadone for opioid use disorder
- Individual continues with OTP
  - Some evidence for better analgesia utilizing methadone - ex: 10 mg in afternoon and evening
    - Clearly document on prescription/chart for ‘pain management’
  - Can utilize other opioids if additional methadone contraindicated (prolong QTc) - USE caution not to trigger craving

Buprenorphine for OUD and Pain

- Obtain waiver to prescribe buprenorphine/naloxone for opioid use disorder
- Split doses of buprenorphine/naloxone for pain management – utilize up 24 mg daily (generally insurance approval becomes problematic at doses greater than 24 mg daily and no significant evidence for increased efficacy)
- Generally do not use mu-opioids with buprenorphine unless patient hospitalized with acute pain

References:
sfvrsn=a00a52c2_2
sfvrsn=a00a52c2_2
**Naltrexone for OUD and Pain**

- Utilize multimodal analgesia WITHOUT opioids
- If opioids required collaborate with addiction specialists to rotate to an agonist therapy

_Educate on risks for accidental overdose if relapse during transition_

American Society of Addiction Medicine. 2020
https://www.asam.org/docs/default-source/quality-science/npg-jam-supplement.pdf?sfvrsn=a00a52c2_2

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**Acute and Chronic Pain Management Strategies in Remission not on MOUD**

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**Treatment Strategies**

- Multimodal approach including non-pharmacologic strategies
- Continue or engage in psychosocial programs
- Offer non-pharmacologic strategies if available
- Naloxone for opioid reversal even if NOT on opioids due to risk of relapse
Take Home Points

1. Consistently utilize safe prescribing techniques for individuals with opioid use disorder.
2. Treat patients with opioid use disorder with compassion—it is a disease, not a moral failing.
3. Consider further education on pain and addiction management if there are limited resources for referral in your community.

Some Suggested Readings

- Lembke A. Patients maintained on buprenorphine for opioid use disorder should continue buprenorphine throughout the perioperative period. Pain Med 2016;17:1325-31

PCSS Mentoring Program

- PCSS Mentor Program is designed to offer general information to clinicians about evidence-based clinical practices in prescribing medications for opioid addiction.
- PCSS Mentors are a national network of providers with expertise in addictions, pain, evidence-based treatment including medication-assisted treatment.
- 3-tiered approach allows every mentor/mentee relationship to be unique and catered to the specific needs of the mentee.
- No cost.

For more information visit:

pcssnow.org/mentoring
PCSS Discussion Forum

Have a clinical question?

Ask a Colleague

A simple and easy way to receive an anonymous, expert-verified response to a prompt regarding practice-related questions.

Ask Now.

PCSS is a collaborative effort led by the American Academy of Addiction Psychiatry (AAAP) in partnership with:

- American Academy of Family Physicians
- American Academy of Neurology
- Addiction Technology Transfer Center
- American Academy of Pain Medicine
- American Academy of Pediatrics
- American College of Emergency Physicians
- American College of Physicians
- American Dental Association
- American Medical Association
- American Osteopathic Academy of Addiction Medicine
- American Psychiatric Association
- American Society of Addiction Medicine
- American Society of Pain Management Nursing
- Association for Medical Education and Research in Substance Abuse
- Christian Health Care Foundation for Addictions
- National Association of Community Health Centers
- National Association of Drug Court Professionals
- Southeastern Consortium for Substance Abuse Training

Educate. Train. Mentor

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