SUBSTANCE USE DISORDERS IN PALLIATIVE CARE

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OBJECTIVES

• Understand diagnostic criteria and strategies to identify substance use
• Review epidemiology of substance use
• Describe concerns specific to patients on palliative care services with substance use issues
• Review various treatment approaches to substance use
• Name two community resources for substance use treatment and referral
ADDICTION AS A BRAIN DISEASE: DOPAMINE REWARD PATHWAY
ADDICTION AS A BRAIN DISEASE

Adapted from Di Chiara et al. Neuroscience 1999
ADDICTION AS A COMPLEX BIOPSYCHOSOCIAL DISORDER

• “It is impossible to understand addiction without asking what relief the addict finds, or hopes to find, in the drug or the addictive behavior.”
  In the Realm of Hungry Ghosts - Gabor Mate, MD

• Higher rates of addiction in patients
  • chronic pain
  • psychiatric disorders
  • history of trauma
  • raised in homes with substance abuse
DSM-5 CRITERIA FOR SUBSTANCE USE DISORDER

A problematic pattern of substance use leading to clinically significant impairment or distress, as manifested by at least two of the following, occurring within a 12-month period

Severity specifier:
2-3: mild
4-5: moderate
6+: severe

- Failure to fulfill obligations at work, school or home
- Use in dangerous situations
- Continued use despite social or interpersonal problems due to the substance use (fights with significant other)
- Using more than intended
- Persistent desire or unsuccessful efforts to cut down or stop use
- Significant time spent getting, using or recovering from substance use
- Decreased social or occupational activities due to substance use
- Continued use despite physical or psychological problems
- Craving
- Tolerance
  - A need for markedly increased amounts of the substance to achieve desired effect
  - A markedly diminished effect with continued use of the same amount of substance
- Withdrawal
  - Syndrome dependent upon substance
SCREENING: VALIDATED MEASURES IN HOSPICE PATIENTS

- Drug Abuse Screening Test -10 (DAST)
  - Drugs other than alcohol and tobacco
- Alcohol Use Disorders Identification Test (AUDIT)
  - Alcohol
- Alcohol, Smoking, and Substance Involvement Screening Test (ASSIST)
  - Tobacco, cannabis, cocaine, stimulants, opioids, hallucinogens, inhalants, sedatives
  - Alcohol & Drug Abuse Institute – University of Washington
  - Instrument searching Database
U.S. CITIZENS WITH SUBSTANCE USE DISORDERS

In Millions

- Alcohol: 14.7
- Marijuana: 6.8
- Pain Relievers: 2.4
- Cocaine: 0.6
- Methamphetamine: 0.5
- Tranquilizers: 0.3
- Inhalants: 0.2
- Sedatives: 0.1
- Hallucinogens: 0.1
- Stimulants: 0.1
- Heroin: 0.0

NIDA – 2017 National Survey
HEALTH DISPARITIES

Source: 2010 Data - CDC, AHA, SAMHSA. Adapted from ASAM Training
Figure 1. National Drug Overdose Deaths
Number Among All Ages, by Gender, 1999-2017

Source: Centers for Disease Control and Prevention, National Center for Health Statistics. Multiple Cause of Death 1999-2017 on CDC WONDER Online Database, released December, 2018
Figure 3. National Drug Overdose Deaths Involving Any Opioid, Number Among All Ages, by Gender, 1999-2017

Source: Centers for Disease Control and Prevention, National Center for Health Statistics. Multiple Cause of Death 1999-2017 on CDC WONDER Online Database, released December, 2018
Figure 4. National Drug Overdose Deaths Involving Prescription Opioids, Number Among All Ages, 1999-2017

Source: Centers for Disease Control and Prevention, National Center for Health Statistics. Multiple Cause of Death 1999-2017 on CDC WONDER Online Database, released December, 2018
Figure 5. National Drug Overdose Deaths Involving Heroin Number Among All Ages, 1999-2017

Source: Centers for Disease Control and Prevention, National Center for Health Statistics. Multiple Cause of Death 1999-2017 on CDC WONDER Online Database, released December, 2018
OPIOID MISUSE

12.5 Million People Aged 12 or Older Who Misused Prescription Pain Relievers in the Past Year

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2015.
REASON FOR OPIOID MISUSE

- Relax or Relieve Tension (10.8%)
- Help with Sleep (3.3%)
- Help with Feelings or Emotions (3.9%)
- Experiment or See What It’s Like (3.0%)
- Feel Good or Get High (12.9%)
- Increase or Decrease the Effects of Other Drugs (0.9%)
- Hooked or Have to Have Drug (2.1%)
- Some Other Reason (0.9%)

11.5 Million People Aged 12 or Older Who Misused Prescription Pain Relievers in the Past Year
PAIN AND ADDICTION IN HOSPICE

• Pain is reported in up to 80% of patients at the end of life
• Up to 25% of hospice patients have substance use disorders
• More than 1/3 of hospice providers identified that substance use and diversion were problems within their agencies
• CDC best practice guidelines for opioid prescribing
  • “Not indented for patients who are in active cancer treatment, palliative care, or end of life care”
• No validated screeners specific to opioid use disorders in hospice patients
“CHEMICAL COPING”

- “The use of opioids to cope with emotional distress characterized by inappropriate and/or excessive opioid use”
- Risk factors for chemical coping
  - Depression
  - History of psychiatric disease
  - History of substance use disorder
  - +CAGE screen
CONSEQUENCES OF SUBSTANCE USE IN PALLIATIVE CARE

- Masking other symptoms – complicating palliative care efforts
- Decreased compliance with treatment of primary disease
- Provider reluctance to provide adequate pain medications
- Reduced quality of life at the end of life
- Drug-drug interactions
- Increased stress and frustration for family members
- Compromised social and physical functioning due to compulsion to obtain substance, even in hospice care setting
- Risk of overdosing and chemical coping

Gabbard et al 2019
OPIOID EDUCATION FOR PATIENTS AND FAMILIES

- Do not take medications that are not prescribed for the patient
- Do not adjust the dose of the medication without discussing with the prescriber
- Do not take opioids in combination with alcohol
- Use caution when opioids are used in combination with benzodiazepines
- Keep opioids out of the reach of children
- Dispose of excess medications through take-back programs
- Keep the prescriber of opioids in the loop of any changes in medications that are prescribed by other providers

Gabbard et al 2019
RECOMMENDATION TO REDUCE MISUSE AND DIVERSION

- Regular pill counts
- Medication diaries
- Controlled substance agreements
- Communication with patients misusing
  - Naming addiction if present
  - Empathizing with pain and distress
  - Setting firm limits
  - Committing to continue to treat pain and addiction

Virginia Association for Hospices and Palliative Care
Recommendations: Gabbard et al 2019
BUPRENORPHINE: (MU)-OPIOID RECEPTOR

Receptor Activation
Full Agonist, Partial Agonist, Antagonist

© Clinical Tools, Inc
Source: SAMHSA, 2001
## Buprenorphine vs Fentanyl in Cancer Pain

**Retrospective Cohort Study: 446 Patients**

<table>
<thead>
<tr>
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<th>% Requiring Increase in Opioid</th>
<th>% Mean Daily Increases in Opioid</th>
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<tbody>
<tr>
<td>Transdermal Fentanyl</td>
<td>42.7%</td>
<td>0.11%</td>
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<tr>
<td>Transdermal Buprenorphine</td>
<td>21.7%</td>
<td>0.07%</td>
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Sittl et al 2005
<table>
<thead>
<tr>
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<th>% With Stable Doses Throughout Treatment</th>
<th>Mean % Increase in Medication</th>
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<tr>
<td>Transdermal Fentanyl</td>
<td>26.2%</td>
<td>81.4%</td>
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<tr>
<td>Transdermal Buprenorphine</td>
<td>50.0%</td>
<td>34.5%</td>
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Sittl et al 2006
# Buprenorphine vs Fentanyl in Cancer Pain

**Retrospective Analysis: 258 Patients**

<table>
<thead>
<tr>
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<th>Pain Intensity Difference (Average Pain)</th>
<th>Pain Intensity Difference (Worse Pain)</th>
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<tbody>
<tr>
<td>Transdermal Fentanyl</td>
<td>-2.51</td>
<td>-2.46</td>
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<tr>
<td>Transdermal Buprenorphine</td>
<td>-2.32</td>
<td>-2.94</td>
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<tr>
<th></th>
<th>% Full Responders: defined as &gt;30% reduction in PID (Average Pain)</th>
<th>% Full Responders: defined as &gt;30% reduction in PID (Worse Pain)</th>
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</thead>
<tbody>
<tr>
<td>Transdermal Fentanyl</td>
<td>68.2%</td>
<td>62.9%</td>
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<tr>
<td>Transdermal Buprenorphine</td>
<td>70.7%</td>
<td>54.5%</td>
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Corli et al 2012
BUPRENORPHINE VS FENTANYL IN CANCER PAIN CONT.
RETROSPECTIVE ANALYSIS: 258 PATIENTS

<table>
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<tr>
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<th>Switching Opioid Due to Lack of Efficacy</th>
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<tbody>
<tr>
<td>Transdermal Fentanyl</td>
<td>20.0%</td>
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<tr>
<td>Transdermal Buprenorphine</td>
<td>8.6%</td>
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</table>
BUPRENORPHINE IN MANAGEMENT OF OPIOID USE DISORDER AND PAIN

- Sublingual Buprenorphine FDA approved for treatment of opioid use disorder
  - Daily dosing for management of opioid use disorder
    - Prevent Craving
    - Prevent withdrawal
    - Prevent aberrant use of illicit opioids
    - *will not provide consistent analgesia*
  - Off label use for pain
    - Split dosing q6-8hours for pain management
- Additional Pain Relief Strategies
  - Full mu opioid agonists
  - Non-Opioid analgesics (NSAIDs, Acetaminophen, TCAs, SNRIs, Gabapentin, Topical agents, etc)
  - Non-pharmaceutical Interventions
METHADONE IN MANAGEMENT OF OPIOID USE DISORDER AND PAIN

- Methadone FDA approved for treatment of opioid use disorder
  - Daily dosing for management of opioid use disorder
    - Prevent Craving
    - Prevent withdrawal
    - Prevent aberrant use of illicit opioids
    - *will not provide consistent analgesia
  - Requires patient to be enrolled in DEA waivered methadone clinic
    - Additional mu opioid agonists can be administered for analgesia

- Additional Pain Relief Strategies
  - Full mu opioid agonists
  - Non-Opioid analgesics (NSAIDs, Acetaminophen, TCAs, SNRIs, Gabapentin, Topical agents, etc)
  - Non-pharmaceutical Interventions
ALCOHOL USE DISORDERS

- FDA approved Medication Assisted Treatments
  - Naltrexone 50mg oral daily dose or Monthly 380mg IM injections
  - Disulfiram 250mg daily dosing
  - Acamprosate 666mg TID dosing
LOCAL SUBSTANCE USE TREATMENT

- [http://adai.uw.edu/hotlines.htm](http://adai.uw.edu/hotlines.htm)

Seattle Area Alcohol & Drug Helplines & Treatment Resources

[Helplines](http://adai.uw.edu/hotlines.htm) | [Self-Help/Recovery](http://adai.uw.edu/hotlines.htm) | [Univ. of WA Resources](http://adai.uw.edu/hotlines.htm)
SELF HELP PROGRAMS

- Alcoholics Anonymous: [https://www.seattleaa.org/](https://www.seattleaa.org/)
- Al-Anon: [https://www.seattle-al-anon.org/](https://www.seattle-al-anon.org/)
UW PSYCHIATRY AND ADDICTIONS CASE CONFERENCE SERIES

• Weekly Teleconference: Thursdays 12-1:30pm
• Two components
  • Educational presentation
  • Case presentation – providers can present real cases and get feedback and recommendations
• Staffed by UW Medicine Psychiatrists and Addiction Experts
• Any community providers in Washington State Welcome
• Website - http://ictp.uw.edu/node/6
• Registration Link - http://ictp.uw.edu/node/26
RESOURCES

• American Academy of Addiction Psychiatry (AAAP): Provider’s Clinical Support System for Opioid Therapies (PCSS-O) – https://pcssnow.org
• Substance Abuse and Mental Health Services Administration (SAMHSA) – https://www.samhsa.gov
REFERENCES


