MANAGEMENT OF OPIOID USE DISORDER: Medication Assisted Treatment

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Disclosure

• I hereby declare that the content for this activity, including any presentation on therapeutic options, is well balanced, unbiased, and to the extend evidenced based.

• My partner/spouse and I have no financial relationships with commercial entities producing, marketing, re-selling, or distributing health care goods or services consumed by, or used on, patients relevant to the content I am planning, developing, presenting, or evaluating.
Current Toll and Trends

- Overdose in 2017
  - 70,237 drug overdose
  - 59% involved synthetic opioids
  - Arizona with largest relative rate increase in synthetic opioid overdose (122%)
    - 1.8/100,000 deaths (2016)
    - 4/100,000 deaths (2017)
- Substances cut with fentanyl:
  - Street oxycodone, street benzodiazepines, heroin, cocaine, methamphetamine
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Objectives

1. Describe medication assisted treatment (MAT)
   Addiction • Sociopsychobiologic

2. Discuss MAT efficacy, length of treatment, pregnancy, and common perceptions

3. Discuss access to MAT including telemedicine
<table>
<thead>
<tr>
<th>DSM-V Criteria – Opioid Use Disorder and the 3C’s</th>
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</thead>
<tbody>
<tr>
<td><strong>Loss of Control</strong></td>
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<tr>
<td>Using larger amounts over a longer period than initially intended</td>
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<td>Persistent desire or inability to cut down or control opioid use</td>
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<td>Spending a lot of time to obtain, use, or recover from use</td>
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<td><strong>Craving</strong></td>
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<td>Cravings or strong desire to use</td>
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<td><strong>Use Despite Consequences</strong></td>
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<td>Failure to fulfill obligations at work, school, or home due to use</td>
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<td>Continued use despite persistent or recurrent social or interpersonal problems related to use</td>
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<td>Activities are given up or reduced because of use</td>
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<tr>
<td>Recurrent use in situations that are physically hazardous</td>
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<tr>
<td>Continue use despite physical or psychological problems related to opioids</td>
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<tr>
<td><strong>Physiologic Dependence</strong></td>
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<tr>
<td>Tolerance*</td>
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<tr>
<td>Withdrawal*</td>
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</table>

*Mild 2-3, Moderate 4-5, Severe ≥6
*Does not count toward Use Disorder if prescribed and taken as directed
Why do we care about models?

- What causes [blank]?
- What are the treatment and goals?
- Who is responsible for treatment outcomes?
- How does the health system drive care?
The U.S. pays most per capita for health care and ranks one of the lowest: Life expectancy vs. health expenditure, 1970 → 2015.
MODEL THE LANGUAGE.

BIOMEDICAL

BIO

PSYCHO

SOCIAL

THE ARIZONA PAIN AND ADDICTION CURRICULUM
Sociopsychobiologic approach to substance use disorder

- Screening and Treat Mental Health Disorder
  - Counseling and Behavioral Support
  - Coping Skills / Resilience
  - Relapse Prevention

- MAT: Methadone or Buprenorphine
- Depo-naltrexone
- Primary Care / Preventative Medicine
- Multimodal Pain Mgmt
- Harm Reduction

- Food, Water, Shelter/Housing
- Financial, Insurance, Transportation
- Domestic Violence
- Human Trafficking

- Family/Peer Support
  - Prevention
  - Destigmatizing Campaign
  - Criminal Justice Reform

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Medication Assisted Treatment

• Goals of treatment:
  – Regain control
  – Decrease opioid withdrawal
  – Decrease cravings
  – Decrease use opioids
  – Block subsequent use of opioids
  – Improve quality of life of individual and community

• Length of treatment
  – Individualized - "As long as is helpful" - no artificial limits
  – SAMHSA – at least 12 months
Medication Assisted Treatment

- FDA Approved Medications
  - Methadone
  - Buprenorphine
    - Suboxone, Subutex, Zubsolv, Probuphine, Sublocade
  - Depo-naltrexone (Vivitrol)
Socioeconomic Impacts of MAT

• Mortality
  – MAT lowers risk of death while in treatment, specifically death from opioid and other drug overdoses, trauma, and suicide
  – Not on MAT leads to:
    • 2.5 times risk of dying from any cause
    • 8 times risk of overdose death
  – In a study of 3789 patients, there were 113 overdose deaths
    • 61 before treatment
    • 24 during treatment
    • 28 after treatment
  – Save 25 lives if you treat 1,000 with methadone over 1 year
Socioeconomic Impacts of MAT

- Treatment impact
  - MAT increases retention in treatment
    - Methadone > buprenorphine
  - MAT decreases drug use and positive UDS
Socioeconomic Impacts of MAT

• Crime
  – Involvement in crime and the amount of crime committed during periods of addiction is dramatically higher than during periods of non-addiction
  – During MAT, rates of criminal convictions drop to less than half
    • Acquisitive, drug selling, and violent crimes
  – Patients in continuous treatment have the fewest convictions
Socioeconomic Impacts of MAT

• DUI
  – In one study, 78% of those who tested positive for heroin had been arrested previously for drunken or drugged driving
  – During MAT, convictions for DUI were reduced by 40%
  – Total convictions for men decreased by 35%, for women, 60%
Socioeconomic Impacts of MAT

- Economics
  - Both methadone and buprenorphine are more cost-effective than no drug therapy in dependent opioid users
    - Methadone - £12,584 /QALY (£12584 = $16,347)
    - Buprenorphine - £30,048/QALY (£30,048 = $39,034)
  - Annual commercial health care cost for patients on methadone is 50% less than non-methadone
    - Methadone - $7,163
    - Non-methadone substance treatment - $14,157
    - No substance treatment - $18,694
Socioeconomic Impacts of MAT

- HIV Transmission
  - Between 5-10% of all HIV infections are due to injection drug use
  - With MAT, there is a 54% reduction in HIV transmission risk
  - Multifactorial
    - Less unprotected sex
    - Less sexual partners
    - Less injection drug use
• **Depo-Naltrexone**
  
  – Given 7-14 days after last opioid
  
  – **Harder to initiate** (30% of patients drop out)
  
  – Mortality rate lower in treatment, **not as favorable as methadone or buprenorphine** during and after treatment
  
  – Retention **non-inferior to buprenorphine** at 3 mo
  
  – Treatment retention needs more research
Patient Vignette
Medication Assisted Treatment

• Pregnancy
  – American College of Obstetrics and Gynecology
    • MAT is gold standard treatment
    • Neonatal abstinence may occur and is treatable
    • 60% stopped MAT by 6 months postpartum
      – More developmental impact if parent using while child is growing up
    • Goal is long term chronic disease management
Detox or MAT?

- Flexible **high dose methadone** (60-100 mg) or **high dose buprenorphine** (≥16mg) most effective at retention and preventing return to use

- *Can you be in recovery on MAT?*

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<table>
<thead>
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<th></th>
<th>Detoxification</th>
<th>MAT</th>
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<tbody>
<tr>
<td>Treatment Retention</td>
<td>10-40%</td>
<td>70-95%</td>
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<tr>
<td>Opioid Positive UDS</td>
<td>50-80%</td>
<td>20-50%</td>
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</table>
• Methadone maintenance (1974)
• Drug Abuse Treatment Act (2000)
  – 48% of waivered physicians were prescribing buprenorphine to five patients or fewer
• Lack of MAT access in US
  – OUD rate 891/100,000
    • Methadone capacity 119/100,000
    • Buprenorphine capacity 420/100,000
  – 43% of counties have no DATA physicians
  – 2% of physicians had waiver and 90% were in urban areas
• AZ - 40% of treatment centers offer MAT
Access to Medication Assisted Treatment

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Rosenblatt et al, 2015
Tesema, et al, 2018
Access to Medication Assisted Treatment

• MAT in UME/GME/CME
  – ADHS Pain and Addiction
• MAT in Primary Care
  – Sociopsychobiologic support
• MAT in substance use treatment centers
• MAT offered to persons in criminal justice
• Telemedicine
  – More likely to engage in counseling
  – Increased retention in treatment
Objectives

1. Describe MAT
   Addiction • Sociopsychobiologic

2. MAT decreases mortality, drug use, and crime.
   MAT in pregnancy!
   No duration limits

3. AZ still needs to increase access to MAT


