Overview of Opioid Use Disorder Treatment

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Disclosures

I have the following relevant financial relationship with a commercial interest to disclose

Medical Consultant:

• MAP Health Management Peer Recovery Specialists
• MCSTAP Massachusetts Consultation Service for the Treatment of Addiction and Pain (funded by Massachusetts government)
Terminology

• Inappropriate:
  – Medication “Assisted” Treatment

• Appropriate:
  – Medication for Opioid Use Disorder (MOUD)
  or
  – Medication for Addiction Treatment
Components of Treatment for Opioid Use Disorder

**Pharmacotherapy**
- Full opioid agonist: methadone
- Partial opioid agonist: buprenorphine
- Opioid antagonist: naltrexone

**Psychosocial/Behavioral**
- Levels of Care:
  - Outpatient, IOP/PHP, residential
- Modalities:
  - CBT, MI/MET, CM, TSF

**Peer-based Recovery Support**
- AA, NA, SMART recovery
- Recovery coaches
MOUD Restores Neuropathways

Slide courtesy of Dan Alford, MD
Medications for Opioid Use Disorder: MOUD

**Goals of Treatment**

- **Relieve**
  - Relieve withdrawal symptoms

- **Block**
  - Block effects of other opioids

- **Reduce**
  - Reduce cravings

- **Restore**
  - Restore normal reward pathway

**Expected Improvements**

- **Substance Use**
- **Criminal Activity**
- **Needle Sharing: HIV, HCV**
- **Decreased Mortality**
- **Employment**
- **Physical and Mental Health**
Mu Receptor Pharmacodynamics

Full MU Agonist:
- Methadone
- Heroin
- Morphine
- Oxycodone

Partial MU Agonist:
- Buprenorphine

Full MU Antagonist:
- Naltrexone
- Naloxone

*Naltrexone has the highest receptor AFFINITY, then buprenorphine, then methadone
# Medications For Addiction Treatment

<table>
<thead>
<tr>
<th></th>
<th>Patient selection</th>
<th>Pharmacology</th>
<th>Administration</th>
<th>Treatment Setting</th>
<th>Prescribing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methadone</td>
<td>OUD that meet federal criteria for OTP admission</td>
<td>Opioid receptor full agonist</td>
<td>Daily oral administration at OTP. *patients may also have take home medication</td>
<td>Opioid Treatment Program</td>
<td>Only OTPs</td>
</tr>
<tr>
<td>Buprenorphine</td>
<td>OUD</td>
<td>Opioid receptor partial agonist</td>
<td>Transmucosal, implant or injection. Can be filled at pharmacy</td>
<td>No limitation to treatment setting</td>
<td>Physicians, PAs, NP, CNS who have a waiver to prescribe</td>
</tr>
<tr>
<td>Naltrexone</td>
<td>OUD (or AUD) abstained from opioids 7-14 days</td>
<td>Opioid receptor antagonist</td>
<td>Daily tablet (AUD only) or once per 28d IM injection</td>
<td>No limitation to treatment setting</td>
<td>No special waiver required</td>
</tr>
</tbody>
</table>
Details of Treatment

• Agonist treatment consists of daily methadone or buprenorphine
  – Stable level of opioid effect is experienced as neither intoxication nor withdrawal, but as “normal”
  – Requires waivered prescriber for buprenorphine or
  – Federally regulated opioid treatment program for methadone

• The aims of agonist maintenance treatment include:
  – reduction or cessation of illicit opioids and associated risks
  – improvement in psychological and physical health

• Antagonist treatment consists of once monthly injection
  – Anyone can prescribe naltrexone
  – Efficacy in certain populations
  – Overall efficacy not well established

Opioid Detoxification Outcomes

- Low rates of retention in treatment
- High rates of relapse post-treatment
  - < 50% abstinent at 6 months
  - < 15% abstinent at 12 months
  - Increased rates of overdose due to decreased tolerance
Protracted Abstinence Syndrome

• Secondary to derangement of endogenous opioid receptor system

• Symptoms
  - Generalized malaise, fatigue, insomnia
  - Poor tolerance to stress and pain
  - Opioid craving

• Conditioned cues (triggers)

• Priming with small dose of drug
High Mortality if Medication Not Maintained

N=15,831 people treated with buprenorphine over 1.1-4.5 years (Sordo BMJ. 2017 Apr 26;357:j1550.)
Behavioral Treatments

- Evidence-based interventions either skills-based or utilize incentives

- Goal to engage people in treatment, change attitudes and behaviors related to substance use, and increase skills to manage stress & cravings

- **Cognitive-behavioral therapy:**
  - skills to manage cravings, identify and avoid high risk situations, utilize self-monitoring

- **Motivational Enhancement Therapy:**
  - resolve ambivalence through eliciting reasons for change, strengthening motivation, and developing a plan for change

- **Contingency Management:**
  - rewards for engaging in treatment or not using substances
Most Patients Achieve Remission

### Table 2.
Change in clinical characteristics from study entry to follow-up 18, 30, and 42 months later.

<table>
<thead>
<tr>
<th>Participant characteristics</th>
<th>Month 0¹ (n = 338)</th>
<th>Month 18 (n = 252)</th>
<th>Month 30 (n = 312)</th>
<th>Month 42 (n = 306)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Substance use, past month</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current opioid dependence², %**</td>
<td>100</td>
<td>16.3ᵃ</td>
<td>11.5</td>
<td>7.8ᵇ</td>
</tr>
<tr>
<td>Abstinent from illicit opioids³, %***</td>
<td>0</td>
<td>51.2ᵃ</td>
<td>63.5ᵇ</td>
<td>61.4ᵇ</td>
</tr>
<tr>
<td>Opioid agonist treatment, %</td>
<td>0</td>
<td>31.8</td>
<td>38.1</td>
<td>36.9</td>
</tr>
</tbody>
</table>

People Die Waiting for Treatment

- 608 pts with OUD on waitlist for methadone
- Mortality rate 10-fold higher for those on waitlist compared to those treated with methadone
“Patients don’t fail treatment, treatment fails people”  
Marsha Linehan, PhD

Letter from MGH Bridge Clinic patient, shared with permission, 2016
MOUD Can and Should Be Offered to PWUD On Demand and Broadly
Hospitalized patients

• Initiating methadone in hospital:
  – 82% present for follow-up addiction care

• Initiating buprenorphine vs detox:
  – Bupe: 72.2% enter into treatment after discharge
  – Detox : 11.9% enter treatment after discharge
Additional Benefits of Agonist Therapy for Hospital/ED Patients

• PWUD in acute care settings face additional unique risks
  – AMA discharge
  – Overdose after discharge
  – Use in the hospital
Mortality After AMA Discharge

Days to Mortality
Patients Leaving Against Medical Advice vs. Discharged Home

Treating Withdrawal Decreases AMA
Treatment in the ER

- 78% vs 37% engaged in buprenorphine treatment
- Fewer days of self-reported opioid use
Good Retention in Low Threshold Models

• Low threshold methadone:
  – 88% retention at 30 days, 64% at 1 year
  – Significant reduction in heroin & cocaine
  – Increased stable living conditions

• Low threshold buprenorphine:
  – Patients retention similar to “standard” bup
  – 68%, 63%, 56%, 42% retained at 3, 6, 9, 12 mo

Treatment Effective in Primary Care

No difference in self-reported opioid use, opioid abstinence, study completion, or cocaine abstinence between the 2 groups

Prison Based Medication Saves Lives

- High prevalence of SUD in corrections
- DOC do not allow opioid agonist therapy
- OD post release 130X general population

- Rhode Island DOC:
  - Offers all FDA approved medications
  - 61% reduction in mortality post release, direct linkage to care

John Young, a prisoner at the Rhode Island Department of Corrections, says medication-assisted treatment will "keep me safe."

Traci C. Green, Jennifer Clarke, et al. Postincarceration Fatal Overdoses After Implementing Medications for Addiction Treatment in a Statewide Correctional System. JAMA Psychiatry, 2018;
Agonist vs. Antagonist Treatment

- Oral naltrexone ineffective for OUD
- Retention rates worse with naltrexone
- High OD risk if miss injection
- Extended-release naltrexone more effective than placebo

Agonist vs. Antagonist Treatment

- Buprenorphine or methadone still first line treatment
- Easy to initiate
- Better engagement
- Targets cravings
- Fewer Overdoses

- Naltrexone ER another “tool in the shed” for those who can safely start and stay engaged
ASAM Guidelines

- Providers must use clinical judgment considering multiple issues
  - *Patient preference*
  - Severity of opioid use disorder, recent OD
  - Patient history of treatment response
  - Co-existing medical and psychiatric conditions
  - Other medications and potential for interactions
  - Other substance use disorders
  - Job, travel, transportation, family needs
  - Pain
  - Patient beliefs about specific medications, in collaboration and discussion with family
  - *Pending incarceration*
Imagine Sobriety...

Despite Superior Efficacy, Opioid Agonists Still Stigmatized and Misunderstood

- After multiple detoxes, involuntary and voluntary commitments, long term programs, losses, overdoses, relapses....
- You achieve sobriety
  - You are engaged in counseling
  - You are engaged in a treatment community
  - You are exercising and eating healthfully
  - You are in college or have a job
  - You have your family back
  - You feel “normal”
But....

You are prescribed medication
  – You are told by your support network that you are not sober
  – You are “trading one addiction for another,” using a “crutch”
  – You are told you cannot start to move through step work until you are off your medication
  – You are told you cannot speak in meetings or hold leadership position because you are prescribed medication
  – You are asked by your family and sponsor what dose you are on, and when you are going to get off the medication, or switch to Vivitrol
What This Does...

- Self Doubt
- Alienation
- Discontinuance of RX
- Relapse
- OD/consequences/Death
Why Medication Is Not “Just Replacing One Drug for Another”

• Opioid agonist treatment consists of daily methadone or buprenorphine
  – Stable level of opioid effect is experienced as “normal”
  – No intoxication or withdrawal
  – Requires waived prescriber or opioid treatment program

• The goals of any medication maintenance treatment include:
  – Reduction or cessation of illicit opioids and associated risks
  – Improvement in psychological and physical health

• Opioid antagonist treatment consists of once monthly injection in a medical clinic
  – No intoxication or withdrawal
Naloxone

Letter from MGH Bridge Clinic patient shared with permission, 2016

6/16/16

HAD MY FIRST OVERTDOSE AFTER 20 YEARS OF IV DRUG USE.
I CAN DESCRIBE MY THOUGHTS AND FEELINGS; AFTER BEING SAVED
BY NARCAN, IN ONE WORD
ALONE... GRATEFUL. THIS
MEDICATION/DRUG IS SAVING
LIVES. THANK GOD, GOD BLESS,
KEEP THE FAITH

⇒ Nick

6/17/16

TODAY IS MY BIRTHDAY AND
I HAVE RECEIVED THE BEST
PRESENT EVER.... ANOTHER
CHANCE AT LIFE, SO GRATEFUL
FOR MY FAMILY, SO GRATEFUL
FOR MY HEALTH, SO GRATEFUL
FOR THIS PROGRAM, AND A GRATEFUL
HEART WILL NEVER RELAPSE.
Overdoses Symptomatic of Untreated Illness

“A key driver of the overdose epidemic is underlying substance-use disorder. Consequently, expanding access to addiction-treatment services is an essential component of a comprehensive response. “

Thank you!

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