Medication-Assisted Treatment Overview

Medication-Assisted Treatment Summit: An Opioid Addiction Response
Richard R. Silbert, MD, DLFAPA, Senior Medical Director
October 3, 2017
Background

• 80% of individuals with an opioid use disorder (OUD) do not receive treatment

• 2 million Americans – people across the economic spectrum, in small towns and big cities – suffer from an opioid use disorder. As a result, tens of thousands of Americans are dying every year and more still will die because of a tragic resurgence in the use of heroin
Background

• As a profession that places pt. well-being as our highest priority, we must accept responsibility to re-examine prescribing practices. We must begin by preventing our patients from becoming addicted to opioids in the first place. We must work with federal and private health insurers to enable access to multi-disciplinary treatment programs for pts. with pain and expand access for medication-assisted treatment (MAT) for those with opioid use disorders. We must do these things with compassion and attention to the needs of our pts. despite conflicting public policies that can’t to assert unreasonable expectations for pain control.
Treatment Background

• Based on 2010-2013 combined data, commonly reported reasons for not receiving treatment for drug or alcohol use included:

- (a) not ready to stop using (40.3%)
- (b) no health coverage and could not afford cost (31.4%)
- (c) possible negative effect on job (10.7%)
- (d) concern that receiving treatment might cause neighbors/family to have a negative opinion (10%)
- (e) not knowing where to go for treatment (9.2%)
- (f) no program having type of treatment (8.0%)
Treatment Background

• Locations where past year substance use intervention or treatment was received:
  – Self-help group
  – Outpatient rehabilitation
  – Inpatient rehabilitation
  – Outpatient mental health center
  – Hospital inpatient
  – Private doctor's office
  – Emergency room
  – Prison or jail
Drug Addiction Treatment Principles

• Medications are an important element of treatment for many patients, especially when combined with counseling/behavioral therapies

• For patients with mental disorders, both behavioral treatments and medications can be critically important

– NIDA
MAT for Substance Use Disorders

• The use of medications in combination with behavioral therapies to treat SUDs can help reestablish normal brain functioning, reduce cravings, and prevent relapse

• For individuals with alcohol dependence, MAT was associated with fewer inpatient admits. Total health care costs were 30% less for individuals receiving MAT than for individuals not receiving MAT

• Methadone and buprenorphine tx tend to be more cost-effective, in terms of health care dollars saved, than other D&A services for OUDs, due in part to having better retention in tx and lower relapse rates
Dopamine Pathways

- Frontal cortex
- Striatum
- Substantia nigra

Functions
- Reward (motivation)
- Pleasure, euphoria
- Motor function (fine-tuning)
- Compulsion
- Perseveration

Serotonin Pathways

- VTA
- Nucleus accumbens
- Hippocampus
- Raphe nucleus

Functions
- Mood
- Memory processing
- Sleep
- Cognition

© 2017 Community Care Behavioral Health Organization
Types of MAT

• For nicotine dependency
• For alcohol dependency
• For opioid dependency

• There are currently no FDA-approved Rx to treat addiction to cannabis, cocaine, or methamphetamine
MAT for Nicotine Dependency

• Nicotine replacement
  – Patches, lozenges, gum, nasal spray (fast-acting), vaping

• 2nd line products
  – Bupropion (Wellbutrin or Zyban)
  – Varenicline (Chantix)
  – Nortriptyline
  – Clonidine

• Combinations are often utilized (e.g., bupropion and a nicotine patch)
MAT for Alcohol Dependency

• Disulfiram (Antabuse) – may be more effective if used in supervised setting – alcohol becomes acetaldehyde

• Acamprosate (Campral) – based on Glutamate response

• Naltrexone (Revia, Vivitrol) – opioid antagonist

• JAMA study (outpatient retrospective review) showed no significant difference between acamprosate and naltrexone for interval days to return to drinking
  – Vivitrol was associated more with less heavy drinking rather than interval days

• Various other Rx have shown promise including topirimate (Topamax), gabapentin (Neurontin) and in early onset alcohol SUD, ondansetron (Zofran)

• SSRIs only help if there really is depression present
Between 60% and 75% of D&A treatment admissions in PA are for an opioid use disorder (OUD)

Medication-assisted treatment (MAT) is an evidence-based treatment for OUD, yet is not often included in D&A treatment

Over 75% of people who enter a MAT program for treatment of their OUD are self-referred, despite its proven efficacy

Data from Community Care contract regions indicate low referrals to MAT from D&A providers
OUD MAT

- MAT is the most effective form of tx for an OUD because it leads to significantly lower relapse rates compared to abstinence-based tx

- Clients in MAT stay longer in tx compared to abstinence-based tx & are less likely to complete any abstinence-based tx compared to all other substance use disorders

- The risk of overdose rises rapidly within the first 4 weeks after people with an OUD leave any level of D&A tx

- PA has one of the highest fatal overdose rates in the U.S. due to easy access to low-cost heroin & other opioids
Medications for OUD Treatment

- **Methadone**
  - Opioid Agonist Therapy
  - Most effective of the 3 in heavy long-term opioid use

- **Buprenorphine**
  - Partial Agonist Therapy
  - Safer & easier to provide than methadone

- **Extended-release naltrexone**
  - Opioid Antagonist Therapy
  - Used in relapse prevention & cannot be used with methadone or buprenorphine
Best Practices for Initiating MAT

• Start with a history that includes medical, psychiatric, family, substance use issues and identifies family and psychosocial supports or lack thereof

• Check PDMP

• Physical exam

• Lab testing
Offer Education

• How it works

• Benefits versus risks

• What happens if using other substances

• Potential for relapse/OD if discontinued

• Offer informed consent
Evaluate Need for Medical Detox

• Especially with potential naltrexone patients

• Polysubstance users may need detox from alcohol or benzodiazepines
Address “Co-occurring” Disorders

• Medical, mental health, and social needs of a patient

• Homelessness
Integrate Therapies

• Pharmacologic and non-pharmacologic therapies

• Counseling and other psychosocial therapies, as well as social support through participation in Narcotics Anonymous and other mutual-help programs
Refer Patients for Higher LOC

• If office-based treatment with buprenorphine or naltrexone is not effective or the clinician does not have the resources to meet a particular patient’s need

• Many providers will get help finding necessary resources including in our contracted areas, from Community Care Customer Service, Network Management, and Care Management staff
MAT is not a Level of Care

• MAT is effective in combination with a continuum of care that can include:
  – Detoxification,
  – Residential treatment,
  – Outpatient treatment,
  – Family support (and family counseling),
  – Mutual support (e.g., 12-step meetings),
  – Halfway houses & recovery homes,
  – Community-based peer services & case management, and
  – An array of social supports and other recovery-based services
MAT Agonist or Antagonist

• **Agonist** medications mimic the action of other drugs that are similar in chemical structure
  – Methadone and buprenorphine are synthetic versions of opioids
  – Agonist medications in MAT are provided at dosages, and have characteristics that reduce or eliminate the euphoric high, while filling the brain’s receptors for opioids, reducing the urge for more

• **Antagonist** medications block the action of other drugs
  – Naltrexone blocks the brain’s receptors built for opioids, which in turn, reduces the urge for opioids
Methadone – Agonist

• Opioid agonist – daily oral

• Use or Ideal Candidates
  – Detox or maintenance treatment of opioid addiction
  – Should be part of comprehensive program with psychosocial supports

• Contraindications/Warnings
  – Allergy
  – Respiratory depression
  – Paralytic ileus
  – Co-administration of other Rx affecting EKG Q-T

• Pregnancy – Category C – can breastfeed
Buprenorphine – Partial Agonist

• Opioid partial agonist (a daily sub-lingual Rx)

• Use or Ideal Candidates
  – Opioid dependence
  – Should be part of comprehensive program with psychosocial supports

• Contraindications/Warnings
  – Could precipitate withdrawal from other opioids
  – Allergy or hypersensitivity
  – Severe hepatic failure, respiratory depression or head injury
  – Risks increased in combo with alcohol/benzos

• Pregnancy – Category C – can breast feed (limited studies)

• A once monthly formulation has been given final FDA OK, Probuphine, delivered as an implant under the skin

• We anticipate an injectable version with extended effect of either 1 week or 1 month being released in the upcoming year if given FDA approval
Buprenorphine

• The most common forms of buprenorphine used for OUD tx include naloxone in the formulary:

• Naloxone is a antagonist medication, similar in chemical structure to naltrexone,

• Naloxone is added to buprenorphine to reduce the potential for crushing the medication into powder and injecting it to acquire a “high”

• Naloxone blocks the action of buprenorphine if a person attempts to inject the drug; however, naloxone does not block the action of buprenorphine if taken orally
Naltrexone (Ext. Release) - Antagonist

• Opioid antagonist – given IM monthly

• Use or Ideal Candidates
  – For relapse prevention
  – Ideally, early in addiction or individuals with less severe addiction history
  – Co-occurring alcohol SUD
  – Must be already detoxified
  – People with high-risk jobs

• Contraindications/Warnings
  – Still on opioids or in opioid withdrawal
  – Allergies to naltrexone or the diluent
  – Not enough body mass for IM 2-inch injection
  – If new and acute hepatitis develops

• Pregnancy – Category C – probably should not breast feed
Methadone vs. Buprenorphine

• Buprenorphine has a safer side effect profile compared to methadone and limited potential for euphoria because it is only partial agonist – it has a ceiling effect, and doses beyond 20-24 mg have little effect on efficacy or on safety risks.

• However, methadone tx tends to have slightly better outcomes in terms of retention and reduction in relapse rates.
Agonist vs. Antagonist

- Methadone and buprenorphine have an extensive body of research supporting their efficacy; whereas extended release naltrexone has limited research

  - Agonist medications are more likely used for treating individuals with an active OUD; whereas extended release naltrexone can be used for relapse prevention after individuals have successfully responded to either MAT or non-MAT tx

  - Extended-release naltrexone can be used immediately for anyone who does not want an agonist medication; however, it should not be considered as an effective replacement to methadone or buprenorphine if individuals cannot abstain from opioids
Agonist vs. Antagonist

• Agonist treatment for an OUD should be provided for a minimum of 12 months and more is preferred

• Extended-release naltrexone can be used for people who do not want to receive agonist medications, but it cannot be used in combination with any opioid drug

• Data from Community Care indicates that two thirds of members will take extended-release naltrexone for one to two months (one to two depot shots); so the medication does not appear to be as effective in terms of retaining individuals in treatment
Is MAT compatible with 12-step recovery?
I Think YES!

• Abstinence from all alcohol/drugs of abuse could still be the short- and long-term goal

• Consider the history of anti-depressant treatment and the resistance but later acceptance it gained in A.A. and N.A.

• Consider whether individuals want to stop drinking or using drugs of abuse

• Don’t make a decision solely based on whether some individuals use buprenorphine in the service of continuing addiction
• There is a principle which is a bar against all information, which is a proof against all argument, which cannot fail to keep a man in everlasting ignorance – that principle is condemnation before investigation
References

• SAMHSA Pocket Guide to MAT
  http://store.samhsa.gov/shin/content//SMA16-4892PG/SMA16-4892PG.pdf

  http://www.drugabuse.gov/sites/default/files/podat_1.pdf