Medication Assisted Treatment and Corrections

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MAT in the Corrections Setting

- Who Does This Affect?
- What is MAT and What is the Evidence of Efficacy?
- Emphasis on Treatment as Prevention
- What are the Challenges in Adopting MAT in the Setting of Corrections?
- Where is this being implemented and how is this working?

Who is affected by Substance Use Disorders

- People
  - Covers every walk of life (medical professionals, attorneys, CEO's, students, sports stars, etc.)
  - An estimated 65% of individuals in United States' prisons or jails have a substance abuse disorder, and a substantial number of these individuals are addicted to opioids.
- Families of offenders (mostly females)
  - Loss of wage earners, income spent on drug use
  - Neglect of responsibilities for dependents
  - Children "losing" parents to foster care
- Public
  - Crime against property
  - Crime/violence perpetrated on individuals
  - Cost of incarceration of SUD offenders and increased recidivism

Opioid Use Epidemic

- Overdoses with opioid pharmaceuticals led to almost 17,000 deaths in 2011 and over 52,000 in 2015. Since 1999, opiate overdose deaths have increased 265% among men and 400% among women.
- 20.5 Million Americans ages 12 and older had a substance use disorder in 2015.
- In 2015, an estimated 2 million people had an opioid use disorder related to prescription pain relievers and an estimated 591,000 had an opioid use disorder related to heroin use specifically.
- SAMHSA 2016 and NIDA 2015 Drugs of Abuse, Opioids

What is Addiction?

- **Addiction is "a primary, chronic disease of brain reward, motivation, memory, and related circuitry," with a "dysfunction in these circuits" being reflected in "an individual pathologically pursuing reward and/or relief by substance use and other behaviors."**
- **The ASAM National Practice Guideline for the Use of Medications in the Treatment of Addiction Involving Opioid Use 2015**

Opioid Use Disorder

- Symptoms of opioid use disorders include:
  - strong desire for opioids,
  - inability to control or reduce use,
  - continued use despite interference with major obligations or social functioning,
  - use of larger amounts over time,
  - development of tolerance,
  - spending a great deal of time to obtain and use opioids,
  - withdrawal symptoms that occur after stopping or reducing use, such as negative mood, nausea or vomiting, muscle aches, diarrhea, fever, and insomnia.
  - DSM-5 Criteria 2015

Management of Opioid Use Disorder

- Abstinence Based Treatment
  - 12 Step Programs- < 10% effectiveness
    - Abstinence-oriented interventions are effective for only in very motivated patients with stable living conditions and adequate social support. (NIDA 2016)
  - Forced Abstinence (incarceration)
- Medication Assisted Treatment
  - 30% effective with meds
  - MAT can be used in conjunction with 12 Step programs that accept the use of these medications
  - Increases to almost 80% with support groups and counseling
    - Methadone
    - Buprenorphine
    - Naltrexone

Medication Assisted Treatment in the Management of Opiate Dependence

- Medication Assisted Treatment
  - Combination of behavioral therapy, counseling and medications to prevent use of illicit opiates.
- Transition from the use of illicit substances to carefully controlled doses of medication to prevent withdrawal, decrease craving and allow to perform normal ADLs and participate in their treatment and become productive and to taper off medications if possible.

Harm Reduction

- The use of MAT allows the patient to think clearly and participate in their recovery process
- These medications have been shown to reduce rates of HIV and HCV transmission
- The patient is not committing crimes by purchasing illegal medications and avoiding medications that have been “cut” with more powerful agents like fentanyl, or putting themselves at risk seeking out drugs in dangerous areas.
- Patients on MAT are able to think clearly, hold a job, manage their money, pay taxes, care for their children and resume a “normal life”.

Interruption of treatment

- Courts and DHS (depending on the individual provider) will often require that patients end their treatment with MAT immediately, as a condition to regain custody.
- More often than not, these clients relapse with in 2-3 months and may quickly reappear in the court system
- While on MAT medications, to prevent relapse, these medications should be tapered at a slow rate and managed by a physician
- MAT treatment, to be effective, should continue for at least one year in most individuals. Some may require a life-long treatment to keep these patients sober and prevent relapse.

The MAT Process

- Patients with addiction present for treatment
- Patients are evaluated for and assessed if they are appropriate for care
- Patients are referred to physician for further evaluation and to determine type of MAT services best suits the client
- Patients are assigned a counselor and begin treatment planning counseling, and group therapy

Monitoring MAT

- Initial monitoring of symptoms
- Random monthly UA to detect use
- Routine monitoring of PMP to evaluate “other” use of medications
- Physician monitoring of dose and evaluation when nursing/pharmacists detects problems
- Working toward detoxification based on recovery stability
- SAMHSA recommends a minimum of 1 year of treatment to decrease relapse rates

Methadone

- Used to treat opiate dependence since 1970's in the US
- Controlled daily dosing (60-120mg/day for most clients)
- Inexpensive (5-10 cents/dose)
- Highly monitored, minimum of 8 random UA's per year,
- Monitor of PMP at regular intervals
- May be used in pregnancy to avoid exposure to illegal substances and prevent withdrawal/spontaneous abortion
- May be stable at maintenance dose for years
- Does not impair mental tasks if used at correct dose and has a long half-life allowing daily dosing
- Allows patients to work, study and participate in recovery
- Reduces recidivism, most effective in combination with behavioral therapy, counseling and support groups

Methadone Disadvantages

- Daily dosing, must be from an Opioid Treatment Program, "take homes" only after months of treatment stability and clean UA's
- May be abused and has no deterrent from using other drugs, including opiates, with its use
- Highly fat soluble and metabolized by liver and may interact with other medications
- Increased dose levels may cause prolonged QTc interval with cardiac/respiratory depression

Buprenorphine

- Introduced in 2002 for treatment of opiate dependency and maintenance therapy
- Partial agonist at μ, κ receptors and slowly dissociates (t ½ of 72 hours)
- Poor bioavailability in GI tract and is administered trans-mucosally
- Mixed with naloxone to prevent injection of medication.
- Little intrinsic activity on its own and blocks use of other opiates, but prevents withdrawal
- Patients have no cognitive impairment and are able to work and participate in recovery.
- Can be office based, doesn't require provider to be OTP based, but provider needs to be Certified to prescribe.
- CARA 2016 now allows Nurse Practitioners and Physician Assistants to prescribe with Certification

Buprenorphine Disadvantages

- Cost. Most patients are stable between 16-24 mg /day (max of 32 mg)
- Providers require special training and DEA approval to prescribe and have limits as to how many patients they can support
- Cannot be taken with other CNS depressants (Benzodiazepines)
- Difficult to reverse effects due to its slow dissociation from receptors
- Marginal data on safety in pregnancy, ACOG recommends Buprenorphine without naloxone to avoid accidental induction of withdrawal and possible loss of the pregnancy
- Usually not effective for long term/high dose opiate addicts, likely due to tolerance.

Naltrexone (Revia, Vivitrol)

- Pure antagonist (blocker) that works by binding to μ–receptors and preventing agonist activity. It is also believed to interfere with the Dopamine Reward System.
- Approved for use in opiate dependent patients who have completed MAT therapy
- Used to treat alcoholism as well
- Reduces cravings
- No abuse or diversion potential
- Available as an IM Injection lasting up to 30 days

Naltrexone Disadvantages

- Cost ($1400) per month for injections, tablets are daily at 50 mg.
- Tablet form has no incentive for patient to continue to daily dose
- Possible hepatotoxity over time
- Long term use can lead to lower sensitivity to drugs of abuse and may overdose on relapse

Opiate Dependence in the Incarcerated Population

- Estimated 65% prisoners meet criteria for substance abuse
- Only 11% receive treatment while incarcerated
- Untreated offenders are more likely to relapse and engage in criminal behavior on release
- Treatment of these offenders has been shown to reduce the costs of
  - Lost productivity
  - Crime and property loss
  - Medical and Legal issues associated with return to incarceration

2015 National Survey on Drug Use and Health

- 9.8 Million Americans used prescription Opioids
- 11.5 Million Misused them
- 1.9 Million had a Substance Use Disorder
  - Among SUD adults, 60% reported using opioids without a prescription
  - 41% reported getting them free from friends and relatives

Annals of Internal Med, by Han, et al Aug 2017

Factors Leading to Addiction

- Over 60% of opioid misuse is for pain relief
- Likelihood of chronic use increases when the prescription exceeds either 5 days or 1 month of therapy
- A refill for a second prescription during a pain episode doubles the risk for use one year later, so much that 1 in 7 persons remain on opioids 1 year later
- CDC guidelines from 2016, now recommend to limit opioids for acute pain to 3-7 days.

Incorporation of Treatment into the Criminal Justice Setting

- Comprehensive Addiction and Recovery Act (CARA) of 2016 passed in July 2016.
- Substance Use Treatment may be incorporated in Criminal Justice System:
  - Treatment as a condition of probation
  - Drug Courts blending sanctions with treatment
  - Treatment in prison followed by Community Based treatment on Discharge
  - Treatment while under parole or probation supervision

Challenges to Implementing MAT in a Correctional Setting

- Limited knowledge of Evidence Based Medicine for MAT treatment by stakeholders
- Philosophical Aversion to treatment vs abstinence with MAT by stakeholders "bootstrap mentality"
- Security concerns regarding diversion
- Lack of qualified staff and treatment centers statewide that accept insurance

Nationwide Access to MAT in Drug Courts

- Currently about half offer MAT
  - Probation (3-17% offered tx)
  - Community Treatment programs (7-13%)
- Courts that didn't offer MAT
  - 20% have a blanket prohibition against
  - Many report other barriers including:
    - Insufficient funding
    - Few providers in communities served
    - Rural areas have little/no access

Recommended Standards for MAT in Drug Courts

- Bureau of Justice Assistance
  - In 2015 required drug courts receiving Federal funding to attest that if MAT is prescribed by a licensed medical practitioner for a participant, diagnosed with SUD, and medication is appropriate, that it would be continued. Participants would not be required to taper off medication as a condition of graduation from the program.
- Drug courts may overrule this only in the explicit finding that the participant is abusing or diverting the medication.

Continuation of MAT services

- Recommendations for continuing MAT in clients that are opioid dependent include:
  - Evidence Based Medicine reveals the MAT along with counseling and support works well as preventative care.
  - Court and DHS services should continue MAT services as condition of continued visitation and the reunification process.
  - Anecdotally, many patients who are doing well in the MAT programming, are forced to chose between their children and their health due to Court/DHS decisions and often relapse.
- Best Practices
  - Education about MAT, to the Court, as to the effectiveness of this treatment for a recognized "disease". We do not separate parents from children who have many other mental illnesses.
  - Making continued MAT engagement a requirement of a parent's working toward reunification/continued custody

Pregnancy and Neonatal Abstinence Syndrome (NAS)

- Withdrawal symptoms seen in newborns after delivery to opioid dependent mothers
- Approximately 3% of the 4.1 million women of child-bearing age who abuse drugs are believed to continue drug use during pregnancy.
- Pregnant patients receive "high risk" prenatal care and are monitored monthly in treatment
- Sudden withdrawal of opioids in the first and third trimesters may result in the loss of pregnancy
- Infants are not uniformly affected by mother's use of MAT treatments but use of illicit substances may introduce "other factors"

Reommendations for Management of NAS

- Is removing an infant with NAS based solely on mother's MAT is not always appropriate.
  - CAPTA states that this is not grounds for a child abuse and/or neglect determination and cannot be used for criminal prosecution but intended to have mothers voluntarily submit for treatment services
- Continuing in MAT care often allows mother to breastfeed and bond with the infant
- ACOG recommends breastfeeding these infants by mothers in continuing MAT treatment
- Prevents entry to foster care system

Summary

- MAT for the treatment of OUD is effective and is recommended for persons with opioid addiction and alcohol use disorder.
- Treatment with MAT should include psychosocial treatment, and therapy to be most effective
- MAT can be used in the setting of 12 step programs, given that the sponsor and group are open to it
- There is no evidence that one treatment is superior to another (methadone vs buprenorphine) for opioids
- MAT therapy can decrease recidivism and help patients to regain their lives and be with their families
- Pregnancy and NAS should not be mean automatic removal of a child based on MAT status of parents
- ASAM National practice Guideline for Use of Medications in the Treatment of Addiction Involving Opioid Use, Kampman and Jarvis. J Addict Med 9(5) Sept 2015