Medication Assisted Treatment of Substance Use Disorders

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Addiction:
The Bare Essentials
Addiction

• The Person: Loss of Control
• The Observer: Persistent Use Despite Harm
Vulnerability

- Family History
- Adverse Childhood Experiences
- Substance Availability
- Permissive Attitudes Toward Use
How Addiction Starts

• Dopamine Release / Mood Change
• Pleasure
• Relief from Displeasure
• Conditioning
• Brain Changes at Instinctual Level
• Tolerance
How Addiction Keeps Going

• Withdrawal
• Reminders ("Triggers")
• Instinctual Behavior (No Choice Needed)
• Dopamine Dictates Bad Choices
• Any Can Be Too Much
• Substances May Be Easier to Obtain than Treatment
Overview of Treatment and Recovery Approaches
Levels of Care for Treatment

• Inpatient
• Residential
• Day Care/Partial
• Intensive Outpatient
• Outpatient
Common Treatment Approaches

• Medical Model
• Social Model/Therapeutic Community
• 12-step based
• Evidence Based Practices (i.e. Matrix Model, Seeking Safety, Motivational Interviewing, Cognitive Behavioral Therapy, etc.)
• Psycho Educational
• Hybrid/Combination approaches
• Harm Reduction
Common Issues Addressed in Treatment

• Withdrawal Management and/or Monitoring
• Understanding and Acceptance of Problem
• Skill Development – e.g., honest self-disclosure
• Relapse Prevention
• Development and use of support systems
• Factors affecting use such as living environment, peer and family factors, legal and job issues and other medical or mental health problems
Treatment – Professional Responsibility

Recovery – Individual Responsibility
Common Components of Treatment

• Screening
• Intake
• Assessment
• Treatment Planning
• Individual Sessions
• Educational Sessions
• Group Sessions
• Discharge Planning
• Recovery Oriented Activities
Common Recovery Environments

- 12-step based
- Faith or other spirituality based
- Community based
- Corrections based
Common Components of Recovery

- Use of a Support System
- Improvements in major life areas
- Disciplined activities to improve physical, mental, and spiritual health
- Continued support
- Healthy living environment
How Medications Help
Where and how do medications fit into treatment and recovery?

• Wherever they reduce the suffering and/or harm

• Some typical areas they may be helpful in are:
  – Reduction of withdrawal (both short term and long term) symptoms
  – Reduction of cravings (short term and long term)
  – Improvement of emotional state, hope and motivation
Where and how do medications fit into treatment and recovery (cont.)

• Very rarely used as a stand alone treatment
  – To be effective the patient must be able to take as directed

• Can be used in combination with most any other approach
  – Other approach must be open to medications
  – Patient must be prepared for any potential resistance
Where and how do medications fit into treatment and recovery (cont.)

• Where treatment and recovery support persons are receptive and supportive
  – Educated on the evidence that medications can be very effective
  – Accepting of the potential for medications to help
  – Where individuals are allowed individual personal experiences
  – Where enough advocacy work has been done to make sure medications are available
Where and how do medications fit into treatment and recovery (cont.)

• Where recipients have been prepared for success
  – No barriers blocking access
  – Assessed by a physician trained in Substance Use Disorder Treatment
  – Resistance in has been identified and removed or at least decreased
  – Where education on effects and potential side effects has been thorough and effective
  – Has ability to comply with medication schedule
Where and how do medications fit into treatment and recovery (cont.)

• Where they are not seen as a “magic bullet” that will mean nothing else is necessary
  – Even if they help someone stop, staying stopped is the hard part
  – Medication does not change environment, social circles, finances, relationships etc. and these usually are both affected by drug and alcohol problems and contribute to them
Roles of Medications in Addiction Treatment

• Prevent Withdrawal
• Reduce Craving
• Reduce Automatic Behaviors
• Make You Sick if You Use
• Block the High
• Increase Accountability
• For Medical and Psychiatric Problems
Without medication, some individuals are unable to gain the traction required to make the lifestyle and relationship changes needed for recovery.
Specific Medications
Medications for Addiction Treatment

Never a casual decision, but are underutilized.

**Alcohol Use Disorder**
- Disulfiram (Antabuse)
- Naltrexone (Revia, Vivitrol)
- Acamprosate (Campral)

**Opioid Use Disorder**
- Methadone
- Buprenorphine (Suboxone)
- Naltrexone (Revia, Vivitrol)
Disulfiram (Antabuse)

- FDA approved for alcohol dependence in 1951
- Blocks enzyme (acetaldehyde dehydrogenase)
- Drink alcohol and acetaldehyde rises fast
- Causes flushing, nausea, vomiting, rapid pulse, rarely: collapse and death
- May cause liver damage
- If taking, avoid alcohol in food and on skin
- Some take only at times of stress/high risk
Naltrexone (Revia, Depade, Vivitrol)

- FDA approved for opioid dependence in 1984
- FDA approved for alcohol dependence in 1995
- Strong attraction to opioid receptors
- Displaces.Blocks other opioids – “antagonist”
- Does not cause pleasure or relieve pain
- Alcohol: less craving, less pleasure
- Opioids won’t work
- May cause liver damage
- Loss of opioid tolerance – Easy to overdose!
Acamprosate (Campral)

• FDA approved for alcohol dependence in 2004
• May reduce excitement of glutamate and increase calming of GABA in brain
• Decreases prolonged withdrawal
• Decreases response to triggers (environmental cues)
• No threat to liver (kidney function required)
• May cause diarrhea and gas
• Rare: thoughts of suicide
Opioid Dependence

• Receptor / neuroadaptive changes in the brain are long lasting
• Treatment with opioid replacement stabilizes patients
• Relapse to opioid use is common after attempted detoxification despite “best intentions”
The shape of the chemical molecules of opioids all resemble morphine, which is made from opium.

Opioids work in the brain by fitting into the receptor sites of the brain’s natural opioids, the endorphins.
Many opioids act like morphine or endorphins and stimulate the receptor sites to relieve pain and produce pleasure.

Some block the receptor sites.

Others do some of each.
Pharmacology

• Agonist – drug-receptor interaction completely turns on cell machinery

• Antagonist – drug sits on receptor and DOES NOT turn it on--prevents turn on

• Partial agonist – drug-receptor interaction partially turns cell on
  – Ceiling on all clinical effects
Methadone

• Synthetic opioid - “agonist”
• FDA approved for treatment of pain in 1947
• Shown effective for opioid addiction in 1960s
• FDA approved for opioid addiction in 1972
• Prevents withdrawal, can block highs, allows safe function such as driving
• First few weeks can be dangerous
• Reduces relapse, crime, unemployment, infection...
• Stigmatized
Buprenorphine

- Approved by the FDA for Office Based Treatment as a Schedule III drug in October 2002 and released for use in January 2003
- Designed so that physicians can treat patients in their offices
- No stigma of having to go to a clinic
- Flexibility in dosing and dispensing
- Few drug interactions except respiratory depression in combination with benzodiazepines and other sedatives
Buprenorphine

- Synthetic opioid— “partial agonist”
- Prevents withdrawal, reduces craving, relieves pain
- Strong attraction to opioid receptors
- Displaces/blocks other opioids
- Ceiling effect – but not in children!
- Long acting – can be taken every other day
Buprenorphine

- A partial mu-agonist for the treatment of opioid dependence (moderate activity/high affinity)
Buprenorphine

- Effective if injected
- Somewhat effective if taken under the tongue
- NOT effective if swallowed
Buprenorphine/Naloxone

- Suboxone® (and others) is buprenorphine combined with naloxone (Narcan®), which is inactivated when swallowed but precipitates withdrawal when injected
- 2 mg and 8 mg tablets and film
- 4 mg & 12 mg film
- Subutex® is plain buprenorphine, which is more abusable than the combination med and is used primarily in pregnant women (2 and 8 mg tablets)
Subutex
(buprenorphine HCl/sublingual tablets)

Suboxone
(buprenorphine HCl/naloxone HCl dihydrate)
Suboxone®
(buprenorphine and naloxone) sublingual film
8 mg/2 mg
Rx only
Children who accidentally take SUBOXONE® will need emergency medical care. Keep SUBOXONE® out of the reach of children.

suboxone.com
Your Responsibilities With Prescribers

- Look for alternatives before accepting an addictive medication
- Tell them you have an addictive disorder even if the problem was a long time ago
- It’s best to tell them this before you are sick
- Remember you have “no brakes” when it comes to addictive substances
- Ask the prescriber to set a time limit
- Have someone else control the supply of medication
If You Have Addiction: **Avoid These Medications**

- Benzodiazepines
- Opioids
- Barbiturates (esp. Butalbital)
- Stimulants
- Meprobamate (including carisoprodol or Soma)
- Alcohol
And Be *Cautious* Taking Any of These:

- Antihistamines
- Muscle relaxants
- Sedating medications (psychiatric and other)
If you are convinced the *only* treatment that can help you is an addictive medication: *worry and ask for help* because that’s a sign of addiction.
For more information, log onto: www.ncadd.org

also see:

The Two Pillars of Recovery
Medications for Alcohol Addiction are Underutilized
Balance is Everything
Childhood Matters--Very Much
What is Medication-Assisted Recovery?
If you are a Cigna customer and have questions about Substance Use treatment or about your benefits and how to use them, please contact me:

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