

Mind Matters ECHO

Module: Substance Use

Session 2: Effective Treatments for
Substance Use

January 11, 2023



**Mount
Sinai
Health
Partners**

Welcome!

- ▶ Pre-survey: bit.ly/sudmeeting2
- ▶ Hub team introductions
- ▶ Disclosures
- ▶ Questions during presentations



Case Presentation



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Mount Sinai Visiting Doctors



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Mount Sinai Visiting Doctors

Patient Information

Demographic Information	<ul style="list-style-type: none">• 61 year old cis male• Medicaid• Lives alone
Main Area of Concern	<ul style="list-style-type: none">• Patient has a history of psychosis and has been institutionalized in the past, cannot function in the community, is increasingly paranoid, hallucinating, and is physically debilitated due to multiple sclerosis
Medical History	<ul style="list-style-type: none">• Multiple sclerosis, wheelchair bound as a result
Current Psychiatric Diagnoses	<ul style="list-style-type: none">• Schizophrenia
Current Treatment Plan	<ul style="list-style-type: none">• None
Substance Use	<ul style="list-style-type: none">• No known current substance use• Past significant substance use (not corroborated)
Current Medications	<ul style="list-style-type: none">• None
Previous Psychiatric Hospitalization	<ul style="list-style-type: none">• Prolonged stay in a chronic care facility many years ago

Patient's Apartment



Patient Information

History of Trauma	<ul style="list-style-type: none">• Unknown
Symptoms of Depression	<ul style="list-style-type: none">• Lack of motivation• Feelings of hopelessness, helplessness, and/or guilt• Thoughts of suicide• Unclear if these symptoms reflect depressive disorder or are a result of psychosis, MS, and concomitant frailty
Symptoms of Anxiety/Panic	<ul style="list-style-type: none">• Fear of losing control• Intrusive worrisome thoughts• Above symptoms may be due to psychosis
Other Psychiatric Symptoms	<ul style="list-style-type: none">• Hallucinations, paranoia, feelings of persecution, battling with the devil, being told (by the devil, by his father) that he should kill himself
Suicidality	<ul style="list-style-type: none">• Past passive ideation (thoughts without plan and/or intent)
Areas of Support and Consultation Being Sought	<ul style="list-style-type: none">• Psychotherapeutic consultation• Identify appropriate behavioral health referrals, placement options

Effective Treatments for Substance Use

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Didactic Presentation



Prameet Singh, MD

Vice President, Behavioral Health

Mount Sinai Health System

Associate Professor of Psychiatry

Icahn School of Medicine at Mount Sinai

Learning objectives

- ▶ Understand the modalities for treatment of substance use disorders
- ▶ Learn the basic principles of non-pharmacological interventions
- ▶ Learn about the use of pharmacological agents to treat substance use disorders in the PCP's office

Approaches to treatment

▶ Non-pharmacologic treatments

- Promoting motivation and adherence
- Skills to reduce or stop using
- Skills to stay stopped (relapse prevention)
- 12-step groups and facilitation (TSF)
- **S**elf **M**anagement **A**nd **R**ecovery **T**raining

▶ Pharmacological agents

- Agonists
- Anti-craving drugs
- Antagonists or blockers

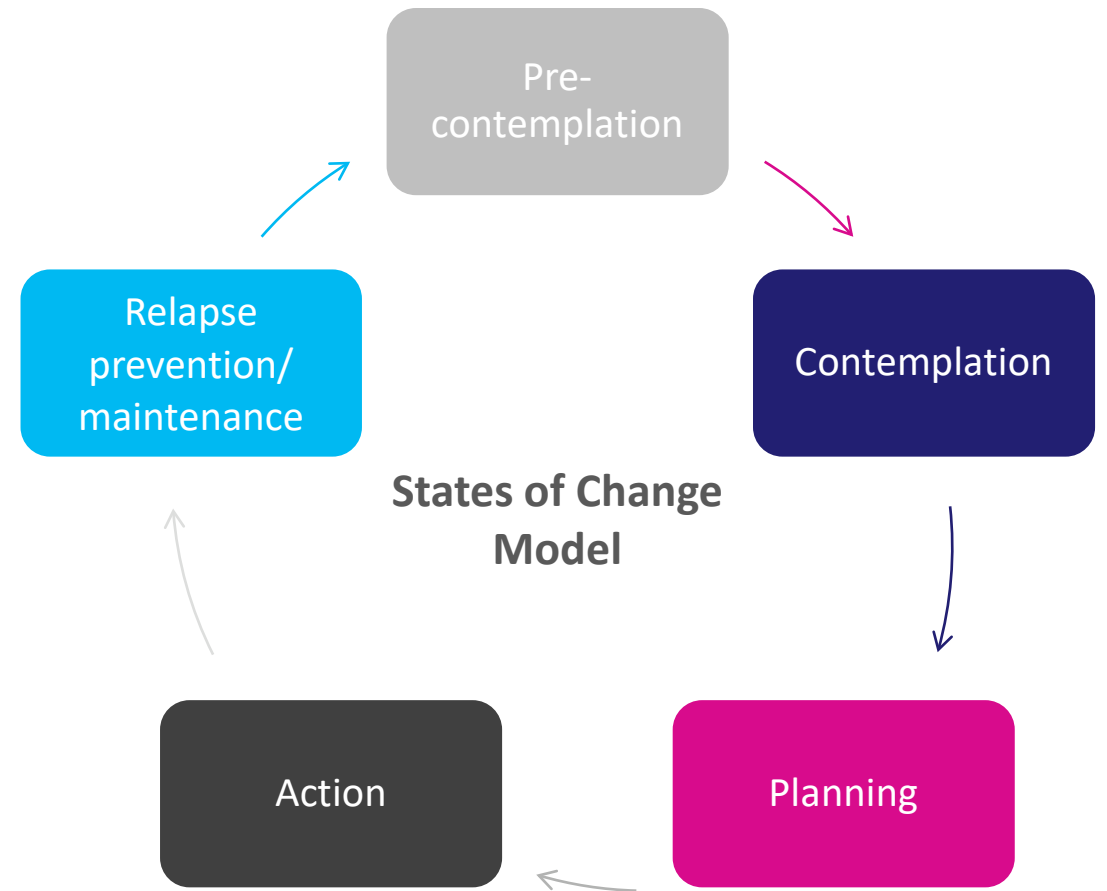
Promoting motivation and adherence

- ▶ Utilize the Stages of Change Model
- ▶ Motivational interviewing
- ▶ Motivational enhancement therapy (MET)



Stages of change

- ▶ Pre-contemplation
- ▶ Contemplation
- ▶ Planning
- ▶ Action
- ▶ Relapse prevention/maintenance



Tips to cut down or stop

- ▶ Avoid exposure
- ▶ Avoid cues
- ▶ Prepare for and prevent response to cue

Relapse prevention

- ▶ Preventing the abstinence violation effect
- ▶ Identifying high-risk situations
- ▶ Highlighting tools to prevent use
- ▶ Reducing harm

12-step groups

- ▶ Concepts
- ▶ Common misconceptions
- ▶ Advantages
- ▶ Disadvantages
- ▶ Twelve-step facilitation (TSF)

SMART Recovery

- ▶ Uses CBT and MET
- ▶ Focus on 4-Point Programming
 - Building motivation
 - Coping with urges
 - Managing thoughts, feelings, and behaviors
 - Living a balanced life

Pharmacological Agents

Agonists

- Methadone
- Buprenorphine

Antagonists

- Naltrexone
- Disulfiram (aversive)

Anti-craving agents

- Acamprosate
- Naltrexone for alcohol

Pharmacological options by drug class

Opiates

- **Blocker:** naltrexone
- **Agonist:** buprenorphine, methadone
- **Anti-craving:** both agonists

Alcohol

- **Anti-craving:** naltrexone, acamprosate
- **Aversive/blocker:** disulfiram (Antabuse)

Stimulants, hallucinogens, cannabinoids

- No FDA-approved agents

Naltrexone

- ▶ FDA approved for Alcohol Use Disorder (AUD) and Opioid Use Disorder (OUD)
- ▶ Pure mu opioid antagonist
- ▶ Modifies HPA axis to suppress ethanol consumption

Route	Brand Name	Dosage	Notes
Oral	Revia	50-100 mg daily	Significant first-pass metabolism
Depot injection	Vivitrol	380 mg deep IM every 4 weeks	Half life = 10-12 days

Naltrexone adverse effects

- ▶ Three-fold increase in ALT and AST in 20% of patients receiving IM form
- ▶ No other consistent side effects
- ▶ Some patients report a mild dysphoria or decreased experience of pleasure

Acamprosate

- ▶ NMDA antagonist effect
- ▶ Increases beta-endorphins
- ▶ May influence GABA transmission
- ▶ Purported mechanism is alleviating sub-syndromal protracted withdrawal

Disulfiram (Antabuse)

- ▶ Alcohol dehydrogenase II inhibitor
- ▶ Also inhibits dopamine beta-hydroxylase
- ▶ Allows accumulation of aldehydes
- ▶ Diaphoresis, nausea, headache, facial flushing, hypotension, tachycardia
 - Can occur UP TO 14 days after last dose
- ▶ Adverse effects
 - Common: headache, tiredness, metallic taste
 - Rare (1/1000): dermatitis, hepatitis, neuropathy

Buprenorphine

- ▶ Partial agonist or agonist – antagonist at mu receptor
- ▶ Very high affinity and very long receptor occupancy
- ▶ Ceiling agonist effect
- ▶ Safe in pregnancy

Methadone

- ▶ Nyswander and Dole 1966
- ▶ Long-acting, pure agonist
- ▶ Slow onset of action
- ▶ Long half life
- ▶ Extensive protein binding
- ▶ Analgesia is short lived: after 4-6 hours tolerance is built
- ▶ 70mg is considered an effective blocking dose

Opioid (methadone) treatment programs

- ▶ Uniquely regulated
- ▶ Must meet full criteria
- ▶ Gradual increase in dose and decrease in required attendance with “take homes”
- ▶ Buprenorphine is a far better option for most

Summary

- ▶ Numerous options exist both in the pharmacological and non-pharmacological realm
- ▶ Adherence to treatment is key and is a target of interventions
- ▶ Treatment should be matched to stage of change
- ▶ Non-pharmacological treatment takes as little time as pharmacological and is just as easy in the PCP's office
- ▶ **Combination of approaches is best**
- ▶ Assess stage of change and match accordingly

Summary (continued)

- ▶ Medication-assisted treatment (MAT) options are FDA approved only for Opioid Use Disorder (OUD) and Alcohol Use Disorder
- ▶ It is now the standard of care to offer MAT
- ▶ Methadone's analgesic effects are very short lived compared to its half life
- ▶ Medication agonist treatment for OUD has 2 options but buprenorphine is superior for almost all patients



THANK YOU!

**ANY
QUESTIONS?**