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Objectives

• At the completion of this webinar, attendees will be able to:

  1. Identify the characteristics of patients who are misusing substances, including alcohol, cannabis, and opioids
  2. Know how to assess for substance use disorders, including differential diagnosis from bipolar and schizophrenia and recognizing co-occurring disorders
  3. Describe treatment approaches substance use disorders, including alcohol, cannabis, and opioids
What is your role?

What is your primary role in your organization?
A. Administrator
B. Prescribing Clinician
C. Non-prescribing clinician
D. Researcher
E. Other
Outline

• Overview of substance use
• Identification of substance use disorders (SUD)
• Treating SUDs
  • Alcohol
  • Cannabis (natural and synthetic)
  • Opiates
Overview: Understanding Substance Use

• Why use drugs?
  • Well-liked, and with few exceptions, we all use them (e.g., aspirin, caffeine)
    • Which drugs, and how much (e.g., alcohol), is what makes all the difference
  • Drugs induce positive feeling states – and “get rid of” negative feelings – very quickly
    • Feelings can often pop up in reaction to outside events
    • We only get to exert control after the fact (i.e., coping)
Overview: Understanding Substance Use

• Seeking “mastery & control” in life is largely adaptive – why not over feelings, too?
  • Toddlers love to spin until dizzy = control over initiating dizziness
  • Teens and adults love to ride roller coasters = control over fear and excitement
• Getting drunk/high is quicker, easier, and open 24 hours
  • In many ways, “our patients” are not much different than “us”
Model for Substance Abuse

• **Biological, psychological, and social factors raise and/or lower risk**

• **Biological**
  - So far, 1500 human substance abuse-related genes have been identified
  - But genetic component is set off by a stressor ("diathesis-stress model")

• **Psychological**
  - Feeling depressed, anxious, irritable → “self-medicating”

• **Social**
  - Family members who use substances, pressure to fit in with peers, availability of certain drugs, public policy, cultural views, media portrayals
    - Good guys in movies used to smoke cigarettes...now only bad guys
SUD: Societal Burden

• Health effects of SUDs over time:
  • Can damage heart, lungs, kidneys, liver, stomach
  • Can produce cognitive deficits
  • Can increase risk of HIV, hepatitis, and risky behavior (unsafe sex, needle use)

• U.S. societal cost: ~$276 billion/year
  • Estimate includes lost productivity and added healthcare costs
  • Recent prescription opiate misuse = ~$78.5 billion/year (over 25% of total burden)
SUD: Societal Burden

• In 2013, 22.7 million people 12 and older had an SUD
  • Only 3 million received treatment

• Large need = find & offer treatment to these individuals!
Opioids

• Largest impact = drug diversion
  • Most prescriptions for pain were taken as prescribed
  • But over-prescribing for pain → increased access to those seeking free drugs of abuse

• Opioid meds used in opioid treatment programs = medications, not drugs
  • Some “controlled substances” can be abused/sold illicitly, which creates confusion
  • How do controlled substance abuse medications differ from illicit drugs?
    • Aim: Find minimally-effective dosage to aid recovery & achieve return to life functioning
    • Dispensed and monitored by trained physicians
    • Quality control in manufacturing; not “cut”
• Fentanyl: Opioid agonist 50-100x more potent than morphine
  • Being used to ‘cut’ street drugs → overdoses
  • Street drugs may now be more dangerous
Synthetic Cannabinoid Receptor Agonists

• Many (but not all) bind to same cannabinoid receptors as marijuana
  • Why? Goal = Change on regular basis – just enough chemically – to evade laws

• Ever-increasing variety of chemical compositions
  • Result = limited understanding of short- or long-term effects
  • Can be tested for via urine toxicology
  • Names include:
    • K2, Spice, Blaze, Red X Dawn, Bliss, Black Mamba,
    • Bombay Blue, Fake Weed, Genie, Spice, Zoh

• Poses potential serious health risks
  • Psychosis, cardiovascular distress, death, and more…
Identifying SUDs: DSM-5 Criteria

• Must meet any 2 of 11 criteria, which comprise 4 subcategories:
  • Impaired control (criteria 1-4)
  • Social impairment (criteria 5-7)
  • Risky Use (criteria 8-9)
  • Pharmacological criteria (criteria 10-11)

• In DSM-5, abuse/dependence → continuum:
  • Mild (2-3 criteria met), Moderate (4-5), or Severe (6+)
Identifying SUDs: DSM-5 Criteria

1. Using larger amounts (or for longer time) than intended
2. Persistent desire and/or repeated unsuccessful attempts to cut down or stop
3. Great deal of time spent obtaining, using, or recovering from effects
4. Cravings, or a strong desire or urge to use
5. Continued use resulting in failure to fulfill major obligations (e.g., work, home, school)
6. Continued use despite persistent/recurrent interpersonal problems from use (family, friends)
7. Important social, work, or leisure activities are given up or reduced due to using substance
Identifying SUDs: DSM-5 Criteria

1. Recurrent use in situations in which it is physically hazardous (e.g. drunk driving, unsafe sex)
2. Continued use despite psychological or physiological problems resulting from use (e.g., feeling depressed, anxious, irritable, having memory blackouts, creating/aggravating health problems)
3. Tolerance: taking more to get same effect, or getting less effect from same amount
4. Withdrawal: feeling sick when not using, or needing to use to avoid feeling sick
Identifying SUDs: Brief Assessments

• Multiple brief assessments are available for the detection of SUDs in outpatient clinics:
  • MSSI-SA: 16 questions; uniquely includes prescriptions & OTC medications
    • Widely used in correctional facilities, but not specific to this population
    • Available in English, Chinese, Creole, Korean, Russian, and Spanish
    • Takes ~10 minutes to administer
Identifying SUDs: Brief Assessments

• CAGE-AID: 2 screener and 4 follow-up yes/no questions
  • Useful for screening in busy clinics and primary care; available only in English and Spanish.
  • Takes ~1 minute to administer

• ASSIST: Created by WHO
  • Comprehensive list of drugs, but not prescription or OTC medications
  • Available in English, French, German, Hindi, & Portuguese; no Spanish version
  • Takes ~17 minutes to administer
Differential Diagnosis

• Need to differentiate between Primary vs. Substance-Induced: **Bipolar disorder and psychotic disorders**
  • Manic/psychotic symptoms can result from intoxication and/or withdrawal
    • Must tease out which came first
    • If the person is not floridly manic or psychotic, can ask him or her for exact timeline (without saying why)
    • If exact timeline not possible, did psychiatric symptoms persist during a period of abstinence or markedly reduced use (≥ 1 month and ideally verifiable)?
Differential Diagnosis

• Were mood swings or hallucinations/delusions still present when:
  1. Not actively intoxicated?
     • If so, should hold to see if symptoms resolve on comedown
  2. Not in early withdrawal?
     • Recently stopped after period of longstanding substance use?
     • If so, do symptoms resolve after medical treatment for withdrawal?
  3. Not after 1 month of substance abstinence?
Treating Substance Use Disorders
Treating Co-Occurring Mental Illness

• SUD with another mental health disorder(s)
  • Roughly 8.4 million people
  • Nearly half of treatment-seekers for SUD have at least 1 other disorder
  • Many can also have chronic medical conditions (e.g., diabetes)
Treating Co-Occurring Mental Illness

• How to treat: integrative, harm reduction, and stage-based approach
  • Screen for and treat SUD and mental health disorder(s) simultaneously
    • Comprehensive treatment offerings: individual, group, couple/family therapies
  • First, reduce harm
    • Focus on physical safety (e.g., address homelessness, needle use, unsafe sex, etc.)
    • Regardless of patient’s motivation to reduce or stop substance use
  • Next, sequence treatment based on the goals the patient is most ready to work on
    • Patient makes (and ideally owns) choice to accept our help to reduce or quit
Treating SUDs: Integrative Care

• For many, SUDs are a lifelong, chronic relapsing disorder
  • A subset of patients are able to moderate their use to healthy levels (instead of quitting)
    • More likely with substances that are prevalent and licit (e.g., alcohol)

• Many paths to health: therapy alone, medication alone (and many times without any professional help!)
  • For most, success is less likely if treatments are used in isolation
  • Unsuccessful therapy = treatment failure (on some level), not necessarily a patient failure
  • Integrative care (therapy + meds) offers best chances for success
Treating SUDs: Integrative Care

• Best approach: multidisciplinary team collaborates on care plan
  • Prescribing physicians are a critical part of team
  • But behavioral clinicians should be on equal footing
  • Why?
    • Medication only part of larger, integrative treatment regimen
    • Medication can be viewed as an adjunct to psychotherapy
    • Counselors generally spend more time with patients
Alcohol

Q: What is ‘low-risk’ drinking?

• Which is consistent with ‘low-risk’ SAMHSA guidelines FOR MEN?

A. No more than 4 drinks a week (& no more than 2 drinks per weekend day); 1 heavy drinking days (≥ 4 drinks on 1 weekend day)

B. No more than 7 drinks a week (no more than 3 drinks a day); No heavy drinking days (no more than 4 drinks in one sitting)

C. No more than 14 drinks a week (no more than 4 drinks a day); No heavy drinking days (no more than 5 drinks in one sitting)

D. There is no such thing as ‘low-risk’ drinking, according to SAMHSA
Answer: Yes, there is ‘low-risk’ drinking!

• SAMHSA guidelines:
  • **WOMEN**: No more than 7 drinks a week (and no more than 3 drinks a day); no heavy drinking days (no more than 4 drinks on one occasion)
  • **MEN**: No more than 14 drinks a week (and no more than 4 drinks a day); no heavy drinking days (no more than 5 drinks on one occasion)
  • NIAAA research: only about 2 in 100 people who drink within these limits have (or will go on to develop) an alcohol use disorder
• Most of you engage in this every week!
Alcohol Use Disorder (AUD) Treatment: Brief Therapy for Moderation

• **Alcohol moderation is possible** for certain patients
  Reaches more people = goal of reducing to ‘low-risk’ level drinking in ‘problem drinkers’ (not yet ‘severely’ dependent)
  • Many avoid treatment because they are not ready to quit completely
  • More realistic – difficult for people in many environments to stop drinking completely
  • May be a necessary trial before people will consider abstinence
AUD: Motivational Interviewing (MI)

- Patient considers and decides to change (or not)
- Is based on a “guiding” style to enhance motivation and resolve ambivalence to encourage behavior change and treatment-seeking
  - The therapist strategically evokes and enhances change talk
  - Involves skillful handling of language about “not changing” (i.e., “resistance”)
  - Discuss pros/cons, alignment with goals/values, imagine future with/without it
AUD: Cognitive-Behavioral Therapy (CBT)

• Alcohol misuse is a learned behavior
• Decide goals; analyze drinking patterns (triggers, behaviors, consequences, expectancies...and possible alternatives)
• Teach **coping skills** and prescribe behavioral exercises; involve significant others; actively plan for relapse
  • Assertiveness training and drinking refusal skills; coping with craving and withdrawal pain (e.g., meditations)
  • Address negative moods that can trigger drinking (anger, stress, depression, social anxiety)
  • Enlist social support and increase non-alcohol-related pleasant activities
AUD: Brief Therapies for Abstinence

• Same CBT can be applied to:
  • Achieving abstinence
  • Preventing relapse
• Contingency Management: give tangible rewards for abstinence
• Abstinence is the more appropriate treatment approach when there is:
  • Physical dependence
  • Heightened and imminent risk of causing/exacerbating a serious physiological problem
  • Trials of moderation have been attempted and failed
• ~30% of patients in alcohol moderation treatments go on to abstinence-based treatment
• Approaches that focus on abstinence are:
  • 12-step programs
  • Inpatient detoxification and rehabilitation
  • Couples/family treatment
    • Help couples and families support patient’s efforts to stay clean
AUD: Medication Options

• In what ways could a potential medication (for any substance) work?
  1. Substitution Therapy: Provide the drug or its primary component in a less harmful way
  2. Aversion Therapy: Cause an aversive reaction if combined with the drug
  3. Blocking Therapy: Lower the craving for, and/or euphoria of, the drug
  4. Combat psychiatric or physical symptoms that initially produced or now maintain the drug use (e.g., antidepressant therapy)
AUD: Medication Options

1. **Revia and Vivitrol (Naltrexone):**
   - Drinking behavior partially reinforced by endogenous opioid release. Blocking opioid receptors lessens:
     - Alcohol-related reward ("This drink doesn’t feel as good as usual") & reinforcement ("I won’t drink as much")
     - Better for achieving moderation; Somewhat less efficacy for achieving abstinence

2. **Campral (Acamprosate):**
   - Believed to stabilize brain chemical balance disrupted by withdrawal → lessens cravings & withdrawal
   - Must be abstinent for 1 week before first dose... otherwise, could actually increase relapse risk
   - Useful for maintaining this abstinence

3. **Antabuse (Disulfuram):**
   - Causes alcohol consumption to produce nausea and vomiting within 3 days of medication
   - Uses: Aversion therapy (low efficacy) or monitor missed doses & discuss “relapse preparation”
   - Can get sick without drinking/intent to intoxicate!
     - Any environmental exposure to alcohol (e.g., cleaning products)
Marijuana Use Disorder (MUD): Treatment

- MUD is heavily psychological in nature...but there are definite and identifiable withdrawal and tolerance syndromes
  - Withdrawal consists of sleep disruption, irritability, and impaired concentration
    - Generally only in daily users, it appears 24 hours after last use, and lasts 4+ days (sleep effects last longer)
  - 34% of frequent MJ smokers reported experiencing ≥ 3 withdrawal symptoms
  - 65-70% report relief of “abstinence effects” as a reason for relapse

- Moderation is viable
  - Increasingly so as MJ becomes more decriminalized, legal, and pursued as a potential medicine
MUD Treatment: Psychological

- Gold standard treatment is psychological
  - MI/CBT for SUD moderation or abstinence (previous slide)
- Contingency Management (CM)
  - Based on the idea that the consequences of behavior should be relatively immediate and tangible
  - CM employs monetary reward (vouchers) to reinforce marijuana abstinence
    - Based on the results of urine tests
  - Counseling involves guidance on use of accrued $$ to build naturalistic reinforcers (e.g., purchase a suit for job interview, holiday gifts for family)
- 12-step
  - Marijuana Anonymous (MA)
MUD Treatment: Medication Options

• No currently FDA-approved medications
• Oral THC (Dronabinol)
  • Synthetic cannabinoid (CB1 receptor agonist)
  • Initially used for cancer patients in chemotherapy as anti-nausea and appetite stimulation medication
  • Promising as a substitution therapy, in combination with weekly therapy
MUD Treatment: Medication Options

• Mixed results with other psychiatric medications
  • Buspar worked, Fluoxetine did not, Depakote and Wellbutrin may worsen withdrawal

• Future directions
  • Rimonobant: Selective CB1 antagonist/inverse agonist = promising, but not on market
  • Opioid receptor agonists
Opiate Use Disorder (OUD): Treatment

• Moderation not considered viable as the end goal
  • But may be useful as a step towards abstinence
• Treatment is multifaceted
  • Rapid abstinence
    • Closely-monitored detoxification (e.g., methadone, Suboxone)
    • Contingency management
Opiate Use Disorder (OUD): Treatment

• Gradual abstinence/relapse prevention
  • Medication maintenance
  • CBT
  • 12-step (e.g., Narcotics Anonymous [NA]/ 12-step facilitation therapy)
• Group therapy
• Couples/family treatment
Opiate Use Disorder: Medication Options

1. **Full agonists:** *fully* binds to opioid receptor sites *(e.g., Methadone)*
   - Mild euphoria & relief from craving/withdrawal/pain
   - Illicit opiates have near-nowhere to bind → their acute effects get subdued
   - But can be diverted to street drug → strict fed/state regulations (OTPs only)

2. **Partial agonists:** *partially* binds *(e.g., Buprenorphine)*
   - Even milder euphoria but less pain relief
   - Fewer restrictions (can be prescribed in office practices with training)
   - Taken either alone, or combo product with Naltrexone *(Suboxone)*
   - Now considered *first-line treatment for OUD*
Opiate Use Disorder: Medication Options

1. **Antagonists**: blocks anything from binding (e.g., Narcan & Naltrexone)
   - Narcan works within 2 minutes = used in opioid overdose
   - Naloxone offered as long-acting injectable (Vivitrol, ~2 months) or daily oral pill
     - No high, withdrawal, or physical dependence; no abuse potential → no legal restrictions
   - Agonist considered safe in pregnancy/nursing, but antagonists not
Parting Thoughts

• SUDs have a large societal burden

• Quick and easy tests available to find and offer SUD treatment
  • MSSI-SA, CAGE-AID, ASISST easily used in primary care and outpatient clinics

• Differential diagnosis very important
  • Must tease out which came first: psychiatric symptoms or substance abuse

• SUD Treatment must be integrative
  • Evidence-based behavioral interventions available for moderation and abstinence
  • Best outcomes = meds + therapy together
Parting Thoughts

• Alcohol & cannabis: moderation possible if not severely dependent
  • CBT + medication can help reduce down to less...or zero
• Opiates: abstinence with CBT + medication management indicated
  • Methadone can only be delivered in opioid treatment programs (and patient per physician caps)
  • Buprenorphine can be prescribed in office practices with training (no caps)
  • Antagonists = no restriction on who can prescribe or where
Thank you!

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The project described was supported by Funding Opportunity Number CMS-1L1-15-003 from the U.S. Department of Health & Human Services, Centers for Medicare & Medicaid Services.

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References


