UVM Project ECHO:
Adult Complex Mental Health

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“Introduction” to ZOOM

• Please mute microphone when not speaking
• Please use camera as much as possible
• Test both audio & video before joining
• Communicate clearly during session:
  • Can use “raise hand” feature to comment
  • Use chat function for questions, comments or technical issues
RECORDING OF SESSION TO BEGIN
Series Objectives

Learning objectives for this ECHO series include the ability to:

• Enhance diagnostic skills in patients with complex mental health issues
• Incorporate new treatment strategies into management of common but challenging mental health disorders
• Improve the care that patients with mental health issues receive in the primary care setting
Session Agenda

- Welcome
- Objectives
- Didactic Presentation (30-35 min)
- Case presentation(s)
  - Clarifying questions
  - Participants – then faculty panel
- Discussion
- Recommendations
- Closing Announcements
  - Submission of new cases
  - Completion of evaluations
CMIE Disclosures

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This activity was planned by and for the healthcare team, and learners will receive 1.5 Interprofessional Continuing Education (IPCE) credit for learning and change.

Participants should claim only the credit commensurate with the extent of their participation in the activity.
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**Interest Disclosures:** As an organization accredited by the ACCME to sponsor continuing medical education activities, UVMCMIE is required to disclose any real or apparent conflicts of interest (COI) that any speakers may have related to the content of their presentations.

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Co-Occurring Substance Use and Mental Health Disorders

Brady Heward, MD
March 30, 2022
Objectives

• What are the most common substance use and psychiatric comorbidities?
• How do you screen for mental health and substance use in a primary care setting?
• How do you differentiate a primary psychiatric disorder from a substance-induced psychiatric condition? Does it matter?
• What treatment options and challenges exist with comorbid mental health and substance use disorders?
Addressing Stigma

“Stigma about people with SUD might include inaccurate or unfounded thoughts like they are dangerous, incapable of managing treatment, or at fault for their condition”

Words Matter
Terms to Use and Avoid When Talking About Addiction

This handout offers background information and tips for providers to keep in mind while using person-first language, as well as terms to avoid to reduce stigma and negative bias when discussing addiction. Although some language that may be considered stigmatizing is commonly used within social communities of people who struggle with substance use disorder (SUD), clinicians can show leadership in how language can destigmatize the disease of addiction.

Stigma and Addiction

What is stigma?
Stigma is a discrimination against an identifiable group of people, a place, or a nation. Stigma about people with SUD might include inaccurate or unfounded thoughts like they are dangerous, incapable of managing treatment, or at fault for their condition.

Where does stigma come from?
For people with SUD, stigma may stem from antiquated and inaccurate beliefs that addiction is a moral failing, instead of what we know it to be—a chronic, treatable disease from which patients can recover and continue to lead healthy lives.

Language that reflects an accurate, science-based understanding of SUD and is consistent with your professional role.

• Because clinicians are typically the first points of contact for a person with SUD, health professionals should “take all steps necessary to reduce the potential for stigma and negative bias.”
• Take the first step by learning the terms to avoid and use.
• Use person-first language and let individuals choose how they are described. Person-first language maintains the integrity of individuals as whole human beings—by removing language that equates people to their condition or has
# Terms to Avoid, Terms to Use, and Why

Consider using these recommended terms to reduce stigma and negative bias when talking about addiction.

<table>
<thead>
<tr>
<th>Instead of...</th>
<th>Use...</th>
<th>Because...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Addict, User, Substance or drug abuser, Junkie, Alcoholic, Drunk, Former addict, Reformed addict</td>
<td>- Person with substance use disorder&lt;br&gt;- Person with opioid use disorder (OUD) or person with opioid addiction [when substance in use is opioids]&lt;br&gt;- Patient&lt;br&gt;- Person with alcohol use disorder&lt;br&gt;- Person who misuses alcohol/engages in unhealthy/hazardous alcohol use&lt;br&gt;- Person in recovery or long-term recovery&lt;br&gt;- Person who previously used drugs</td>
<td>- Person-first language.&lt;br&gt;- The change shows that a person “has” a problem, rather than “is” the problem.&lt;br&gt;- The terms avoid eliciting negative associations, punitive attitudes, and individual blame.</td>
</tr>
<tr>
<td>Habit</td>
<td>- Substance use disorder&lt;br&gt;- Drug addiction</td>
<td>- Inaccurately implies that a person is choosing to use substances or can choose to stop.&lt;br&gt;- “Habit” may undermine the seriousness of the disease.</td>
</tr>
<tr>
<td>Abuse</td>
<td>For illicit drugs: &lt;br&gt;- Use &lt;br&gt;For prescription medications: &lt;br&gt;- Misuse&lt;br&gt;- Used other than prescribed</td>
<td>- The term “abuse” was found to have a high association with negative judgments and punishment.&lt;br&gt;- Legitimate use of prescription medications is limited to their use as prescribed by the person to whom they are prescribed. Consumption outside these parameters is misuse.</td>
</tr>
<tr>
<td><strong>Opioid substitution replacement therapy</strong></td>
<td><strong>Opioid agonist therapy</strong></td>
<td><strong>It is a misconception that medications merely “substitute” one drug or “one addiction” for another.</strong>[^9]</td>
</tr>
<tr>
<td>------------------------------------------</td>
<td>-----------------------------</td>
<td>---------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Clean</strong></td>
<td><strong>For toxicology screen results:</strong></td>
<td><strong>Use clinically accurate, non-stigmatizing terminology the same way it would be used for other medical conditions.</strong>[^10]</td>
</tr>
<tr>
<td></td>
<td>• Testing negative</td>
<td>• Set an example with your own language when treating patients who might use stigmatizing slang.</td>
</tr>
<tr>
<td></td>
<td><strong>For non-toxicology purposes:</strong></td>
<td>• Use of such terms may evoke negative and punitive implicit cognitions.[^7]</td>
</tr>
<tr>
<td></td>
<td>• Being in remission or recovery</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Abstinent from drugs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Not drinking or taking drugs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Not currently or actively using drugs</td>
<td></td>
</tr>
<tr>
<td><strong>Dirty</strong></td>
<td><strong>For toxicology screen results:</strong></td>
<td><strong>Use clinically accurate, non-stigmatizing terminology the same way it would be used for other medical conditions.</strong>[^10]</td>
</tr>
<tr>
<td></td>
<td>• Testing positive</td>
<td>• May decrease patients’ sense of hope and self-efficacy for change.[^7]</td>
</tr>
<tr>
<td></td>
<td><strong>For non-toxicology purposes:</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Person who uses drugs</td>
<td></td>
</tr>
<tr>
<td><strong>Addicted baby</strong></td>
<td><strong>Baby born to mother who used drugs while pregnant</strong></td>
<td><strong>Babies cannot be born with addiction because addiction is a behavioral disorder—they are simply born manifesting a withdrawal syndrome.</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Baby with signs of withdrawal from prenatal drug exposure</strong></td>
<td>• Use clinically accurate, non-stigmatizing terminology the same way it would be used for other medical conditions.[^10]</td>
</tr>
<tr>
<td></td>
<td><strong>Baby with neonatal opioid withdrawal/neonatal abstinence syndrome</strong></td>
<td>• Using person-first language can reduce stigma.</td>
</tr>
<tr>
<td></td>
<td><strong>Newborn exposed to substances</strong></td>
<td></td>
</tr>
</tbody>
</table>
Terms

• Co-occurring Disorders (COD)—Condition of having at least one mental disorders and one substance use disorders

• Outdated terms:
  • Dual diagnosis.
  • Dually diagnosed.
  • Dually disordered.
  • Mentally ill chemical abuser.
  • Mentally ill chemically dependent.
  • Mentally ill substance using/abuser.
  • Chemically addicted and mentally ill.
  • Substance abusing mentally ill.
Data from NSDUH for 2020

Figure 35. Past Year Substance Use Disorder (SUD) and Any Mental Illness (AMI): Among Adults Aged 18 or Older; 2020

- Adults Had SUD and AMI: 35.9 Million
- Adults Had SUD but Not AMI: 17.0 Million
- Adults Had AMI but Not SUD: 20.9 Million
- Adults Had SUD but Not AMI: 37.9 Million
- Adults Had AMI but Not SUD: 52.9 Million Adults Had AMI
- Total: 73.8 Million Adults Had Either SUD or AMI

Figure 36. Past Year Substance Use Disorder (SUD) and Serious Mental Illness (SMI): Among Adults Aged 18 or Older; 2020

- Adults Had SUD and SMI: 8.5 Million
- Adults Had SUD but Not SMI: 32.3 Million
- Adults Had SMI but Not SUD: 14.2 Million Adults Had SMI
- Total: 46.5 Million Adults Had Either SUD or SMI
Figure 37. Substance Use: Among Adults Aged 18 or Older; by Mental Illness Status, 2020

<table>
<thead>
<tr>
<th>Substance</th>
<th>Any Mental Illness</th>
<th>Serious Mental Illness</th>
<th>No Mental Illness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Illicit Drugs, Past Year</td>
<td>47.8*</td>
<td>17.0</td>
<td>14.6</td>
</tr>
<tr>
<td>Marijuana, Past Year</td>
<td>39.8*</td>
<td>32.8*</td>
<td>11.6*</td>
</tr>
<tr>
<td>Opioids, Past Year</td>
<td>39.2*</td>
<td>8.1*</td>
<td>2.3</td>
</tr>
<tr>
<td>Binge Alcohol, Past Month</td>
<td>28.5*</td>
<td>30.9*</td>
<td>22.8</td>
</tr>
<tr>
<td>Tobacco Products or Nicotine Vaping, Past Month</td>
<td>37.4*</td>
<td>30.9*</td>
<td>19.6</td>
</tr>
</tbody>
</table>

* Difference between this estimate and the estimate for adults without mental illness is statistically significant at the .05 level.
Common Co-occurring SUDs and Mental Illnesses

• Individuals with SUD
  • 10.8-45% co-occurring ADHD**
  • 40-60% Mood Disorder in treatment seekers
  • 14% of Anorexia; 14% Bulemia
  • 9.5% Borderline PD 14-35% ASPD
  • 26-52% PTSD
  • 58% Major Depressive
  • 37% Any Anxiety

• Individuals with mental disorder
  • ADHD – 15.2%-50% had SUD
  • Bipolar – 21.7 - 65%LT
  • Eating Disorder – 23-37% LT
  • Borderline PD – 50.7%12m, 75%LT
  • PTSD – 36-52%LT
  • OCD – 10-40%LT
  • First-episode psychosis – 13-51%**
Screening for Co-occurrence

- Screening for Mental Health
  - What screenings do you currently use?
  - PHQ-9, GAD-7, PCL-5, ASRS?
  - MHSF-III, DSM-5-TR Self-Rated Level 1 Cross-Cutting Symptom Measure
  - C-SSRS, Domestic Violence

- Substance Use Screening
  - Current?
  - S2BI, NIDA Quick Screen, Modified Assist

- Social Determinants of MH and/or SUD
MHSF-III

5. Schizophrenia
6. Depressive Disorders
7. PTSD
8. Phobias
9. Intermittent Explosive Disorder;
10. Delusional Disorder
11. Sexual and Gender Identity Disorders
12. Eating Disorders (Anorexia, Bulimia)
13. Manic Episode
14. Panic Disorder
15. Obsessive-Compulsive Disorder
16. Pathological Gambling
17. Learning Disorder and Intellectual Disability.
DSM-5-TR Self-Rated Level 1 Cross-Cutting Symptom Measure

- 23 Item
- Level 2 available for those that screen positive.
- [https://www.psychiatry.org/psychiatrists/practice/dsm/educational-resources/assessment-measures#Disorder](https://www.psychiatry.org/psychiatrists/practice/dsm/educational-resources/assessment-measures#Disorder)

### DSM-5-TR Self-Rated Level 1 Cross-Cutting Symptom Measure—Adult

<table>
<thead>
<tr>
<th>Domain</th>
<th>Domain Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.</td>
<td>Depression</td>
</tr>
<tr>
<td>II.</td>
<td>Anger</td>
</tr>
<tr>
<td>III.</td>
<td>Mania</td>
</tr>
<tr>
<td>IV.</td>
<td>Anxiety</td>
</tr>
<tr>
<td>V.</td>
<td>Somatic Symptoms</td>
</tr>
<tr>
<td>VI.</td>
<td>Suicidal Ideation</td>
</tr>
<tr>
<td>VII.</td>
<td>Psychosis</td>
</tr>
<tr>
<td>VIII.</td>
<td>Sleep Problems</td>
</tr>
<tr>
<td>IX.</td>
<td>Memory</td>
</tr>
<tr>
<td>X.</td>
<td>Repetitive Thoughts and Behaviors</td>
</tr>
<tr>
<td>XI.</td>
<td>Dissociation</td>
</tr>
<tr>
<td>XII.</td>
<td>Personality Functioning</td>
</tr>
<tr>
<td>XIII.</td>
<td>Substance Use</td>
</tr>
</tbody>
</table>

### Instructions:
1. If this questionnaire is completed by an informant, what is your relationship with the individual?
2. In a typical week, approximately how much time do you spend with the individual? __________ hours/week

### Assessment Measures

During the past TWO (2) WEEKS, how much (or how often) have you been bothered by the following problems?

<table>
<thead>
<tr>
<th>None</th>
<th>Not at all</th>
<th>Slight, Rare, less than a day</th>
<th>Mild, Several days</th>
<th>Moderate, More than half the day</th>
<th>Severe, Nearly every day</th>
<th>Highest Domain Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>II.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
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<tr>
<td>III.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
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<tr>
<td>IV.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<tr>
<td>V.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>VI.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>VII.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>VIII.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>IX.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>X.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>XI.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>XII.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>XIII.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

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Primary vs Substance-Induced Mental Disorders
Which Came First? Co-occurring? Substance-induced? Self-medicating?
Substance-Induced vs Primary MH Disorder

- **Substance-Induced**
  - **Temporal Course**
    - MH symptoms start during or within 1 month of intoxication or withdrawal
    - Abate generally within a month of resolution of acute withdrawal or intoxication
  - The substance is capable of producing the symptoms
    - Exceeds what would be expected from usual toxic or withdrawal effects

- **Primary Mental Health**
  - **Temporal Course**
    - Symptoms pre-date substance use
    - Symptoms persist for a significant amount of time post use
  - Substances can precipitate primary mental health disorders
DSM-5 Recognized Substance-induced disorders

- Substance-induced depressive disorders.
- Substance-induced bipolar and related disorders.
- Substance-induced anxiety disorders.
- Substance-induced psychotic disorders.
- Substance-induced obsessive-compulsive and related disorders.
- Substance-induced sleep disorders.
- Substance-induced sexual dysfunctions.
- Substance-induced delirium.
- Substance-induced neurocognitive disorder.

### EXHIBIT 4.16. Substances and Corresponding Substance-Induced Mental Disorders

<table>
<thead>
<tr>
<th>SUBSTANCE</th>
<th>SUBSTANCE-INDUCED MENTAL DISORDER</th>
</tr>
</thead>
</table>
| Alcohol              | • Psychotic disorders  
                        | • Bipolar disorders  
                        | • Depressive disorders  
                        | • Anxiety disorders  
                        | • Sleep disorders       |
| Caffeine             | • Anxiety disorders  
                        | • Sleep disorders       |
| Cannabis             | • Psychotic disorders  
                        | • Anxiety disorders       |
| Hallucinogens        | • Psychotic disorders  
                        | • Bipolar disorders  
                        | • Depressive disorders  
                        | • Anxiety disorders       |
| Inhalants            | • Psychotic disorders  
                        | • Bipolar disorders  
                        | • Depressive disorders  
                        | • Anxiety disorders       |
| Opioids              | • Depressive disorders  
                        | • Anxiety disorders       |
| Sedatives            | • Psychotic disorders  
                        | • Bipolar disorders  
                        | • Depressive disorders  
                        | • Anxiety disorders  
                        | • Sleep disorders       |
| Stimulants (e.g., cocaine, amphetamines) | • Psychotic disorders  
                        | • Bipolar disorders  
                        | • Depressive disorders  
                        | • Anxiety disorders  
                        | • Sleep disorders       |
### EXHIBIT 4.19. Substances That Precipitate or Mimic Common Mental Disorders

<table>
<thead>
<tr>
<th>MENTAL DISORDER</th>
<th>SUBSTANCES THAT MIMIC MENTAL DISORDERS DURING USE (INTOXICATION)</th>
<th>SUBSTANCES THAT MIMIC MENTAL DISORDERS AFTER USE (WITHDRAWAL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression and dysthymia</td>
<td>Alcohol, benzodiazepines, opioids, barbiturates, cannabis, steroids (chronic), stimulants (chronic)</td>
<td>Alcohol, benzodiazepines, barbiturates, opioids, steroids (chronic), stimulants (chronic)</td>
</tr>
<tr>
<td>Anxiety disorders</td>
<td>Alcohol, amphetamine and its derivatives, cannabis, cocaine, hallucinogens, intoxicants and PCP, inhalants, stimulants</td>
<td>Alcohol, cocaine, opioids, sedatives, hypnotics, anxiolytics, stimulants</td>
</tr>
<tr>
<td>Bipolar disorders and mania</td>
<td>Stimulants, alcohol, hallucinogens, inhalants (organic solvents), steroids (chronic, acute)</td>
<td>Alcohol, benzodiazepines, barbiturates, opioids, steroids (chronic)</td>
</tr>
<tr>
<td>Psychosis</td>
<td>Alcohol, anxiolytics, cannabis, hallucinogens (e.g., PCP), inhalants, sedatives, hypnotics, stimulants</td>
<td>Alcohol, sedatives, hypnotics, anxiolytics</td>
</tr>
</tbody>
</table>
Take Home Points for Diagnosing

- Monitor the time course and consider the mental health history
- Monitor the developmental history
- Is there a family history of mental illness?
- Don’t delay treatment, outcomes are worse with co-occurring substance use and mental health disorders

- Does it matter if it is a primary mental health disorder or a substance-induced?
Treatment Options and Challenges
Treatment Options and Challenges

- What co-occurring mental illness do you see the most?
- What causes you the most difficulty with respect…
  - To diagnosing?
  - To treating?
  - To interpersonal dynamics with the treat team?

- Trauma
- Depression
- Anxiety
- Bipolar
- Psychosis
- ADHD
- Alcohol
- Tobacco
- Marijuana
General Approach to Treating Co-Occurring Disorders

- Case 1: Tim - 26 yo Veteran with severe PTSD, Stimulant Use Disorder, Opioid Use Disorder, Cannabis Use Disorder, Anxiety
  - Sister reports: “substance use is keeping him alive.”
- Case 2: Jane – 30 yo with severe Cannabis Use Disorder, Generalized Anxiety, Major Depressive Disorder
  - Symptoms are noticeably worse with increased cannabis use
General Approach to Treating Co-Occurring Disorders

• Patient Centered
  • What are the patient’s goals for treatment? For their future?
  • What does the patient feel is most important to work on first?
• Harm Reduction
  • How can we work together to limit risk?
  • How might harm reduction vary based on the patient’s goals?
• Recovery Focused
  • Health, Home, Purpose, Community
• Clinic Expectations and Needs
Should I start medications? What should I treat first?

• Treat SUD first

• Treat MH First
Trauma

• Trauma in SUDs and Mental Illness is the norm not the exception
• Trauma, ACEs, chronic stress are major risk factors for substance use and other mental illness
• History of PTSD
  • 2.4-3 x odds of mood disorder
  • 2.1-2.2x bipolar
  • 2.6-2.8x anxiety disorders
  • 2.8-3.3x borderline personality do
Trauma-informed care

- What is it?
- “Building a therapeutic alliance, which fosters trust, confidence, and self-worth—all keys to healing.
- Helping clients feel empowered and in control of their lives.
- Establishing a sense of safety in clients’ daily lives and in treatment.
- Promoting resilience and offering hope for change and improvement.

- Teaching coping and problem-solving skills to foster effective stress management.
- Discussing retraumatization and developing strategies to prevent further victimization.
- Psychoeducation, especially about the relationship between trauma, mental health, and addiction. Psychoeducation is also needed to help normalize symptoms and reassure clients that their experiences are not unusual, “wrong,” or “bad.”
- Identifying and responding adaptively to triggers, like intrusive thoughts, feelings, and sensations”
PTSD Pharmacology and Psychotherapy

• Psychotherapy is the Gold Standard in Treatment of PTSD
  • Prolonged Exposure
  • Cognitive Processing Therapy
  • Eye Movement Desensitization/Reprocessing
  • Trauma Focused CBT
  • Dialectical Behavior Therapy
  • Affect Regulation, Distress Tolerance, Peer Supports

• Pharmacotherapy
  • SSRI/SNRIs for depressive and anxiety symptoms (Sertraline, Paroxetine, Fluoxetine, Venlafaxine)
  • Prazosin nightmares, hyperarousal
Co-occurring Depression

- Lifetime Depression in individuals with SUD – 50-60%
- Substance-induced
  - Lifetime prevalence – 0.26%
  - 22-40% of individuals with 12-month history of SUDs
  - 33-66% of Depression in individuals with SUDs is substance-induced
- SUD – “biopsychosocial disintegration”

**DSM-5 Diagnostic Criteria for Substance Use Disorders**

A. A problematic pattern of use leadings to clinically significant impairment or distress, as manifested by at least two of the following, occurring within a 12-month period:
   1. Larger amount or longer periods of time than intended
   2. Persistent desire to cut back or multiple failed attempts
   3. Great deal of time spent obtaining, using or recovering
   4. Craving
   5. Failure to fulfill role obligations at work, school or home
   6. Social or interpersonal problems caused or exacerbated by use
   7. Important social, occupational or recreational activities have been given up
   8. Use in situations which may be physically hazardous
   9. Use despite knowledge of physical or psychological problems associated with use
   10. Tolerance
   11. Withdrawal

| 1-4 | Loss of Control |
| 5-9 | Negative Consequences |
| 10-11 | Physiologic Dependence |
Treating Co-Occurring Depression

- **Psychotherapy**
  - Evidence supports the concurrent treatment of SUDs and Depression with psychotherapies (McHugh 2019)
  - There is some evidence that AA may improve depression (McHugh 2019)
  - Evaluation of the Biopsychosocial factors contributing to depression
    - Cognitive Behavioral Therapy
    - Dialectical Behavior Therapy
    - Couples and Family Therapy

- **Medications**
  - Low-quality evidence supports use of Antidepressants for decreasing depression symptoms and some evidence supporting decrease in Alcohol use (Agabio 2018, Cochran Review, Foulds 2015)
  - SSRI, SNRIs, Bupropion, Mirtazapine
  - Tricyclics, Mood Stabilizers, Second Generation Antipsychotics
Co-Occurring Anxiety

- Psychotherapies
  - Evidence supports concurrent treatment of SUDs and Anxiety with psychotherapy. (McHugh 2015)
  - Limited pharmacologic benefit was found with exceptions of small trials of SSRIs and Tricyclics

- Pharmacotherapy
  - Cochran review of Anxiety and AUD – Low evidence for SSRIs (primarily Paroxetine) over placebo (Ipser 2015)
  - What role if any is there for Benzodiazepines?
Co-occurring Bipolar

- Limited evidence related to treatment of Bipolar and SUDs with psychotherapy

- Pharmacotherapy
  - Limited data supports use of Depakote and Lamotrigine for both treatment of Bipolar and some improvement in substance use D>L (Cole 2019)
  - Limited evidence supporting Lithium and Atypical Anti-psychotics (Cole 2019, Sepede 2018)
  - Evidence supports treatment with typical Bipolar medication and SUD medications
Co-occurring Psychosis

- Pharmacotherapy
  - Cannabis use may be associated with decreased response to antipsychotics (Reid 2019)
  - Antipsychotic response with patients with co-occurring SUD appears largely consistent with non-SUD populations (Wilson 2016)
  - There is some evidence for decreased substance use in patients treated with antipsychotics including cannabis use with a stronger relationship with Clozapine than other antipsychotics (Wilson 2016, Krause 2018)
Co-occurring ADHD

• What are the concerns you have with ADHD in people with SUDs?

• What approach do you take to prescribing medications for ADHD?

• Do you prescribe stimulants?
Half of Young Adults With ADHD Report Lifetime Substance Use Disorder

Jolynn Tumolo

09/01/2021

Half of younger adults with attention-deficit/hyperactivity disorder (ADHD) report having experienced a substance use disorder in their lifetime, according to findings published in Alcohol and Alcoholism.

Attention-Deficit/Hyperactivity Disorder and Alcohol and Other Substance Use Disorders in Young Adulthood: Findings from a Canadian Nationally Representative Survey

Esme Fuller-Thomson 1,2,3, Danielle A Lewis 3, Senyo Agbekoya 4

Affiliations + expand
PMID: 34343246 DOI: 10.1093/alcalc/agab048
Treating Co-occurring ADHD

- 15.2% of adults with ADHD have a SUD
- 1 in 4 adults with ADHD use cocaine and 1 in 10 develop lifetime cocaine use disorder (Oliva 2021)
- In patients with ADHD and SUD, SUDs start earlier, remission rates are lower, and attempted suicide rates are higher
- Use of Stimulants may be protective for developing SUD in children and adolescents

- Mixed amphetamine salts are most misused
- Only up to 25% of people with ADHD misuse their stimulants
- 4-20% of college students have used a non-prescribed stimulant in past year
- Most misuse is to improve concentration and studying (65% and 60% respectively)
- The risk of stimulant abuse does not seem to be higher in co-occurring ADHD and SUD than ADHD alone
ADHD and SUDs

- Later onset of prescription stimulants, and shorter duration of treatment are associated with higher rates of substance use in teens (McCabe 2016)
- ADHD in kids increases the risk of SUDs and ADHD in family members (Yule 2016)
- Medication Treatment of ADHD dramatically improves retention in outpatient SUD treatment (Kast 2021)
- Patients with SUD and ADHD compared to SUD only have higher rates of childhood trauma, slower development, greater problems controlling temper, lower education attainment, higher rates of risk-taking, higher rates of other psych comorbidity (Van de Glind 2020)
  - Childhood trauma exposure is associated with increased ADHD (Konstenius 2017)

Figure 1. Kaplan-Meier retention curves: ADHD pharmacotherapy vs. no ADHD medication. Vertical axis depicts proportion of patients retained in treatment. Horizontal axis depicts days in treatment after admission. Shaded area around each curve represents the 95%-CI.
ADHD and SUDs

• Some evidence to support decrease in SUD in stimulant treated patient with SUD and ADHD as well as improved symptoms of ADHD (Cook 2017, Levin 2015)

• Systematic review/systematic analysis – Pharmacologic Treatment of SUDs and ADHD
  • small effect of reduced substance use, abstinence, craving, moderate effect of withdrawal and decrease in ADHD severity (Fluyau 2020)
Prescribing Stimulants

1. Be cognizant of the characteristics of your patients: for example, are they at risk to divert their stimulants or engage in NMU of their stimulants by nature of having a SUD?

2. Discuss diversion and safe storage of stimulants.

3. Discuss the ethical issues of misuse and diversion in terms of academic policies.

4. Discuss the legal connotation of diverting stimulants.

5. Prescribe agents with lower abuse liability for ADHD. In higher risk groups, consider effective nonstimulants and/or extended-release stimulants that, although not free of abuse liability, manifest intrinsically lower abuse liability. Similarly, try to reduce the use of immediate-release stimulants.

Editorial: Stimulants: Friend or Foe?

Timothy E. Wilens, MD, and Tamar Arit Kaminski, BS

4. Prescribe the right amount of medication: while tempting, avoid up-prescribing stimulants (eg, stockpiling). Data suggest that excess supplies of controlled substances are drivers of diversion.
What Risks are there for Treating Co-Occurring Disorders

- Psychological Risks?
- Pharmacologic Risks?
  - Methadone
    - QTc
    - Respiratory suppression – Alcohol, Benzos
    - Adrenal Insufficiency
    - Drug-Drug Interactions***
  - Buprenorphine
    - Precipitated withdrawal
    - Respiratory Suppression – Alcohol, Benzos
    - Drug-Drug Interaction – Increase or decrease in Buprenorphine
### Antiretrovirals

<table>
<thead>
<tr>
<th>CLASS OR SPECIFIC DRUG</th>
<th>INTERACTION</th>
<th>PUTATIVE MECHANISM</th>
<th>NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efavirenz, lopinavir, nevirapine</td>
<td>Reduction in serum methadone levels</td>
<td>Induction of CYP450 enzymes</td>
<td>Clinically significant opioid withdrawal symptoms likely</td>
</tr>
<tr>
<td>Abacavir, etravirine, nefilavir, ritonavir, saquinavir, tipranavir</td>
<td>May reduce serum methadone levels</td>
<td>Induction of CYP450 enzymes</td>
<td>Clinically pertinent opioid withdrawal unlikely</td>
</tr>
<tr>
<td>Didanosine</td>
<td>Reduction in didanosine plasma concentrations</td>
<td>Decreased bioavailability</td>
<td>Possible decreased efficacy of didanosine</td>
</tr>
<tr>
<td>Zidovudine</td>
<td>Increase in zidovudine plasma concentration</td>
<td>Unknown</td>
<td>Risk of zidovudine toxicity</td>
</tr>
</tbody>
</table>

### Antidepressants

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Tricyclic: Amitriptyline, clomipramine, desipramine, doxepin, imipramine, nortriptyline, protriptyline, trimipramine</td>
<td>Increased risk for constipation, sedation, QTc prolongation, and arrhythmia</td>
<td>Anticholinergic effects; blockade of human ether-a-go-go-related gene (hERG) channel</td>
<td>Clinical experience with combination indicates it is generally safe with careful clinical monitoring</td>
</tr>
<tr>
<td>Serotonin reuptake inhibitors: citalopram, escitalopram, fluoxetine, paroxetine, sertraline</td>
<td>May increase serum methadone levels; increased risk for serotonin syndrome</td>
<td>Inhibition of CYP enzymes; blockade of serotonin transporter</td>
<td>Clinical experience with combination indicates it is generally safe with careful clinical monitoring</td>
</tr>
<tr>
<td>Monoamine oxidase inhibitors: Isocarboxazid, phenelzine, selegiline, tranylcypromine</td>
<td>Increased risk for serotonin syndrome</td>
<td>Inhibition of serotonin metabolism</td>
<td>Avoid or use with extreme caution and careful clinical monitoring</td>
</tr>
<tr>
<td>Serotonin/norepinephrine reuptake inhibitors: Duloxetine, desvenlafaxine, venlafaxine</td>
<td>Increased risk for serotonin syndrome; increased risk for QTc prolongation and arrhythmia (venlafaxine)</td>
<td>Blockade of serotonin transporter; blockade of hERG channel (venlafaxine)</td>
<td>Clinical experience with combination indicates it is generally safe with careful clinical monitoring</td>
</tr>
</tbody>
</table>

### Antibiotics

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</tr>
</thead>
<tbody>
<tr>
<td>Ciprofloxacin, clarithromycin, erythromycin, azithromycin</td>
<td>May increase methadone serum levels; increased risk for QTc prolongation and arrhythmia</td>
<td>Inhibition of CYP enzymes; blockade of hERG channel</td>
<td>One case report of sedation (ciprofloxacin); clinical monitoring required</td>
</tr>
<tr>
<td>Rifampin</td>
<td>Reduction in serum methadone levels</td>
<td>Induction of CYP enzymes</td>
<td>Severe opioid withdrawal can occur; need increased methadone dose</td>
</tr>
</tbody>
</table>

### Antifungals

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</tr>
</thead>
<tbody>
<tr>
<td>Ketoconazole, fluconazole</td>
<td>May increase methadone serum levels</td>
<td>Inhibition of CYP enzymes</td>
<td>Little evidence for important clinical effects</td>
</tr>
</tbody>
</table>

### Anticonvulsants

<table>
<thead>
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</tr>
</thead>
<tbody>
<tr>
<td>Carbamazepine, phenytoin, phenobarbital</td>
<td>Reduction in serum methadone levels</td>
<td>Induction of CYP enzymes</td>
<td>Severe opioid withdrawal can occur; will need increased methadone dose</td>
</tr>
</tbody>
</table>

### Antiarrhythmics

<table>
<thead>
<tr>
<th>CLASS OR SPECIFIC DRUG</th>
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<th>PUTATIVE MECHANISM</th>
<th>NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procainamide, quinidine</td>
<td>Increases risk for QTc prolongation and arrhythmia</td>
<td>Blockade of hERG channel</td>
<td>Careful clinical monitoring required</td>
</tr>
<tr>
<td>Amiodarone</td>
<td>May increase methadone serum levels; increased risk for QTc prolongation and arrhythmia</td>
<td>Inhibition of CYP enzymes; blockade of hERG channel</td>
<td>Careful clinical monitoring required</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th><strong>Alcohol Pharmacology</strong></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th><strong>Naltrexone</strong> (Depade®, ReVia®)</th>
<th><strong>Extended-Release Injectable Naltrexone</strong> (Vivitrol®)</th>
<th><strong>Acamprosate</strong> (Campral®)</th>
<th><strong>Disulfiram</strong> (Antabuse®)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Action</strong></td>
<td>Blocks opioid receptors, resulting in reduced craving and reduced reward in response to drinking.</td>
<td>Same as oral naltrexone; 30-day duration.</td>
<td>Affects glutamate and GABA neurotransmitter systems, but its alcohol-related action is unclear.</td>
</tr>
<tr>
<td><strong>Contraindications</strong></td>
<td>Currently using opioids or in acute opioid withdrawal; anticipated need for opioid analgesics; acute hepatitis or liver failure.</td>
<td>Same as oral naltrexone, plus inadequate muscle mass for deep intramuscular injection; rash or infection at the injection site.</td>
<td>Severe renal impairment (CrCl ≤ 30 mL/min).</td>
</tr>
<tr>
<td><strong>Precautions</strong></td>
<td>Other hepatic disease; renal impairment; history of suicide attempts or depression. If opioid analgesics is needed, larger doses may be required and respiratory depression may be deeper and more prolonged. Pregnancy Category C.</td>
<td>Moderate renal impairment (dose adjustment for CrCl between 30 and 50 mL/min); depression or suicidal ideation and behavior. Pregnancy Category C.</td>
<td>Concomitant use of alcohol or alcohol-containing preparations or metronidazole; coronary artery disease; severe myocardial disease; hypersensitivity to rubber (thiuram) derivatives.</td>
</tr>
<tr>
<td><strong>Serious adverse reactions</strong></td>
<td>Will precipitate severe withdrawal if the patient is dependent on opioids; hepatotoxicity (although does not appear to be a hepatotropin at the recommended doses).</td>
<td>Same as oral naltrexone, plus infection at the injection site; depression; and rare events including allergic pneumonitis and suicidal ideation and behavior.</td>
<td>Moderate hepatic dysfunction, including hepatotoxicity, optic neuritis, peripheral neuropathy, psychiatric reactions.</td>
</tr>
<tr>
<td><strong>Common side effects</strong></td>
<td>Nausea, vomiting, decreased appetite, headache, dizziness, fatigue, somnolence, anxiety.</td>
<td>Same as oral naltrexone, plus a reaction at the injection site; joint pain; muscle aches or cramps.</td>
<td>Diarrhea, soreness.</td>
</tr>
<tr>
<td><strong>Examples of drug interactions</strong></td>
<td>Opioid medications (blocks action).</td>
<td>Same as oral naltrexone.</td>
<td>No clinically relevant interactions known.</td>
</tr>
<tr>
<td><strong>Usual adult dosage</strong></td>
<td>Oral dose: 50 mg daily. <strong>Before prescribing:</strong> Patients must be opioid-free for a minimum of 7 to 10 days before starting. If you feel that there's a risk of precipitating an opioid withdrawal reaction, administer a naltrexone challenge test. Evaluate liver function. <strong>Laboratory followup:</strong> Monitor liver function.</td>
<td>IM dose: 360 mg given as a deep intramuscular gluteal injection, once monthly. <strong>Before prescribing:</strong> Same as oral naltrexone, plus examine the injection site for adequate muscle mass and skin condition. <strong>Laboratory followup:</strong> Monitor liver function.</td>
<td>Oral dose: 666 mg (two 333-mg tablets) three times daily; or for patients with moderate renal impairment (CrCl 30 to 50 mL/min), reduce to 333 mg (one tablet) three times daily. <strong>Before prescribing:</strong> Evaluate renal function. Establish abstinence. <strong>Laboratory followup:</strong> Monitor liver function.</td>
</tr>
<tr>
<td></td>
<td><strong>Oral dose:</strong> 250 mg daily (range 125 mg to 500 mg). <strong>Before prescribing:</strong> Evaluate liver function. Warn the patient not to take disulfiram for at least 12 hours after drinking and that a disulfiram-alcohol reaction can occur up to 2 weeks after the last dose and (2) to avoid alcohol in the diet (e.g., sauces and vinegars), over-the-counter medications (e.g., cough syrups), and toiletries (e.g., cologne, mouthwash). <strong>Laboratory followup:</strong> Monitor liver function.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Abstinence vs Harm Reduction

• What is our goal of Substance Use Treatment?
• What is our goal for our patients?

• “Habit is habit and not to be flung out of the window by any man, but coaxed downstairs a step at a time.” Mark Twain
<table>
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<td><strong>Naltrexone</strong> (Depade®, ReVia®)</td>
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<tr>
<td><strong>Examples of drug interactions</strong></td>
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<tr>
<td><strong>Usual adult dosage</strong></td>
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</tbody>
</table>
## Mental Health Effects of Cannabis

<table>
<thead>
<tr>
<th>NASEM health outcome</th>
<th>NASEM conclusions</th>
<th>WHO conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schizophrenia, psychosis</td>
<td>Substantial evidence for increased dose-dependent risk; a history of cannabis use may be linked to better cognitive performance in individuals with a psychotic disorder; limited evidence of increased positive symptoms; moderate evidence of no worsening of negative symptoms</td>
<td>Consistent evidence for increased risk, depending on dose, duration and onset age of cannabis use; cannabis use may trigger earlier onset and exacerbated course of the illness</td>
</tr>
<tr>
<td>Bipolar disorder</td>
<td>Moderate evidence for that regular user increases symptom severity; limited evidence for increased risk</td>
<td>Existing studies are confounded</td>
</tr>
<tr>
<td>Depression</td>
<td>Moderate evidence for small increase in risk; no evidence to support or refute an association with the course of depression</td>
<td>Regular cannabis use during adolescence is associated with increased risk of depressive symptoms</td>
</tr>
<tr>
<td>Suicide (ideation, attempts, and completion)</td>
<td>Moderate evidence for increased incidence of ideation and attempts, with higher incidences among heavier users</td>
<td>Daily use in adolescence and young adulthood is associated with increased rates of suicidal ideation</td>
</tr>
<tr>
<td>Anxiety</td>
<td>Moderate evidence for increased incidence of social anxiety disorder in regular cannabis users; limited evidence for increased risk to develop any other type of anxiety disorder; limited evidence for increased symptoms severity in near daily users</td>
<td>Comorbidity is evident but not understood</td>
</tr>
</tbody>
</table>

(Continues)
Questions?
# 2022 Program Schedule

**Sessions are on Wednesdays from 12:00PM to 1:30PM**

<table>
<thead>
<tr>
<th>Dates</th>
<th>Session</th>
<th>Didactic Topics (in addition to case review)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan 19</td>
<td>TeleECHO Session 1</td>
<td>Attention Deficit Disorder – Diagnosis (Sara Pawlowski, MD)</td>
</tr>
<tr>
<td>Feb 2</td>
<td>TeleECHO Session 2</td>
<td>Attention Deficit Disorder – Management (Sara Pawlowski, MD)</td>
</tr>
<tr>
<td>Feb 16</td>
<td>TeleECHO Session 3</td>
<td>Resistant Depression (Evan Eyler, MD)</td>
</tr>
<tr>
<td>Mar 2</td>
<td>TeleECHO Session 4</td>
<td>Management of Sleep Disruption (including menopause) and Impact on Mental Health (Jess Oehrle, MD)</td>
</tr>
<tr>
<td>Mar 16</td>
<td>TeleECHO Session 5</td>
<td>Role of Electroconvulsive Therapy (Evan Eyler, MD)</td>
</tr>
<tr>
<td>Mar 30</td>
<td>TeleECHO Session 6</td>
<td>Mental Health in Patients with Substance Use Disorders (Brady Heward, MD)</td>
</tr>
<tr>
<td>Apr 13</td>
<td>TeleECHO Session 7</td>
<td>Eating Disorders (Kathy Mariani, MD)</td>
</tr>
<tr>
<td>Apr 27</td>
<td>TeleECHO Session 8</td>
<td>Chronic Pain and Mood Disorders (Mark Pasanen, MD)</td>
</tr>
<tr>
<td>May 11</td>
<td>TeleECHO Session 9</td>
<td>Mental Health in the Elderly (Jennifer Hall, DO)</td>
</tr>
<tr>
<td>May 25</td>
<td>TeleECHO Session 10</td>
<td>Resistant Anxiety (Jessica O’Neil, DO)</td>
</tr>
<tr>
<td>June 8</td>
<td>TeleECHO Session 11</td>
<td>Bipolar Disease – Diagnosis (Suzanne Kennedy, MD)</td>
</tr>
<tr>
<td>June 22</td>
<td>TeleECHO Session 12</td>
<td>Bipolar Disease – Management (Suzanne Kennedy, MD)</td>
</tr>
</tbody>
</table>
CONCLUSIONS

• Slides are posted at www.vtahec.org
• Volunteers to present cases (this is key to the Project ECHO model)
  • Please submit cases to Mark.Pasanen@uvm.edu
• Please complete evaluation survey after each session
• Once your completed evaluation is submitted, CE information will be emailed.
• Please contact us with any questions, concerns, or suggestions:
  • Mark. Pasanen@uvm.edu
  • Elizabeth.Cote@uvm.edu