



ASAM REVIEW COURSE 2024

# CO-OCCURRING MENTAL HEALTH AND SUBSTANCE USE DISORDERS

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## Financial Disclosure

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I, Mason Turner, MD, DFASAM, have nothing to disclose, and in this presentation, I have indicated where proposed use of “off label” drugs is mentioned.

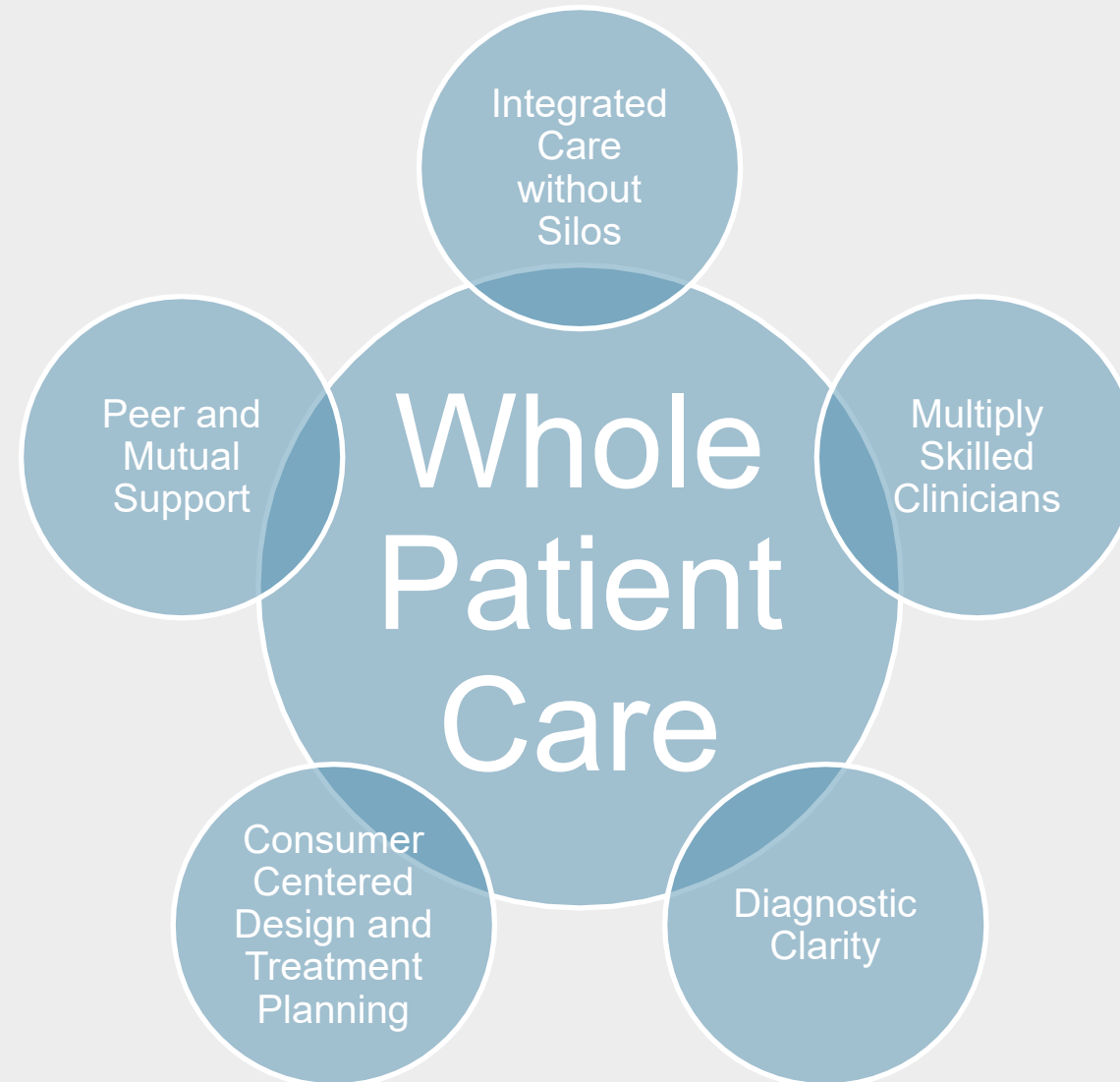
# Educational Objectives

After attending this presentation, participants will be able to:

- Formulate a diagnostic assessment approach for differentiating substance-induced and primary mental health conditions.
- Describe the epidemiology of major mental health conditions relative to substance use disorders
- Apply treatment approaches for co-occurring disorders in their practice environment
- Describe inequities in healthcare delivery for those with co-occurring disorders and understand one method by which they can address those inequities.

# IMPORTANCE OF CO-OCCURRING DISORDERS

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**Co-occurring:** The co-existence of both a mental illness and a substance use disorder. May also apply to other illness states as well (i.e., pain, medical illness, etc.).

**Co-morbidity:** The existence of two or more disorders at the same time or one after the other. Interactions worsen the course of both.



**COMORBIDITY**  
*Substance Use and Other Mental Disorders*

**MENTAL DISORDERS**

**SUBSTANCE USE DISORDERS**

**COMORBIDITY:** When a person has two or more disorders at the same time or one after the other. This occurs frequently with substance use and mental disorders. Comorbidity also means that interactions between these two disorders can worsen the course of both.

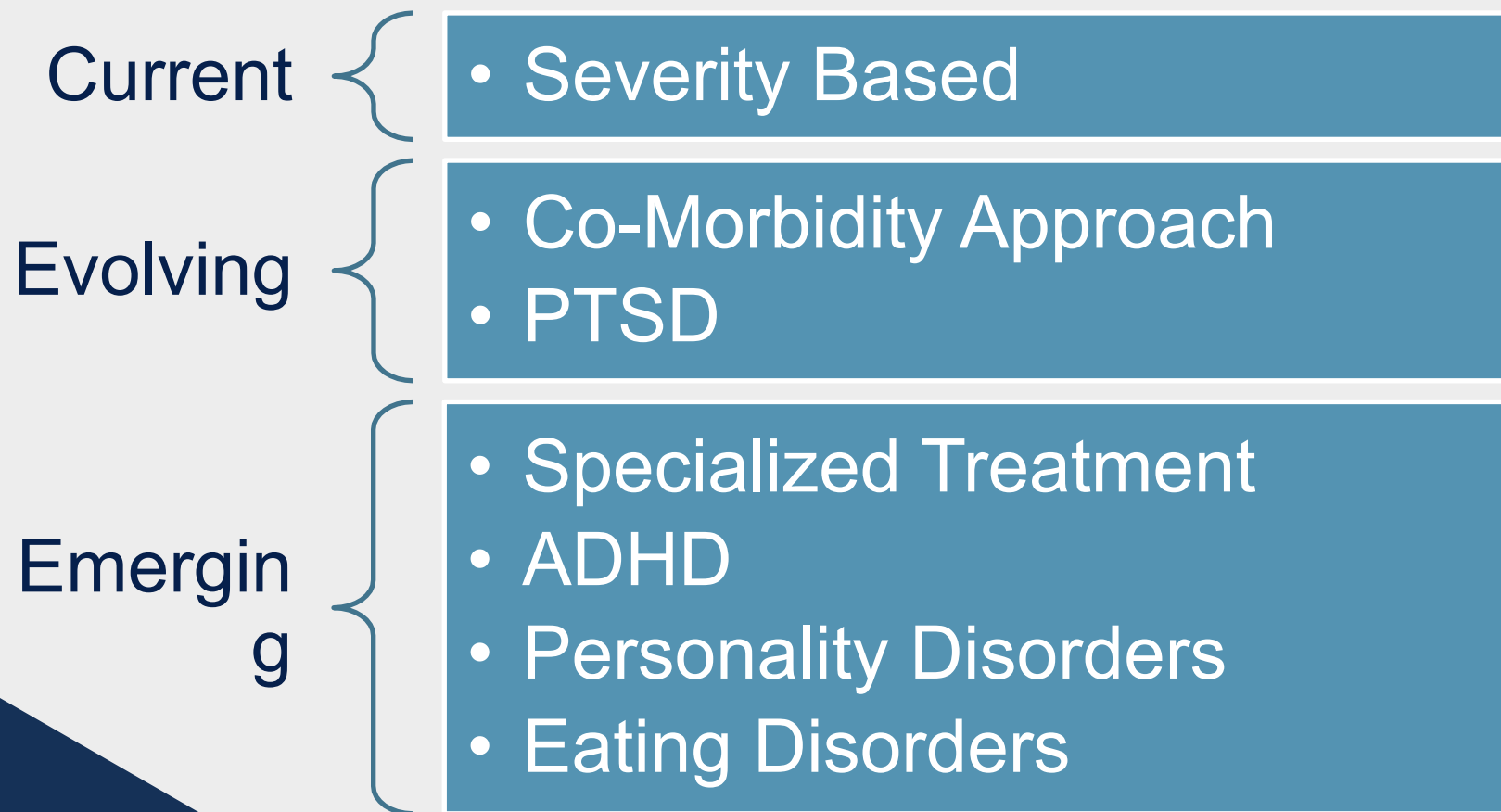
Source: Han B, Compton WM, Blanco C, Colpe LJ. Prevalence, Treatment, and Unmet Treatment Needs of US Adults with Mental Health and Substance Use Disorders. *Health Aff (Proj Hope)*. 2015;34(10):1739-1747. doi:10.1371/journal.pone.0120584

  National Institute on Drug Abuse

For more information about finding treatment for yourself or a loved one, visit [drugabuse.gov/related-topics/treatment](http://drugabuse.gov/related-topics/treatment).

# IMPORTANCE OF CO-OCCURRING DISORDERS

Specialized Treatment Approaches in Co-Occurring Disorders



# IMPORTANCE OF CO-OCCURRING DISORDERS

## Current model

- Level of severity indicates primary treatment location
- If both conditions are of high severity, combined or concurrent treatment is indicated, but collaboration, coordination and integration rarely available.
- Often assumes one illness predominates over another and that treatment for one condition will not worsen the other

## Evolving model

- Focuses on a co-morbidity, rather than a co-occurring, model
- Integrated treatment approaches in primary care and other medical specialties
- Multi-modal skilling amongst all staff
- Specialized treatment programs with recognition that whole person recovery rarely occurs in a linear fashion.



# EPIDEMIOLOGY (PRE-PANDEMIC)

# EPIDEMIOLOGY

- 7.7 million adults have co-occurring mental health and substance use disorders.
- Of the 20.3 million adults with substance use disorders, 37.9% also had mental illnesses.
- Among the 42.1 million adults with mental illness, 18.2% also had substance use disorders.
- Rates of lifetime prevalence are much higher



# EPIDEMIOLOGY

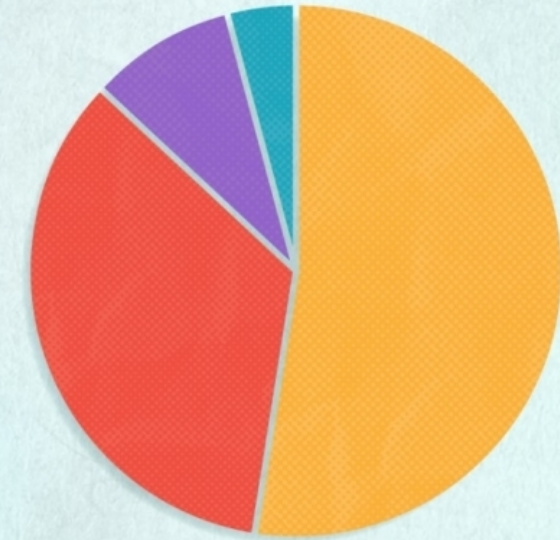
Of those with co-occurring disorders...

- 52.5% received ***neither*** mental health care nor substance use treatment.
- 34.5% received ***mental health care only***.
- 9.1% received ***both*** mental health care and substance use treatment.
- 3.9% received ***substance use disorder treatment only***.

## WHO GETS TREATMENT?

There are many effective treatments for both mental and substance use disorders. A comprehensive treatment approach will address both disorders at the same time.

**Not everyone with co-occurring conditions gets the treatment they need.**



Source: Han, et al. Prevalence, Treatment, and Unmet Treatment Needs of US Adults with Mental Health and Substance Use Disorders. 2017.

# EPIDEMIOLOGY

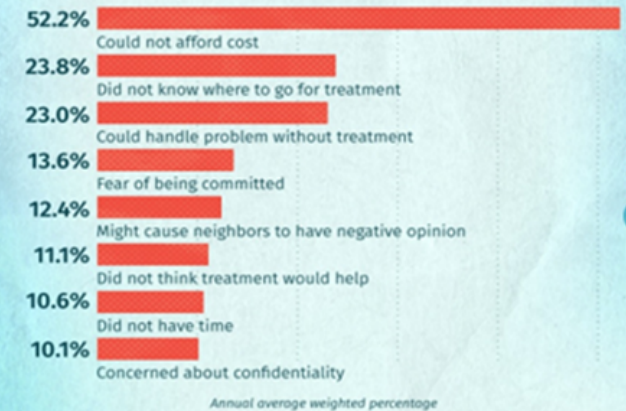
Among adults with co-occurring disorders who did not receive mental health care, their reasons for not receiving it were as follows:

- 52.2% could not afford the cost.
- 23.8% did not know where to go for treatment.
- 23.0% said they could handle the problem without treatment.
- 13.6% feared being committed.
- 12.4% said it might cause their neighbors to have a negative opinion of them.
- 11.1% did not think treatment would help.
- 10.6% did not have the time.
- 10.1% were concerned about confidentiality.

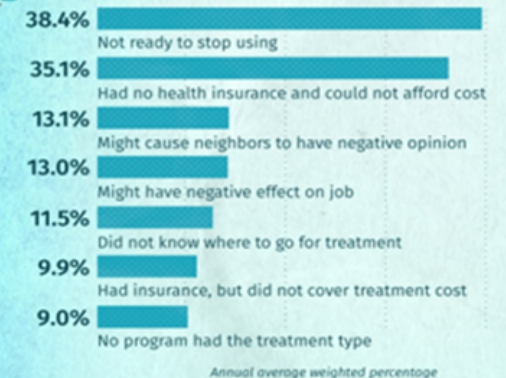
## WHAT ARE THE BARRIERS TO GETTING TREATMENT?

Even among people who want to find help, barriers exist to receive it.

Among adults with co-occurring disorders who did not receive mental health care, their reasons for not receiving it were:



Among adults with co-occurring disorders who did not receive substance use care, their reasons for not receiving it were:



Please note, respondents could provide more than one response.

Source: Han, et al. Prevalence, Treatment, and Unmet Treatment Needs of US Adults with Mental Health and Substance Use Disorders, 2017.

# EPIDEMIOLOGY

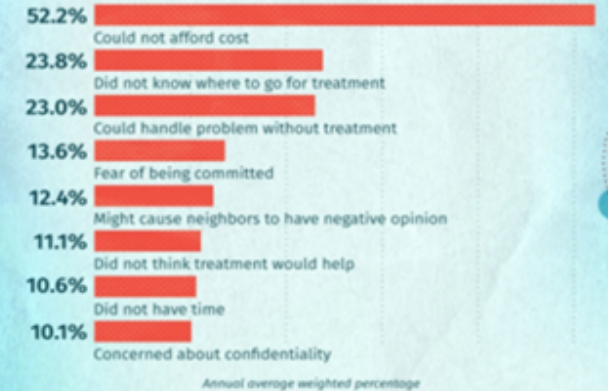
Among adults with co-occurring disorders who did not receive substance use care, their reasons for not receiving it were as follows:

- 38.4% were not ready to stop using.
- 35.1% could not afford the cost.
- 13.1% said it might cause their neighbors to have a negative opinion of them.
- 13.0% said it might have a negative effect on their job.
- 11.5% did not know where to go for treatment.
- 9.9% had insurance but could not afford the co-insurance/co-payments.
- 9.0% said no program had the treatment type.

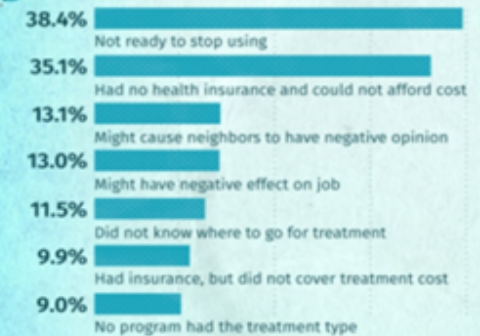
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# PRINCIPLES OF TRIAGE, ASSESSMENT AND TREATMENT



# TRIAGE AND ASSESSMENT

- Consumer- and patient-centric with no wrong door
- Presenting Problem: Most likely of greatest concern to patient and is the initial starting point
- Standard of care is no longer “let’s wait and see how you feel after 30, 60 or 90 days of sobriety.”
- Special considerations for severe mental illness
- Full risk assessment is essential
- Consider entire ecosystem of care and patient’s environment
- Beware of screening in early abstinence

# TRIAGE AND ASSESSMENT

## **Mental Health History**

- Symptoms during periods of abstinence or (preferred) prior to initiation of use
- Relationship between cessation or reduction of use and psychiatric symptoms
- Patient's subjective experience of substance use to self-medicate (use caution)

## **Substance Use History**

- Early substance use can indicate a primary mental health condition
- Substance use prior to onset of psychiatric illness does not imply the addiction is primary
- Progression of use and functional consequences
- **Comprehensive treatment history**
- **The complex role of trauma and PTSD**
- **DSM5 diagnostic criteria**



# PRINCIPLES OF TREATMENT

- As severity increases, likelihood of engagement in treatment does as well.
- From Flynn 2008, monotherapy is typically in mental health (20.7%) not addiction (7.6%) treatment programs.
- Psychotherapy versus psychopharmacology.
- Access to evidence-based practices for psychotherapy, including motivational interviewing, and multi-modal treatment is extremely limited in many areas.

# PRINCIPLES OF TREATMENT

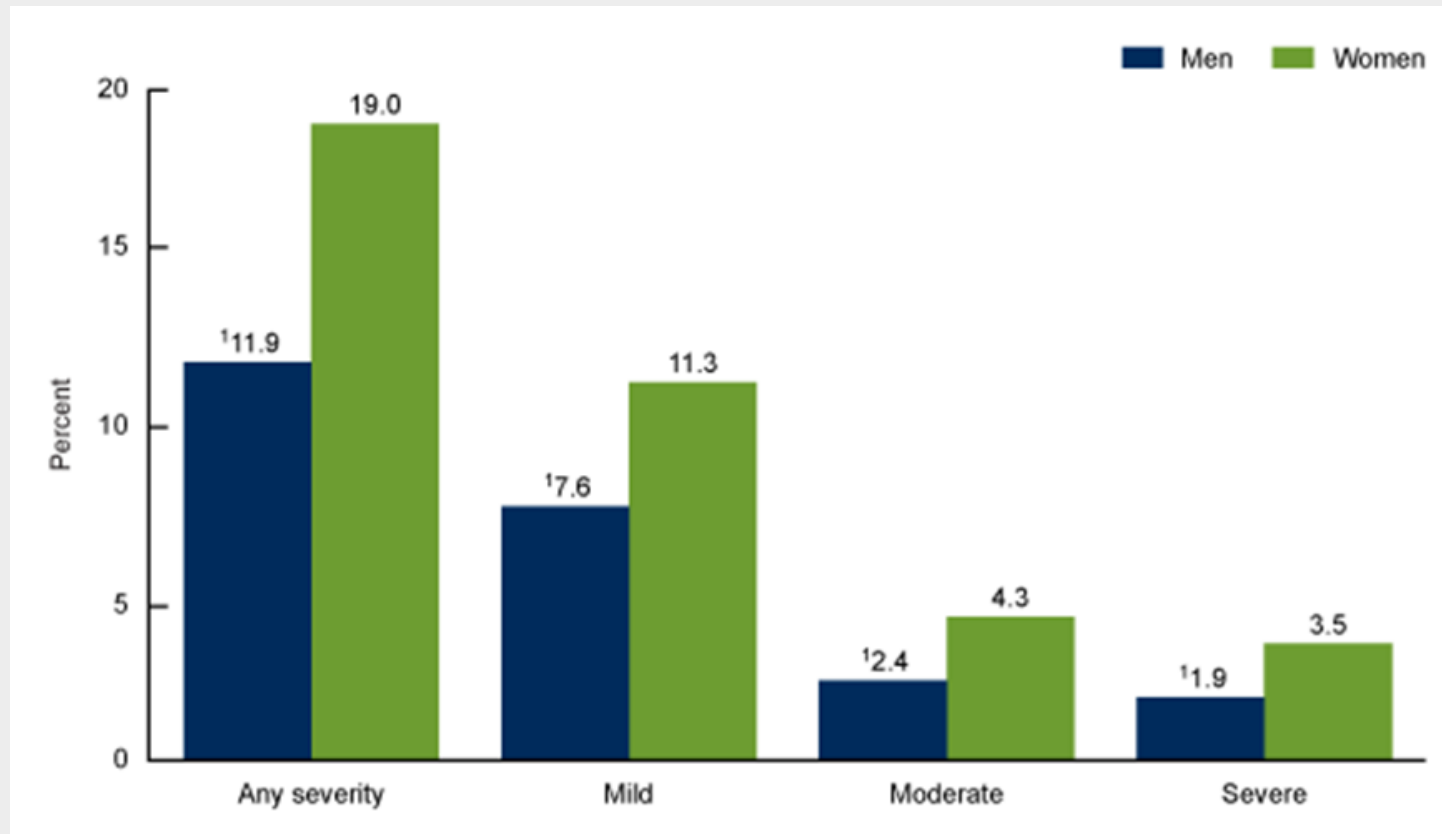
- Risk of Inaction or Delayed Treatment
  - Cycle of use, return to use and remission from co-occurring disorders
  - Escalating functional consequences
- Defining Success and Treating to Target
  - Engagement
  - Abstinence
  - Functional improvement
  - Symptom reduction
  - Individualized treatment outcomes
- Flexible treatment approaches
- Shared decision-making re: treatment planning and goals

# MENTAL HEALTH CONDITIONS: A LIGHTNING REVIEW



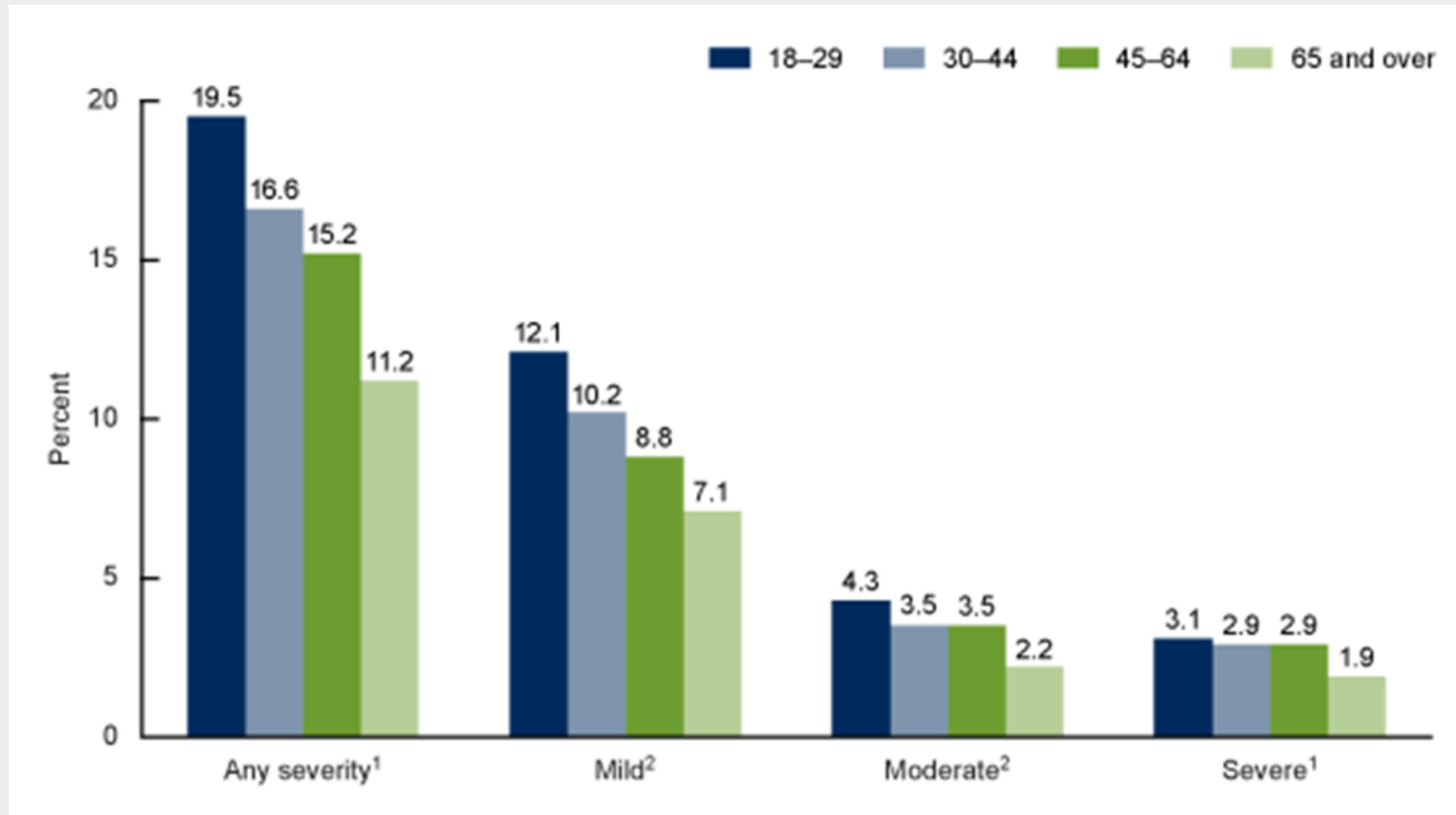
# CO-OCCURRING ANXIETY DISORDERS

Percentage of adults aged 18 and over who experienced symptoms of anxiety in the past 2 weeks, by symptom severity and age group: United States, 2019



# CO-OCCURRING ANXIETY DISORDERS

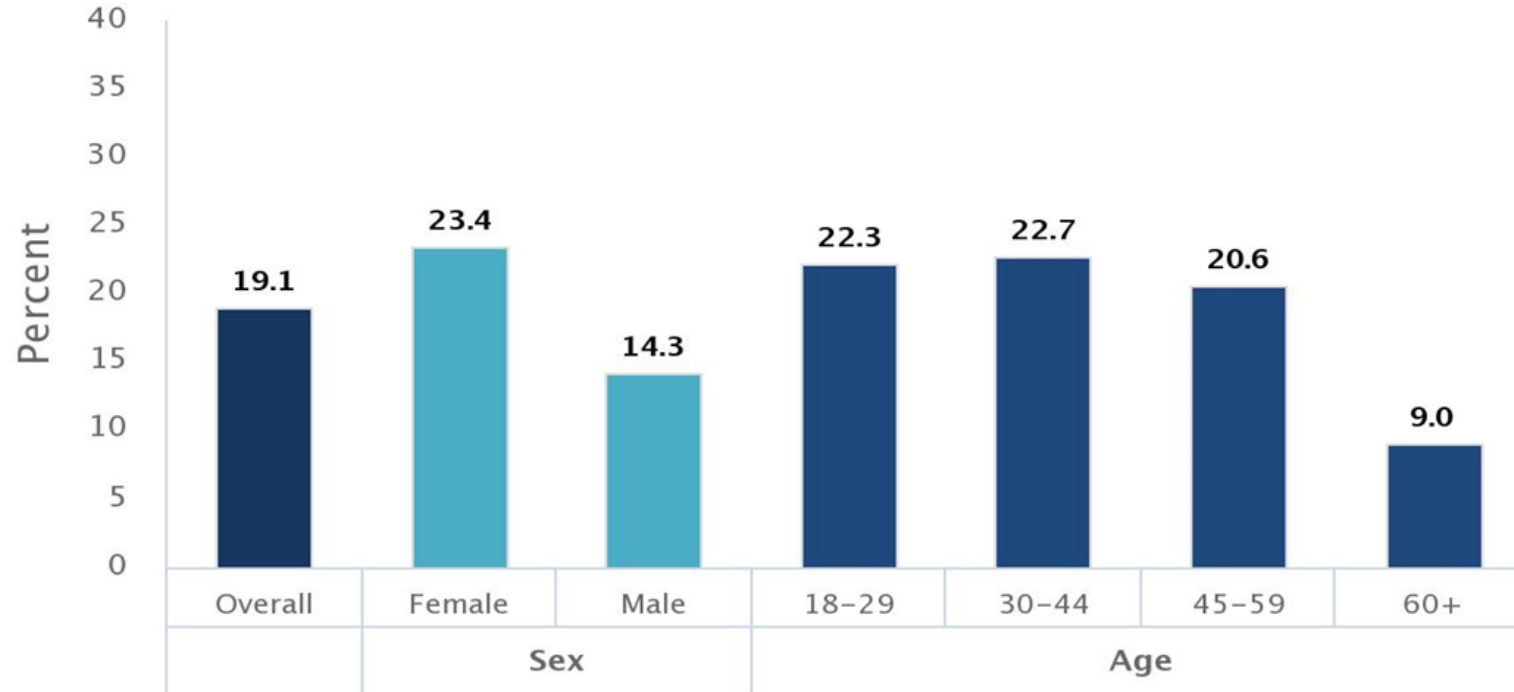
Percentage of adults aged 18 and over who experienced symptoms of anxiety in the past 2 weeks, by symptom severity and age group: United States, 2019



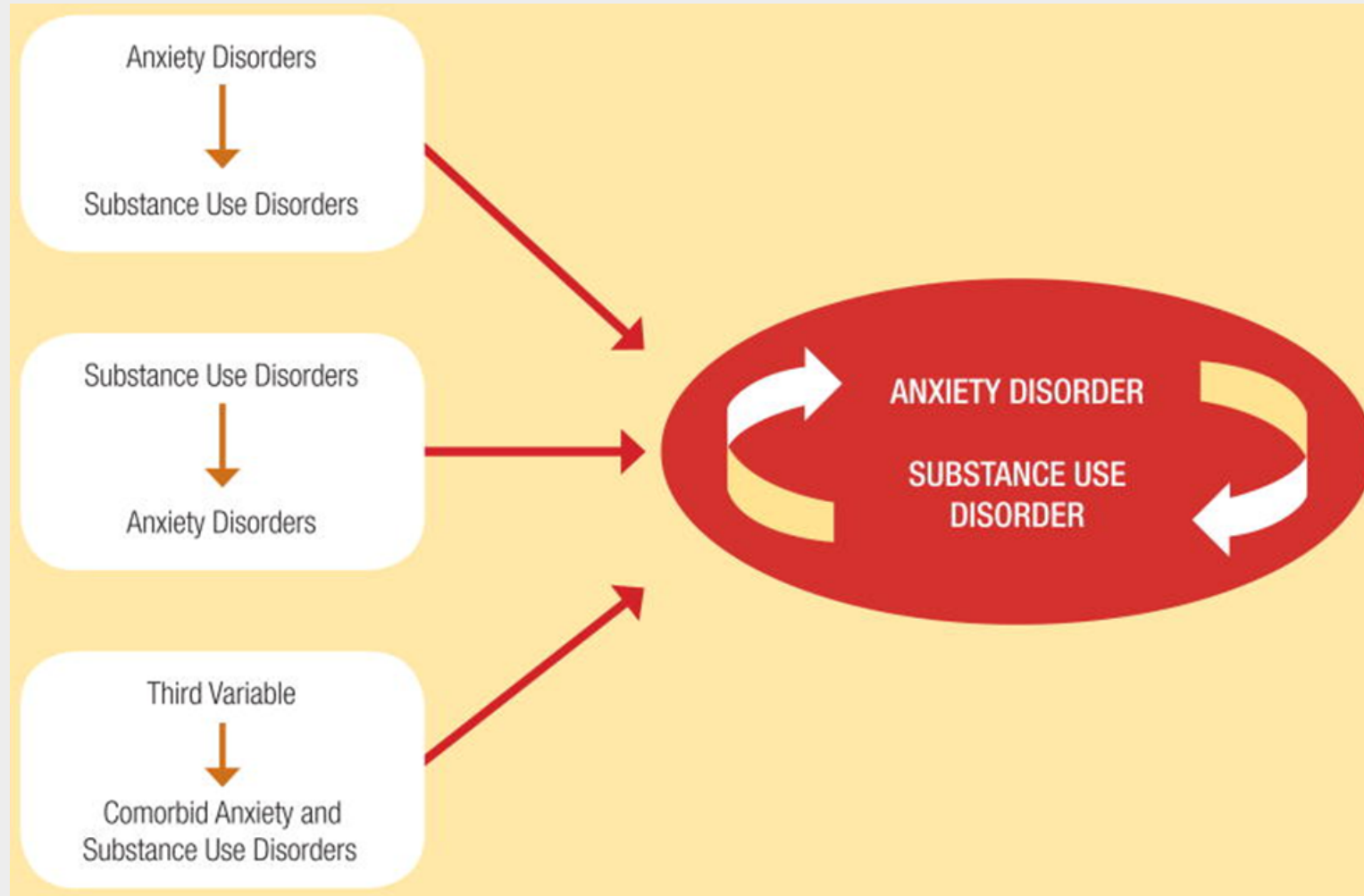
# CO-OCCURRING ANXIETY DISORDERS

## Past Year Prevalence of Any Anxiety Disorder Among U.S Adults (2001–2003)

Data from National Comorbidity Survey Replication (NCS-R)



# CO-OCCURRING ANXIETY DISORDERS



# CO-OCCURRING ANXIETY DISORDERS

- Lifetime prevalence of anxiety disorders is over 30%. The pandemic story viz anxiety disorders has not been told yet.
- Mild substance use disorders likely not associated with anxiety disorders, but moderate and severe substance use disorders are highly related.
- Traditionally, alcohol use disorder is associated with anxiety disorders, but in fact, all substance use disorders are implicated.
- Substance-induced anxiety disorders are rare (<1%) with anxiety disorders usually preceding the substance use disorder.



# CO-OCCURRING ANXIETY DISORDERS

## Diagnosis

*Generalized anxiety and panic disorders: Most strongly associated with substance use disorders*

- Generalized Anxiety Disorder: Significant worry and ruminations
- Panic Disorder: Panic attacks with or without agoraphobia
- Specific Phobias (i.e., fear of heights)
- Social Phobia: Spectrum from mild anxiety to full avoidance
- Obsessive-Compulsive Disorder: Not technically an anxiety disorder

## Treatment

*The presence of either generalized anxiety or panic disorder is likely to predict a higher degree of severity of the substance use disorder.*

- Evidence-based psychotherapy, typically cognitive-behavioral therapy, is first-line
- Medications
  - SSRI's/SNRI's, typically only for generalized anxiety disorder or severe panic disorder
  - Benzodiazepines
    - Blunts psychotherapeutic effects
    - Risk of addiction is low, but misuse is common
    - Physiological dependence is a difficult issue
    - Long-term risk is equivocal

# CO-OCCURRING DEPRESSIVE DISORDERS

- Relationship between depression and substance use disorders is bidirectional: Odds ratio of 1.3 to 2.6.
- Adolescents: 2017 study found a doubling of the incidence of substance use disorders in adolescents with a major depressive episode in the last year (29.3% versus 14.3%).
- Substance-induced depression is also common
  - Direct physiological effects of substances
  - Psychosocial sequelae
  - Co-morbidities with SUDs (i.e., diabetes and chronic pain)

# CO-OCCURRING DEPRESSIVE DISORDERS

- Dysfunction in frontal-limbic reward pathways.
- Altered reward systems lead to compulsive use of substances and anhedonia.
- Repeated cycles of intoxication and withdrawal complicate any *de novo* diagnosis of major depressive disorder in the acute phase of addictions treatment.
- Symptoms of depressive disorders usually precede initiation of substance use or progression to a use disorder.

# CO-OCCURRING DEPRESSIVE DISORDERS

## Diagnosis

- Major depressive disorder
- Persistent depressive disorder
- Substance-induced mood disorder
- Caution re: bipolar disorder

## Major Depressive Episode versus Persistent Depression

- Major depressive episode (MDE): Usually intermittent with inter-episode recovery
- Persistent depressive disorder: Long term, chronic, mild depressed mood. May co-occur with an MDE

## Substance-Induced Mood Disorders

- Over half of patients with alcohol and opioid use disorders.
- Usually, symptoms resolve quickly after cessation or reduction of use
- Persistent symptoms can occur and require medical treatment.

# CO-OCCURRING DEPRESSIVE DISORDERS

## Treatment

- Mild depression: Self-care + psychotherapy first line
- Moderate depression: Psychotherapy ± pharmacotherapy
- Severe depression: Pharmacotherapy + Psychotherapy ± interventional treatments

## Pharmacotherapy

- Standard algorithm
- SSRI's first line
- SNRI's and atypical anti-depressants
- Emerging role of psychedelics

## Evidence-Based Psychotherapies

- Cognitive-Behavioral Therapy
- Interpersonal Therapy
- Supportive/Non-Directive Therapy not effective
- Access to EBP's is challenged

# CO-OCCURRING BIPOLAR DISORDERS

- Bipolar disorder affects 1%-4% of the US population with most studies/surveys consistent with a 4% lifetime prevalence rate for the combination of bipolar 1 and 2 disorders (2% for each).
- Eliciting symptom reports from patients can be challenging (see later patient education graphics)
- Bipolar 1 disorder
  - High correlation with SUD's with lifetime SUD prevalence rate of 50-60%. Some studies found rates as high as 90%.
  - Significant functional impairment, often with hospitalization.
- Bipolar 2 disorder
  - Likely under/mis-diagnosed (with major depressive disorder) with some key opinion leaders noting up to an 11% prevalence.
  - Correlation with substance use disorders is less well studied.

# CO-OCCURRING BIPOLAR DISORDERS

- Age of onset: Teens to early 20's with rare onset after age 40.
- Onset often, but not always, prior to substance initiation/progression.
- Substance intoxication can mimic mania. While ruling out substance-induced mania is important, treatment is largely the same for both conditions.
- Treat with a low suspicion given the bi-directionality of bipolar and substance use disorders and improved outcomes for both conditions with treatment of either.
- Use provisional diagnosis when unsure to avoid later confusion.

# Bipolar Disorder Symptoms

## Manic Episodes:



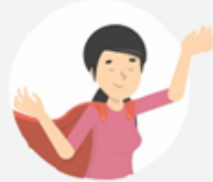
Feeling Overly Happy for Long Periods of Time



Talking very Fast with Racing Thoughts



Becoming Easily Distracted



Having Overconfidence in Abilities



Engaging in Risky Behavior

## Depression Episodes:



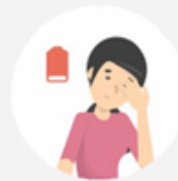
Feeling Sad or Hopeless for Long Period of Time



Significant Change in Appetite



Thinking About or Attempting Suicide



Feeling Fatigue or Lack of Energy



Problems with Memory and Concentration





## Bipolar I vs. Bipolar II



- Symptoms interfere with daily life
- Extreme elevation in mood and energy during manic episodes



- Elevated mood during hypomanic episodes
- Symptoms are shorter and less intense

# CO-OCCURRING BIPOLAR DISORDERS

## Diagnosis

- Bipolar 1: Manic episode ± Major depressive episode with or without psychosis
- Bipolar 2: Hypomania + Major depressive episode
- Cyclothymic disorder (rare in treatment-seeking populations): Hypomania + Dysthymia
- In general, any hospitalization during an elevated mood episode is likely mania, not hypomania

## Treatment

- Pharmacotherapy
  - Mood stabilizers/Anti-manic agents
  - Anti-psychotics
  - Use caution with anti-depressants in bipolar 1, but acceptable with bipolar 2.
- Psychotherapy
  - Cognitive-behavioral therapy
  - Family-focused therapy
  - Interpersonal therapy
  - Social-rhythm therapy

# CO-OCCURRING PSYCHOTIC DISORDERS

- Initial presentation of psychotic illness: Usually mental health
- *However*, up to 50% co-occurrence of substance use disorders in those with psychotic disorders: Cross-skilling is essential when treating this population.
- Typical substances and use disorders with a primary psychotic disorder include cannabis and alcohol
- Substance-induced psychosis can be common and persistent with repeated use of certain substances, particularly methamphetamine.

# CO-OCCURRING PSYCHOTIC DISORDERS

- Continued use of substances is associated with increased symptoms, adjustment difficulties, treatment nonadherence, relapses, and hospitalizations, even with intensive treatment.
- Individualized treatment plans are essential
- May require treatment in specialized integrated programs.
- Role of family and caregivers is important to recognize.
- Aggressive medication management initially can help to reduce symptoms and increase engagement.

# CO-OCCURRING PSYCHOTIC DISORDERS

## Diagnosis

- Schizophrenia
- Mood disorders with psychotic features
- Schizoaffective disorder
- Delusional disorder
- Substance-induced psychosis (particularly methamphetamine-induced psychosis/intoxication)
- Unspecified

# CO-OCCURRING PSYCHOTIC DISORDERS

- **Pharmacotherapy**
  - Anti-psychotics are first line but often poorly tolerated
  - Mood stabilizers and/or anti-depressants for mood symptoms
  - Consider clozapine early. Evidence indicates superior effects for both psychotic and substance use disorders with use of clozapine and superior reduction in suicide risk.
  - Long-acting injectables provide significant advantages but cost is a factor
- **Non-medical therapies**
  - Cognitive-behavioral therapy for psychosis
  - Family psychoeducational and interventional therapies
  - Mutual support groups (NAMI, Mental Health America)
- **Outcomes should focus on functional improvement, not necessarily symptom reduction or abstinence**

# CO-OCCURRING POST-TRAUMATIC STRESS DISORDER

- Patients with PTSD are 2-4 times more likely to have an SUD in general, but among treatment seeking populations, those who present with PTSD are 14 times more likely to have an SUD.
- Severity of trauma correlates with substance use in general and overall development of an SUD.
- Trauma cue-induced cravings and use are a major challenge.
- Trauma, independent of PTSD, is also correlated with substance use and progression to a use disorder. Less than 10% of those exposed to significant trauma will develop PTSD but may have addictions sequelae.

# CO-OCCURRING POST- TRAUMATIC STRESS DISORDER

## Theories of etiology/correlation

- Self-medication hypothesis: Reduction of autonomic symptoms as well as psychological distress with ongoing substance use
- High-risk hypothesis: Substance use leads to presence in higher risk environments and situations that predispose to trauma and development of PTSD
- Susceptibility hypothesis: Chronic hyperarousal from substance use predisposes to PTSD rather than non-pathological reactions after traumatic events
- Shared risk model: Genetics, neurophysiological systems, recurrent trauma
- Possible direct effect of substance: Cannabis and suppression of negative memories, but unclear as to whether this leads to disordered use

## Trauma without PTSD

- Minority stress
- Forced resilience
- Social determinants of health



# CO-OCCURRING POST-TRAUMATIC STRESS DISORDER

- Comprehensive diagnostic evaluation and treatment planning to include social determinants of health and safety/risk assessment
- Focus on safety and stabilization
- Treatment of single-episode versus recurrent PTSD requires differential approaches

# CO-OCCURRING POST-TRAUMATIC STRESS DISORDER

## Specialized Evidence-Based Psychotherapies (First Line)

- Seeking Safety (SUD + PTSD)
- Prolonged exposure (Use in caution in early recovery)
- Eye movement desensitization and reprocessing
- Cognitive processing therapy

## Pharmacotherapy

- Typically, less effective than for other co-occurring conditions.
- SSRI's and SNRI's are the best studied and most effective
- $\alpha$ -Adrenergic receptor antagonists important for symptom management.
- Anti-psychotics and benzodiazepines should generally be avoided due to risk and side effect profiles.

# CO-OCCURRING ADHD

- 15.2% of adults with attention-deficit hyperactivity disorder (ADHD) have a substance use disorder (SUD) compared with 5.6% of those without ADHD.
- Among adolescents, the rate of ADHD in those with an SUD is 24% versus 11.5% in the general adolescent population.
- Substance use begins earlier, and remission rates are lower or take longer to achieve, in those patients with ADHD.
- ADHD + SUD = Higher risk of attempted suicide
- Early *and* adequate treatment of ADHD in childhood is a primary prevention strategy for SUDs.
- Evidence supports use of psychostimulants in this population with appropriate monitoring and safe storage practices.

# CO-OCCURRING ADHD

## **Inattention/Poor Concentration**

- Target symptom for most medications
- Can be independent of, or foundational to, other functional domains

## **Executive Dysfunction**

- Poor impulse control
- Lack of long-term reward and consequence orientation
- Decreased academic and occupational functioning
- Improvement with medications is limited

## **Impaired Reward System**

- Increased risk-taking behaviors
- Need for a higher degree of stimulation
- Does not improve with medications

# CO-OCCURRING ADHD

- Retrospective global study of 4.4 million people prescribed medications for ADHD versus 6.1 million prescribed asthma medications (low risk of diversion): Abuse, misuse and diversion of stimulants was 4 times more likely with stimulants
- In those patients who were dispensed stimulants rather than non-stimulants, those with ADHD were 8 times more likely to engage in “doctor shopping” behaviors.
- In a Swedish national registry study, 7.6% of those prescribed methylphenidate abused, misused or diverted the medication. The 46-65 age group was 17 times more likely to engage in these behaviors than the 6–12-year-old age group. Those with SUDs were twice as likely to misuse/divert.

# CO-OCCURRING ADHD

## Diagnostic Challenges

- Contemporary lifestyle promotes short attention spans: Easy to confuse with ADHD
- Diagnosis of ADHD with active substance use/early recovery: Extraordinarily challenging without pre-morbid diagnostic verification in childhood.
- Inattentive symptoms are common across a range of behavioral health conditions.
- Malingering to obtain psychostimulants is common.
- Engaging in extensive history-gathering can be difficult and time-consuming.
- *De novo* ADHD diagnoses: Only with significant reduction or abstinence from substances and with objective verification.

# CO-OCCURRING ADHD

## Treatment Considerations

- 2021 meta-analysis by Özgen and collaborators: Adolescents with concomitant ADHD + SUD did not respond as well to medications as those with only ADHD.
- Psychosocial treatments are poorly studied and open for innovation. Are these safer approaches?
- Dopamine dysregulation, particularly with stimulant use disorders, may mean that higher doses of stimulants are required to achieve similar effects. As such, safety considerations are important.

# CO-OCCURRING EATING DISORDERS

- Approximately 10% of patients with eating disorders will also have an active substance use disorder, but evidence is mixed:
  - **Anorexia Nervosa:** 16% comorbidity with the binge/purge subtype > restrictive subtype
  - **Bulimia Nervosa :** Less studied, with some evidence that 30% of those with an SUD have bulimia nervosa
  - **Binge Eating Disorder:** Up to 60% may have co-occurrence
- Alcohol, tobacco and caffeine are the most common substances used in those with eating disorders, but evidence also demonstrates increased use of sedative/hypnotics in those with anorexia and hallucinogens/MDMA in those with bulimia
- Evidence for best practice in diagnosis and treatment is lacking



# CO-OCCURRING EATING DISORDERS

## Shared Etiologies

- Maladaptive activation of reward pathways
- Appetite suppression with certain substances can lead to increase in disordered eating
- Shared, but temporary, sense of well-being
- Management of chaotic inner experiences and response to one's environment
- Avoidance of negative feeling states

## Treatment Challenges

- Motivation
- Retention
- Concurrent treatment is ideal, but sequential treatment is the norm
- No widely accepted standard of care for concurrent treatment
- Often, one condition worsens as the other improves

# CO-OCCURRING PERSONALITY DISORDERS

- Borderline and anti-social personality disorders carry the highest co-morbidity/co-occurrence with SUDs, and patients with borderline personality disorder have the highest treatment-seeking behavior. As such, most treatment efforts will focus on that disorder.
- Overall prevalence of personality disorders
  - General population: 10-14.8%
  - Substance use disorders: 34.8-73%.
- Personality pathology often precedes substance initiation/disordered use.
- Poor treatment response and outcomes relative to those without the co-morbidity.

# CO-OCCURRING PERSONALITY DISORDERS

- Psychotherapy is first-line treatment
  - Unlike for other co-occurring disorders, treatment may need to be sequential, especially for a first episode, in order to help patients learn skills to manage emotions in the treatment milieu and as abstinence progresses.
  - Dialectical behavioral therapy (DBT), dynamic deconstructive therapy and dual-focused schema therapy have the greatest evidence, but DBT is most prevalent.
- Disruptions in the milieu environment are common and lead to issues of discharge and lack of engagement.
- Pharmacotherapy should be limited to acute crises and treatment of co-morbidities only.

# CO-OCCURRING DISORDERS: EQUITY

- Between 2016 and 2020, 116,000 premature deaths occurred because of disparities in how mental health and addiction concerns were addressed among racial/ethnic minorities and indigenous groups.
- Secondary to minority stress, rates of problematic substance use and progression to use disorders are higher among minoritized groups across the spectrum.
- Engagement in addictions treatment, particularly with medications for opioid use disorder (MOUD), is far less for minoritized populations, particularly black men.

# CO-OCCURRING DISORDERS: EQUITY

- Among minoritized groups, the total excess cost burden (relative to non-minoritized groups) for mental illness, addiction and suicide was \$278 billion from 2016-2020.
- Multiple explanations
  - Access to care
  - Discriminatory local, state and federal policies
  - Disparities in social determinants of health
  - Lack of culturally aware/sensitive therapeutic approaches
  - Lack of diversity in the workforce

# SUMMARY AND KEY TAKEAWAYS

- Co-occurring mental health and substance use disorders are common with a wide range of severity levels impacting clinical outcomes.
- Consider co-morbidity, not just co-occurrence.
- Diagnosis of co-occurring conditions is essential in order to create effective individualized treatment plans.
- Treatment of co-occurring disorders requires specialized approaches that integrate addictions and mental health treatment together rather than provide in silos or according to the severity of the presenting problem.
- Know key diagnostic criteria for the most common mental health conditions.

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