



# Psychiatric Disorders in Addiction

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# Surgeon General's Report 2016 on Alcohol and Substances

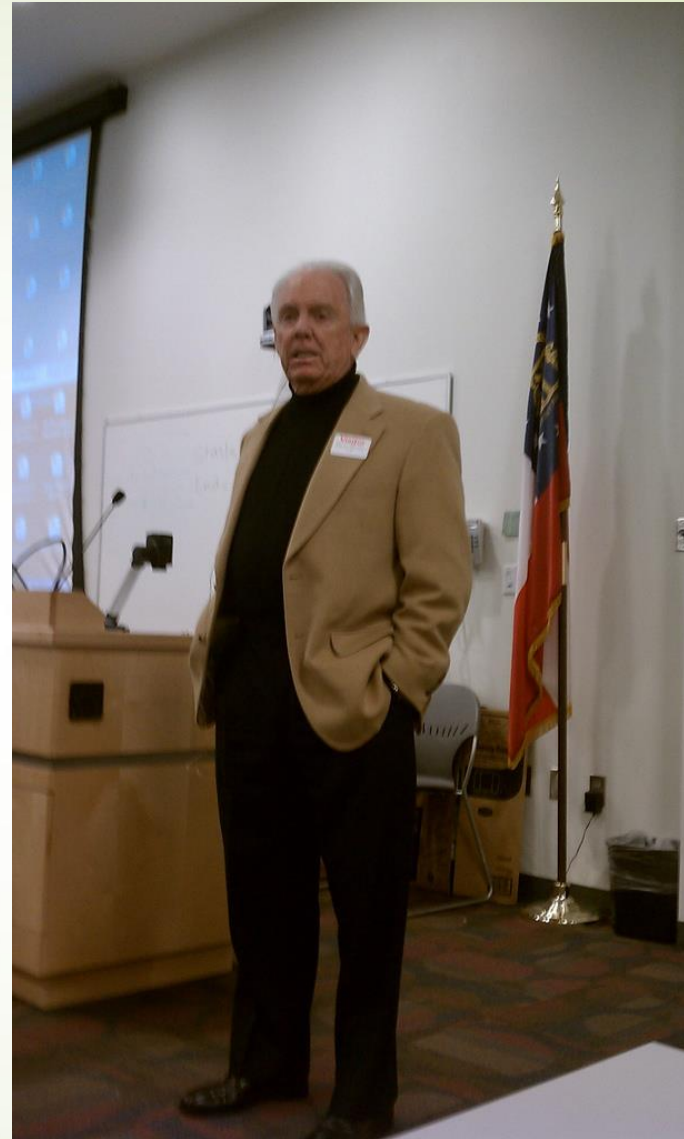
- 20 million persons with addiction in the United States
- Most patients have never been asked/screened about their drug/alcohol use.
- Co-occurring disorders are mentioned only briefly.
- Emphasis on the brain diseases aspect of addiction and brain exposure to chronic drug use, “not a moral issue”
- Represents a major milestone in the history of addiction and addiction treatment.
- Strong scientific evidence for effectiveness of 12 step recovery and the need for long term strategy.


## Burns Brady

Grand Rounds, University of  
Louisville Department of  
Psychiatry 1997

“He discussed how an  
addict was incorrectly  
diagnosed with Narcissistic  
Antisocial Sociopathic  
borderline with psychotic  
tendencies”

“**Demonstrated** that  
impaired physician addicts  
could be successfully  
treated with a high success  
rate utilizing 12 step  
recovery and the  
biopsychosocial model  
when applied with sincerity  
and compassion.”





# DSM-V Differential Diagnosis Handbook

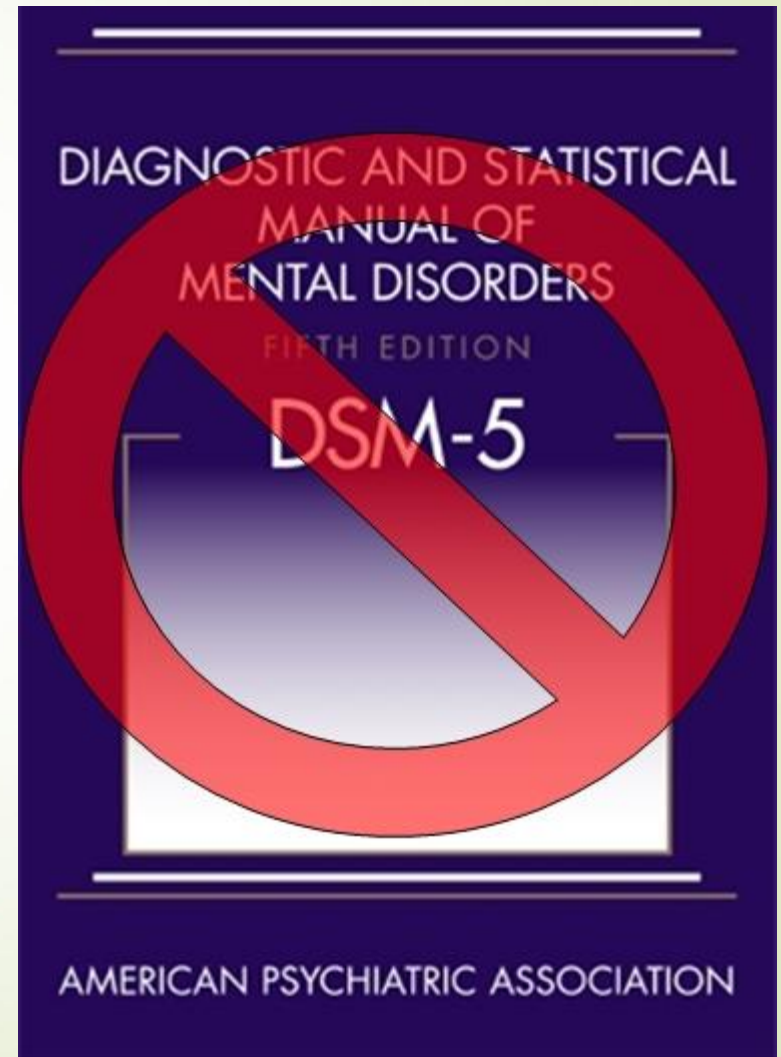
- “The process of DSM-5 differential diagnosis can be broken down into six basic steps: 1) ruling out Malingering and Factitious Disorder, 2) ruling out a substance etiology, 3) ruling out an etiological medical condition, 4) determining the specific primary disorder(s), 5) differentiating Adjustment Disorder from the residual Other Specified and Unspecified conditions, and 6) establishing the boundary with no mental disorder. “ ***DSM-V handbook of differential diagnosis.***



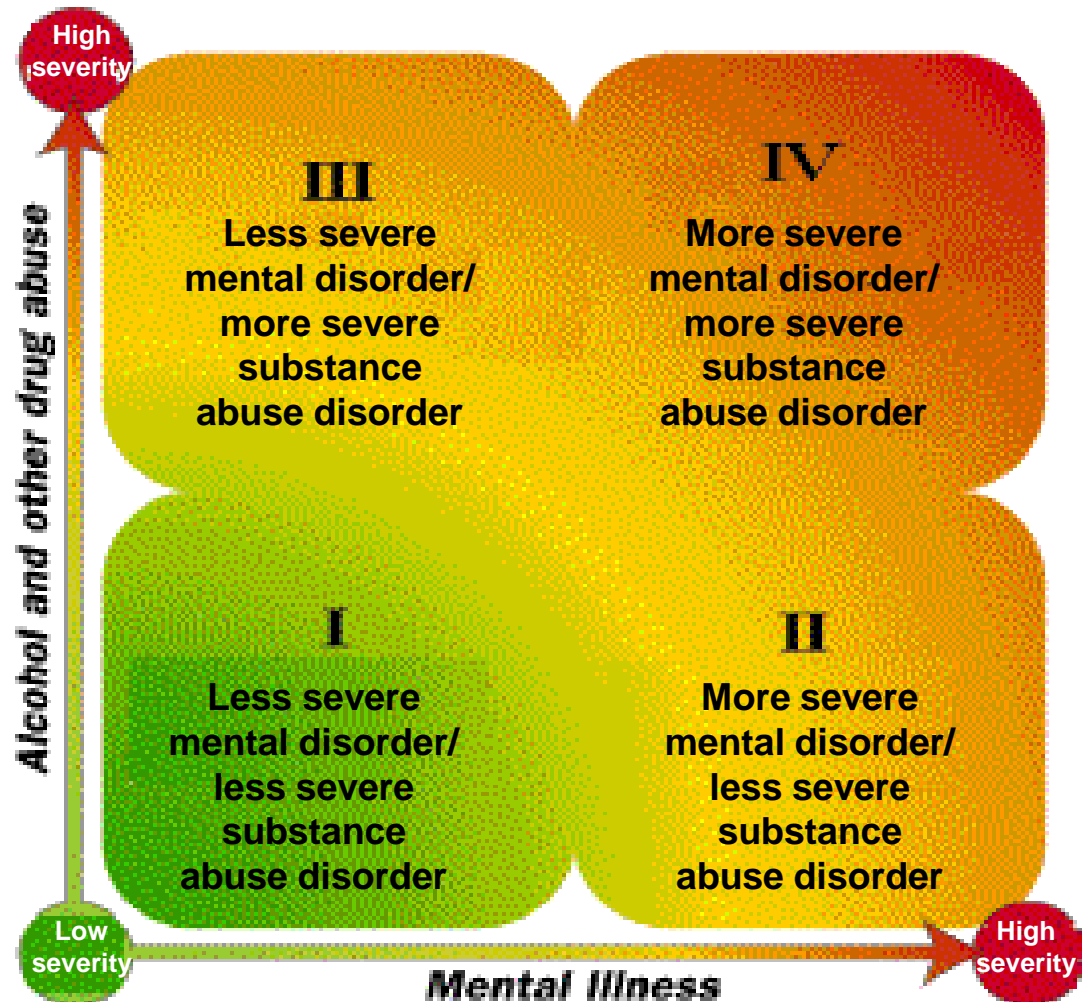
# Substance-Induced Mental Disorders

- ▶ Substance-induced psychiatric disorders are difficult to distinguish from traditional psychiatric illnesses such as depressive, anxiety, and psychotic disorders.
- ▶ The DSM-5, published in 2013, did not change DSM-IV guidelines for diagnoses but added a few new substance-induced mental disorders: substance-induced bipolar disorder and related conditions (which was previously listed in DSM-IV under substance-induced mood disorders), substance-induced obsessive–compulsive disorder and related conditions, and substance-induced major and mild neurocognitive disorder, which include the specifier amnesic-confabulatory type

# DSM-V Controversy



# The Four Quadrant Framework for Co-Occurring Disorders



A four-quadrant conceptual framework to guide systems integration and resource allocation in treating individuals with co-occurring disorders (NASMHPD, NASADAD, 1998; NY State; Ries, 1993; SAMHSA Report to Congress, 2002)



# ?Self Medication Hypothesis?

- Khantzian (1982) observed that Heroin addicts were using the drug to 'soothe' their aggression and rage.
- Addicts were not simply seeking pleasure
- Eventually he expanded his theory to how it applied to most drugs of abuse that reduce anxiety
- Drug addicts were predisposed to use certain drugs to help with affect regulation (ADHD/Cocaine, Social Anxiety/Alcohol)





## ...The rest of the story

- This theory has been used by many to bypass understanding addiction as a primary disease.
- Khantzian's worked from a psychodynamic model based on ideas from Kohut (1977) around self object needs and the vulnerable self.
- Theory also has been used to ignore the effects of PAWS, and substance induced 'mental illness'



# Assessment and treatment of depression in SUD

- Anhedonia is normal in early abstinence (PAWS)
- Major Depression is considered the number one co-occurring psychiatric disorder in SUD's.
- Depressed mood is directly caused by addiction/drug use in many cases
- Most cases will remit with abstinence over time
- SSRI's do not provide benefit in addiction itself
- SSRI's have the problem of side effects and discontinuation syndrome
- SSRI's can induce mania in persons predisposed, and contraindicated in ASPD



# The seduction of a psychiatric diagnosis.....

## ➤ *ADHD and Bipolar disorder*

These diagnoses and others share a common theme:

Often missed and/or misdiagnosed/overdiagnosed

Not obvious, under the surface (like a bear in the woods)

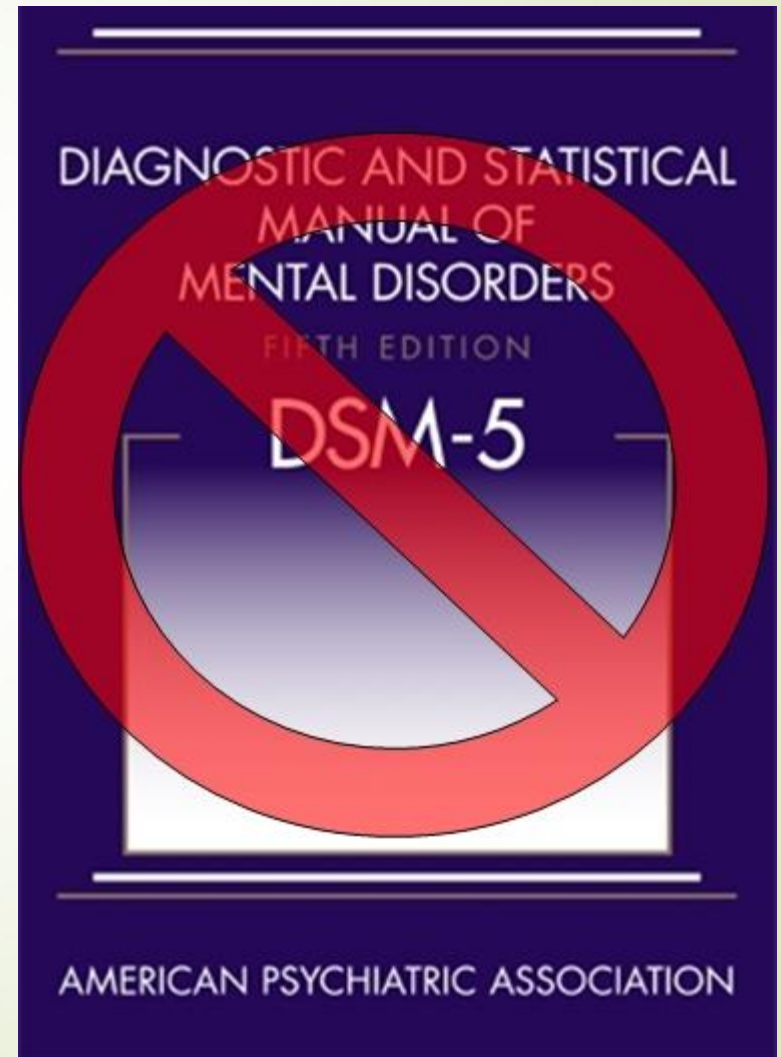
Great imitators (like addiction!)

The “eureka” feeling and/or satisfies managed care paradigm – “Now we have an explanation”

Addicted patients in certain settings preferred to have a psychiatric diagnosis

Still, it is often true, but....

# DSM-V Controversy





# Looping Effects in Human Kinds

- ▶ Ian Hacking described in his published study “Rewriting the Soul: Multiple Personality and the Sciences of Memory” a process whereby people relate to categories and in turn change the categories.
- ▶ Human beings have an ability to reflect on their classifications, change them, and bring new ways of being into existence.
- ▶ Psychologists, psychiatrists, and social scientists are implicated in this process.




# Bipolar Affective Disorder

- Prevalence 1% in the general population
- For Bipolar Type 1: A single manic episode is required
- Bipolar Type 2: A single episode of hypomania without ever having a manic episode
- Increased risks of substance abuse, approximately 60% with co-occurring substance abuse
- Cyclothymia
- No other medical cause
- Mania requires a sleep disturbance and must last for a period of seven days
- Comorbid trauma is likely

# The Healing Place



- “Is Bipolar disorder over diagnosed among substance abuse disorders?” *Bipolar Disorders 2006*. Stewart and El-mallakh.
- *Interviewed subjects utilizing Structured Clinical Interview*
- *Findings were replicated*
- *45 citations*



Journal of Clinical Psychiatry. 2008 Jun;69(6):935-40. “Is bipolar disorder overdiagnosed?”

Mark Zimmerman MD, Department of Psychiatry Brown Medical School, University of Rhode Island; Ruggero CJ, Chelminski I, Young D.

- 700 hundred psychiatric outpatients in Rhode Island were interviewed utilizing the SCID and also completed a self administered questionnaire
- Family history of first degree relatives obtained
- Diagnoses from the SCID were blind to the results of the self administered questionnaires
- This study was conducted from May 2001 to March 2005.





# Both over and under....

*Fewer than half* the patients who *reported* that they had been previously diagnosed with bipolar disorder received a diagnosis of bipolar disorder *based on the SCID*.


Patients with SCID-diagnosed Bipolar disorder had a *significantly higher* morbid risk of Bipolar Disorder(family history) than patients who self-reported a previous diagnosis of bipolar disorder that was not confirmed by the SCID ( $p < .02$ ).

Patients who self-reported a previous diagnosis of bipolar disorder that was *not* confirmed by the SCID *did not* have a significantly higher morbid risk for bipolar disorder than the patients who were negative for bipolar disorder by self-report and the SCID.



# MIDAS Project

- The Rhode Island Methods to Improve Diagnostic Assessment and Services (MIDAS) Project
- The largest clinical epidemiological study utilizing semi structured interviews to assess psychiatric diagnosis in a community based outpatient setting
- Nearly 4,000 individual interviews conducted to date
- Patients seek treatment for diagnoses that are not their principal diagnosis
- Bipolar disorder **over-diagnosis** by psychiatrists is a consistent phenomenon across the spectrum of psychiatric outpatients



# Post Traumatic Stress Disorder

- Among the population in the setting of residential/therapeutic treatment programs approaches 100 percent. 60 percent with women, and 80-100 percent with men.
- Criterion include experiencing a traumatic event, then re-experiencing the event thru the senses even long after the danger or event has passed. Also, avoidance of persons/situations that remind the individual of the event.
- Subthreshold syndrome thought to be very common
- First became an official diagnosis in 1980 in the DSM-III.
- Mood cycles are a prominent feature of this disorder.



*Post Traumatic Stress Disorder and Addiction:*  
**DUAL DIAGNOSIS TREATMENT PROJECT AT THE**  
**UNIVERSITY OF LOUISVILLE**

- ▶ *Integrating Cognitive Neuroscience Research and Cognitive Behavioral Treatment with Neurofeedback Therapy in Drug Addiction Comorbid with Posttraumatic Stress Disorder: A Conceptual Review* **Tato M. Sokhadze, PhD** **Christopher M. Stewart, MD** **Michael Hollifield, MD** *Journal of Neurotherapy* 2007

# Dual Diagnosis Project cont'

- ▶ Sokhadze, E., Stewart, C., Sokhadze, G., Hollifield, M., & Tasman, A. (2009) Neurofeedback and motivational interviewing based bio-behavioral treatment in cocaine addiction. *Journal of Neurotherapy*, 13, 84-86
- ▶ Sokhadze, E., Stewart, C., Sokhadze, G., Husk, M, & Tasman, A. (2009) Effects of neurofeedback-based behavioral therapy on ERP measures of executive functions in drug abuse. *Journal of Neurotherapy*, 13(4), 260-262.
- ▶ Sokhadze, E., , Stewart, C., El-Baz, A., Ramaswamy, R., Hollifield, M., & Tasman, A. (2009) Induced EEG gamma oscillations in response to drug- and stress-related cues in cocaine addicts and patients with dual diagnosis. *Journal of Neurotherapy*, 13(4), 270-271.
- ▶ Sokhadze, E., Stewart, C., Hollifield, M., and Tasman, A. "Event related potential study of executive dysfunctions in a speeded reaction task in cocaine addiction. *Journal of Neurotherapy*, 2008, v.12, N.4.
- ▶ Sokhadze, E., Stewart, C., Hollifield, M., and Tasman, A. "Attentional bias to drug related and stress related pictorial cues in cocaine addiction co morbid with post-traumatic stress disorder." *Journal of Neurotherapy*, 2008, v 12, N.4.

➤ “Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults”

Vincent J Felitti MD, FACP, Robert F Anda MD, MS, Dale Nordenberg MD, David F Williamson MS, PhD, Alison M Spitz MS, MPH, Valerie Edwards BA, Mary P Koss PhD, James S Marks MD, MPH

- May 1998 Volume 14, Issue 4, Pages 245–258
- The Adverse Childhood Experiences (ACE) Study
- The CDC-Kaiser Permanente Adverse Childhood Experiences (ACE) Study is one of the largest investigations of childhood abuse and neglect and later-life health and well-being.
- The original ACE Study was conducted at Kaiser Permanente from 1995 to 1997 with two waves of data collection. Over 17,000 Health Maintenance Organization members from Southern California receiving physical exams completed confidential surveys regarding their childhood experiences and current health status and behaviors.
- The CDC continues ongoing surveillance of ACEs by assessing the medical status of the study participants via periodic updates of morbidity and mortality data



# The Adverse Childhood Events (ACE) Study

- The ACE score, a total sum of the different categories of ACEs reported by participants, is used to assess cumulative childhood stress. Study findings repeatedly reveal a graded dose-response relationship between ACEs and negative health and well-being outcomes across the life course.
- Dose-response describes the change in an outcome (e.g., alcoholism) associated with differing levels of exposure (or doses) to a stressor (e.g. ACEs). A graded dose-response means that as the dose of the stressor increases the intensity of the outcome also increases.



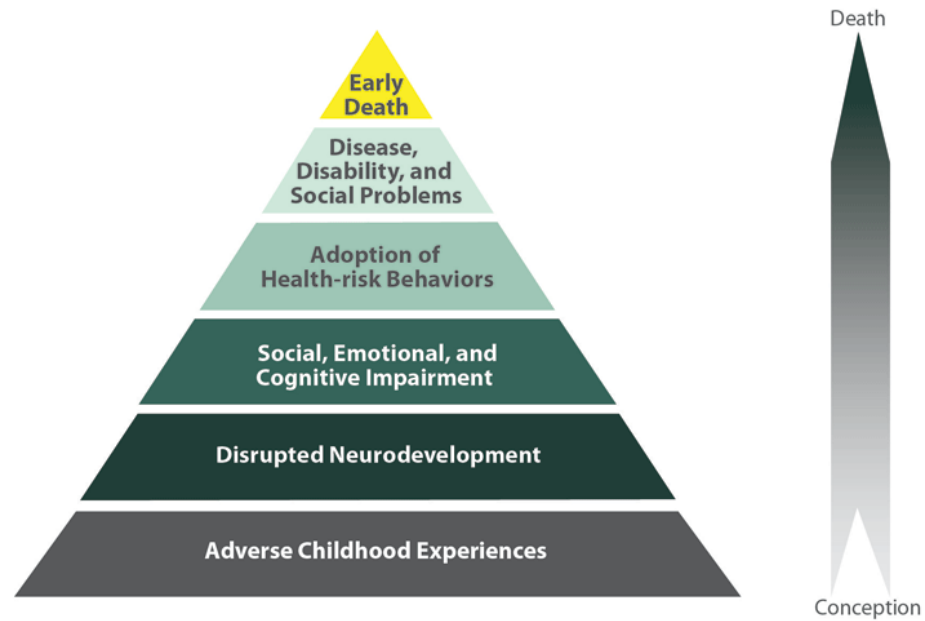
# Adverse Childhood Events:

As the number of ACEs increases so does the risk for the following\*:

- ▶ Alcoholism and alcohol abuse
- ▶ Chronic obstructive pulmonary disease
- ▶ Depression
- ▶ Fetal death
- ▶ Health-related quality of life
- ▶ Illicit drug use
- ▶ Ischemic heart disease
- ▶ Liver disease
- ▶ Poor work performance
- ▶ Financial stress
- ▶ Risk for intimate partner violence
- ▶ Multiple sexual partners
- ▶ Sexually transmitted diseases
- ▶ Smoking
- ▶ Suicide attempts
- ▶ Unintended pregnancies
- ▶ Early initiation of smoking
- ▶ Early initiation of sexual activity
- ▶ Adolescent pregnancy
- ▶ Risk for sexual violence
- ▶ Poor academic achievement



# ACE pyramid



Mechanism by Which Adverse Childhood Experiences Influence Health and Well-being Throughout the Lifespan



# ASSESSMENT OF PTSD IN SUD

*from Essentials of Addiction Medicine*

- ▶ Given the high rates of trauma and PTSD among individuals with SUDs, it is important to screen all SUD patients.
- ▶ As a general rule, PTSD assessment should be conducted after a patient has emerged from acute alcohol or drug intoxication and withdrawal.
- ▶ In contrast to other anxiety disorders, less abstinence may be required in order to establish a diagnosis of PTSD among SUD patients because of the unique nature of the diagnostic criteria (i.e., requirement of exposure to criterion A traumatic event).
- ▶ Intrusive PTSD symptoms (e.g., recurrent thoughts or images related to the trauma) are uniquely characteristic of PTSD and are less likely to be mimicked by substance use or withdrawal.
- ▶ Other PTSD symptoms (e.g., irritability or outburst of anger, sleep impairment) could be exacerbated by the use of, or withdrawal from, alcohol and drugs and should be carefully assessed.



# Alpha -2- Selective Agonists

- Clonidine (Kapvay, Clonidine XR)
  - Guanfacine (Tenex, Intuniv)
  - Prazosin (Minipres)
  - Lofexidine
- 
- inhibits adenylyl cyclase activity, reduces brainstem vasomotor center-mediated CNS activation; used as antihypertensive, sedative & treatment of opiate dependence/withdrawal, ADHD/conduct disorder in children, post traumatic stress disorder, and alcohol withdrawal symptoms.



# My approach to differential diagnosis

- ▶ Attend to medical/physiological status – which includes medications, drugs they are using, medical problems
- ▶ Address safety issues to include acute mental status issues – depression, anxiety, suicidality, psychosis, mania
- ▶ Approach the patient with the assumption they have a significant ACE score, and consider this is the patients current presentation when considering the diagnoses
- ▶ Approach all patients from an attachment perspective




# What does Attachment Theory say about Addiction?

- An attempt at self repair that fails (Kohut 1977)
- Addiction further prevents healthy repair from occurring thru isolation and increased emotional dysregulation
- Until an addict learns to develop the capacity for mutually satisfying relationships they are vulnerable to relapse.



# The brain opioid theory of social attachment

- ▶ Children with poor attachments exhibit lower opiate receptor density (Flores 2005)
- ▶ Kraemer's (1985) peer monkeys and isolation syndrome
  - ▶ Dysregulation of opioid, Serotonin, Dopamine, NE
- ▶ FMRI's of the Brain of patients experiencing pain compared with patients experiencing rejection/loss (Eisenberger and Lieberman, 2003)
- ▶ Depression and isolation increase Mu activity



# Secure versus Insecure Attachment

- Secure attachment liberates. (Safety permits play)
- Insecure leads to patterns of either rigidity or chaos (Siegel)
- Secure attachment maintains homeostasis
- Insecure attachment destabilizes
- Secure attachment is required throughout the lifespan
- Isolation causes increased stress and poorer health outcomes across the lifespan

# Alcoholics Anonymous







# EPIDEMIOLOGY OF ADHD AND SUBSTANCE USE DISORDERS

- ADHD is highly prevalent in child and adolescent populations, with rates ranging from 8% to 18%.
- The adult rate of ADHD is estimated to be from 2.5% to 4%.
- Substance use disorders (SUDs) are more common among adults with ADHD, with rates two to three times than found in the general population.
- ADHD is overrepresented among SUD individuals in the general population and those seeking treatment for their SUD.
- SUDs appear to be overrepresented in adults with ADHD, whether or not they are seeking treatment, roughly three times as likely as those without ADHD to have an SUD.



## **“ADHD Medication and Substance-Related Problems”**

*American Journal of Psychiatry* 2017: 877-885. Patrick Quinn, PhD (Indiana University), Zheng Chang, PhD., Kwan Hur, PhD., Robert D. Gibbons, PhD., Benjamin B. Lahey, PhD., Martin Rickert, PhD., Arvid Sjolander, PhD., Paul Lichenstein, PhD., Henrik Larsson PhD., Brian M. D'Onofrio, PhD.

- Review of commercial health care claims from 2,993,887 ADHD patients that included adolescents and adults who received either ADHD diagnosis and/or ADHD treatment with stimulant therapy or atomoxetine
- Does not settle controversy or questions regarding best approach in the treatment of co-occurring ADHD and addiction in adults
- “Medication periods” were associated with reduced risk of ‘substance related events’ which are defined by ambulance, inpatient, or emergency room visits related to substance use.



# Patients with Addiction and Co-occurring Disorders..

- Poorer prognosis and poorer outcomes
- Higher risk of suicide
- Less likely to engage in outpatient therapy
- More likely to present/utilize in acute medical/psychiatric settings
- 50-75 percent of patients in substance abuse settings
- 20-50 percent of patients in mental health settings



# Likelihood of a Suicide Attempt

## Risk Factor

- Cocaine use
- Major Depression
- Alcohol use
- Separation or Divorce

## Increased Odds Of Attempting Suicide

62 times more likely


41 times more likely

8 times more likely

11 times more likely

NIMH/NIDA

ECA EVALUATION



# Substance-Associated Suicidal Behavior

*(from Essentials of Addiction Medicine)*

- ▶ Substance-induced depression can dissipate rapidly, but it is as dangerous as is major depressive disorder in terms of the risk of suicide and self-injurious behavior. When completed suicides are investigated, the rate of comorbidity is high.
- ▶ European autopsy studies of suicide victims report that around 40% had alcohol dependence and that half of them had comorbid depression and 42% had a personality disorder.
- ▶ Studies suggest that alcohol dysregulates mood independent of use patterns, suggesting that some individuals are at risk of severe depression regardless of the chronicity of their alcohol use.
- ▶ Both independent depression and substance-induced depression are associated with suicidal ideation and planning, and aggression is correlated with suicide attempts.



# Thanks

- Sarah Acland
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  - Arthur Meyer
  - Estate Sokhadze
- 