Co-Morbid Psychiatric Disorders in Patients With Substance Use

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Co-occurring disorders are common

- 45% of patients with alcohol use disorder (abuse or dependence)
- 72% of individuals with drug use disorder (at least one co-occurring psychiatric disorder)

Mental health and addiction treatment settings

- During 1980's and 1990's substance abuse treatment programs typically reported that 50 to 75% of clients had co-occurring mental disorders
- Clinicians in mental health settings reported that between 20 and 50% of their clients had co-occurring substance use disorders

CSAT, SAMHSA (TIP) Series 42. DHHS Publication No. (SMA) 05-3992. 2005, Rockville, MD

- 21.3% of those with serious mental illness had past year substance dependence or abuse of alcohol or any illicit drug

National Epidemiologic Survey on Alcohol and Related Conditions, 2004

AUDADIS (NIAAA) Alcohol Use Disorder and Associated Disabilities Interview Schedule, (N=43,093)

MAIN OUTCOME MEASURES:

- 12 month and lifetime prevalence of drug abuse and dependence
- associated correlates, treatment rates, disability, and co morbidity with other Axis I and II disorders

Compton, et al, Arch Gen Psychiatry. 2007 May;64(5):566-76

AUDADIS (NIAAA) Alcohol Use Disorder and Associated Disabilities Interview Schedule, (N=43,093)

12 month (1.4%) and lifetime (7.7) drug abuse
12 month(0.6%) and lifetime (2.6%) drug dependence

*Strong association:
with other substance use disorders, antisocial personality disorder
*Significant association:
with mood disorders, generalized anxiety disorder

Compton, et al, Arch Gen Psychiatry. 2007 May;64(5):566-76

AUDADIS (NIAAA) Alcohol Use Disorder and Associated Disabilities Interview Schedule, (N=43,093)

12-month (4.7%) and lifetime (17.8%) alcohol abuse
12-month(3.8%) and lifetime 12.5%) alcohol dependence

Significant association between:
*other substance use disorders and alcohol use disorder
*mood, anxiety, and personality disorders

Compton, et al, Arch Gen Psychiatry. 2007 May;64(5):566-76

AUDADIS (NIAAA), US adults (N=43,093) Co-Morbidity/treatment

Drug Use Disorders:

*Lifetime treatment or help-seeking uncommon, 8.1%, for abuse; 37.9% for dependence

*Treatment was associated with psychiatric co-morbidity, not demographic characteristics

Alcohol Use Disorders:

*Lifetime treatment rate for alcohol dependence 24.1%, (less than rate found 10 years earlier)

Compton, et al, Arch Gen Psychiatry. 2007 May;64(5):566-76

National Co-Morbidity Study

- ETOH dep: high lifetime rates of clinical depression (24% male, 49% female) and dysthymia (11% male, 21% female)
- Bipolar disorder: high rates of ETOH (61%) and other drug dependence (41%) **(APA, 1994; SAMSHA, 2003)**

Eating disorders and substance use

- 50% of persons with an eating disorder also have problematic drug or alcohol use, (compared with 9% of the general population)
- Approx. 35% of females with a substance use disorder report having an eating disorder (compared with 1–3% of the general population)

Root, et al, Int J Eat Disord March 2009; (online pub.)

Eating disorders and substance use

Alcohol and drug abuse or dependence more common with both mixed binge/purging and purging only eating behaviors

than in:

restrictive only eating behaviors

Treatment outcomes poor unless both conditions addressed

Root, et al, Int J Eat Disord March 2009; (online pub.)

Attentional disorders and substance use

- Approx. 30% of individuals with ADHD continue the diagnosis into adulthood
- Summary data for adults and adolescents with substance use disorders found a mean rate of 23% of subjects with ADHD
- Summary data for adults with ADHD estimate rates of alcohol use disorders between 17% and 45% and rates of drug abuse or dependence to be between 9% and 50%

Wilens TE, et al Hosp Comm Psychiatry 45:421-435, 1994

National Co-Morbidity Study

- High rates of personality disorders, esp. antisocial, narcissistic and borderline **(SAMSHA, 2003)**
- …which predict poor response to treatment and greater risk of suicide **(Ziedonis, et al., 1994)**

Why is diagnosis difficult?

- Alcohol/drugs can cause psychiatric symptoms in anyone (acute toxicity)
- Prolonged A/D use can cause short or long-term psychiatric illness
- A/D use can escalate in episodes of psychiatric illness
- Psychiatric symptoms and A/D use can occur in other psychiatric disorders
- Independent addiction and psychiatric illness

Marc A. Schuckit: Am. J Psychiatry, 143:2 p. 141 – modified

Chicken or Egg?

25-year longitudinal study, 635 boys, 630 girls, birth cohort, general community sample in New Zealand

found that:

problems with alcohol led to increased risk of Major Depression

as opposed to:

a self-medication model in which Major Depression led to increased risk of AAD.

Fergusson, Boden, et al, Arch Gen Psychiatry. 2009 Mar;66(3):260-6

Diagnosis

Red Flags for co-occurring psychiatric illness include:

- Family history of psychiatric illness
- Onset of psychiatric symptoms before the onset of substance use disorder
- Psychiatric symptoms during lengthy periods of abstinence in the past

Substance-induced mood disorder DSM IV

- **Prominent/persistent mood disturbance**
- **Develops within 1 month of intoxication or withdrawal *or* medication use is causative**
- **Not better accounted for by other axis I d/o**
- **Sx not exclusively during delirium**
- **Sx cause significant distress or impairment**

Substance induced mood Sx ?

- 1886, Erlenmeyer noted depression following cocaine use (as did Freud)
- Weddington et al. (1990), Satel et al. (1991), noted depressed mood, emotional flatness and craving in newly abstinent cocaine addicts which generally resolved in 21 to 28 days.

Substance induced mood Sx ?

- Volkow, et al. (1990) used PET studies to demonstrate a temporary reduction in post-synaptic dopamine receptors which normalized within 4-5 weeks post-withdrawal

Early phase psychosis w/ co-morbid substance use vs. substance induced psychosis ?

N=386(acute care urban setting, NYC), 44% sub induced psychosis, 56% primary psychosis

Parental substance abuse, a diagnosis of any drug dependence, and visual hallucinations,

predicted a diagnosis of:

substance-induced psychosis vs. primary psychosis

(Caton et al, Arch Gen Psychiatry. 2005;62:137-145.)

Substance induced mood Sx ?

- Most drugs of abuse have dopaminergic *and* serotonergic effects = mood effects
- Depression is most common symptom during any substance withdrawal followed by anxiety and irritable mood
- Withdrawal -related mood symptoms may last several weeks to months depending on the substance.

Substance induced mood Sx ?

191 male alcoholics, none with prior major psychiatric Hx.

- **42% had mod.-severe depressive Sx** (Ham D > 19) **within 48 hrs. of admission**
- **At 2 weeks, only 12%** with Ham D score >19
- **At 4 weeks, only 6%** with Ham D score > 19
- **Rapid decline in Sx intensity** over first 4 weeks of Tx., largest reduction at 2 weeks

Recommend: defer starting antidepressant Rx prior to first 4 weeks of abstinence*

(Brown and Schuckit, 1988)

Diagnostic and treatment considerations/ symptom severity

- ability to participate in treatment or recovery process compromised by symptom severity?
- apathy, anxiety with distractibility, sig. sleep disturbance can constitute barriers to recovery
- despite no clear diagnosis early on, can target a symptom complex to treat and follow, i.e, irritability

Diagnostic and treatment considerations/ treatment setting

- controlled, supportive setting where symptom course can be safely observed, “watch and wait”?
- Or, outpatient, questionable supports, few coping skills to manage mood, struggling with structure required to maintain abstinence?

Every decision has consequences:

Mental illness label may be incorporated into denial system, less unacceptable than being an “addict”

the diagnosis and treatment will always take on internal meaning; patient develops transference reaction to both

Every decision has consequences:

Even Rx "non-abusable" Rx:

- can increase reliance on a relationship with chemicals for well being
- hinder transfer of dependency needs to human and spiritual relationships,
  esp. "chasing symptoms" with poly-pharmacy

Every decision has consequences:

Diagnosis:

Culture of recovery may not support mental health diagnosis or Tx.,
leading to "secrets", criticism or rejection, which undermine engagement

No Diagnosis:

Relapse, life consequences, and suicide due to untreated, undiagnosed, or ignored psychiatric disorders are real

Every decision has consequences:

- Hendrikson et al. (1993) reported 43% of a group of Finnish suicide victims had alcoholism and, of these, 48% had co-morbid depression

  Persons with persistent anxiety, apathy, irritability or social withdrawal are describing barriers to engagement in recovery process

Case Study 1: Depressive Sx in 20 y.o. male

- Mr. B, 20 y.o. male, abstinent 5 weeks, in LTR for ETOH, cannabis, opioid dep.
- **HPI:**
  - ? Diagnosis, evaluate Rx: Celexa® (citalopram) 40mg/d, trazodone 150mg for sleep
  - Symptoms of depression began 6 mos. prior, in context of: active substance use, life consequences, family discord, academic failure, exhaustion of resources.

Case Study 1: Depressive Sx in 20 y.o. male

- PCP, 2 mos. PTA. denied substance use, c/o fatigue, anhedonia, dec. motivation, concentration, poor sleep, irritable, hopeless + social withdrawal = Celexa®
- mood now, "OK," sleeps 7 hrs, good appetite, + enjoyment, +/- low energy but improving, forming friendships with his group members, supports
- No SI, HI, no psychotic spectrum Sx.

Case Study 1: Depressive Sx in 20 y.o. male

- **Past Psych Hx:** None beyond HPI
- **Psych Sx review**: No mania/hypomania, anxiety/OCD, psychosis, self harm or disordered eating
- **PMH:** Non-contributory
- **FHx:** *Mother: problematic ETOH use,
  *Father with "depression" ? Dx or TX.
  *P. cousin (distant), suicide when patient age 9

Case Study 1: Depressive Sx in 20 y.o. male

- **Substance Hx:**
  - ETOH, 1st at age 14, daily use 6-10 beers for 9 mos prior to 11/06 then MIP, tether
  - Cannabis: 1-8 "bong hits" daily for past 2.5 yrs
  - Oxycontin®, first at age 18, 4-5 occ./week, 80-120mg/occ. ("snorting") X 6 mos.

Case Study 1: Depressive Sx in 20 y.o. male

Social Hx:

*Only child, lived with parents until they divorced when patient age 15, "mom unhappy with marriage", lived with mother since

*Never married, no long term sig other relationships.

*H.S. grad, "barely"

*On probation for DUI 12/06 (BAC 0.23%), 3 prior MIP's

Case Study 1: Depressive Sx in 20 y.o. male

- **Diagnosis:**
  - **AXIS I**: ETOH dep., cannabis dep., opioid dep., early full remission
    - Substance-induced depressive disorder by HX
  - **AXIS II**: deferred
  - **AXIS III**: no active medical problems
  - **AXIS IV**: mod. to severe inc. legal, social, occupational, family, financial
  - **AXIS V**: 40

Case Study 1: Considerations

- Stable/improving mood, engaging in program
- No prior psychiatric history absence of substance use
- No self perceived need for medication or investment in having a psychiatric diagnosis.

Case Study 1: Depressive Sx in 20 y.o. male

- Recommendation:
  1. Taper off Celexa® over 2-4 weeks
  2. Stop trazodone
  3. Continue to monitor mood

Case Study 2: Bipolar illness

- J.W., 41 year old male
- 20 year Hx progressive cocaine and ETOH dep.
- 5 failures at lesser levels of care
- Now in treatment after 6 month relapse had 1 year in recovery; now has legal, financial, housing, occupational consequences

Case Study 2: Bipolar illness

- "I've always been a high energy person, but I feel terrible now"
- First seen 4 weeks into treatment, referred for persistent depressive Sx
- Was irritable first 2 weeks of Tx
- Now is "tired, no motivation, cry sometimes - never used to, don't even know why I'm here, nothing's going to help" "8/10" (10 worst)

Case Study 2: Bipolar illness

- No SI, No HI, No psychotic Sx,
- Sleeps 6-7hrs., is eating, marginal participation in program, withdrawn
- **Dx: depressive disorder NOS, r/o major depression**
- *Recommend:* begin Wellbutrin® (bupropion), pt. declined, "don't want to be on meds, I'll be OK"

Case Study 2: Bipolar illness

- **Past Psych Hx:**
  - No hosp., no suicide, no prior psychiatric Dx or Tx
  - Recalls irritability, "trouble sleeping" during prior year in recovery
  - Relapses preceded by disengagement from recovery, meetings, supports "people told me I took my will back, didn't want to stay sober, self-sabotage"

Case Study 2: Bipolar illness

Before relapses, "felt great, confident I'd be OK, get a good job, able to live on my own and not use"

Now bewildered, "I don't know what I was thinking when I stopped doing my program, picked up again"

Case Study 2: Bipolar illness

- **PMH:** Unremarkable
- **FHx:** Father alcoholic, "had a distant relative, was in a (psych) hospital for a long time"
- **SA Hx:**

  Cocaine, first at 18, regular use by 21, powder then crack primarily by age 35 "cheaper, stronger."

  Longest abstinence 1 year before most recent relapse
- Alcohol, first at 16, pattern is use along with cocaine, doesn't drink otherwise, "takes the edge off, once I start, I drink a lot" (1/5 liquor per day)
- Meets DSM criteria for dependence on both

Case Study 2: Bipolar illness

- **Social HX:**

  *Only child, raised by bio parents, mother now 70, was a seamstress, father was a factory worker, dec. 10 yrs. ago due to MI.

  *AA Computer Science, "no trouble getting a good job, but I lose it when I smoke crack."

  *DUI age 22, no other legals

  *Never married, no children, longest S.O. relationship 1 year, "cocaine is the problem"

  *Patient denies abuse HX

Case Study 2: Bipolar illness

- **re-evaluated at week 8 due to agitation**
  - **Past 2 weeks:** "wound up," getting up at 5 am and exercising, rapid/ pressured speech, loud, "grandiose in group, other clients get mad at him"
  - Barn crew leader, residents complaining, "no time for breaks, one job after another, yells at us, jumps in and starts doing it himself if he thinks it's not right, control freak"

Case Study 2: Bipolar illness

- On interview

  *agitated, gets up, paces, hand gestures

  *rapid pressured speech, irritable, grandiose

  *looks startled/fatigued

  *tangential but re-directable, no frank psychosis

Case Study 2: Bipolar illness

- Dx: Axis I:
  - Bipolar I, currently manic
  - ETOH, Cocaine dep.

Case Study 2: Bipolar illness

- Rx:
  - Risperdal® 2mg now, then 3 mg/d + 2mg avail as needed
  - lithium 300mg 2x/d for 5 days, check level/increase to 1.0mmol/L
  - trazodone 100-200mg q hs prn sleep
  - Labs: COMP panel, TSH – both reported WNL next day
  - Safety plan: transport to UM Psych ED if worsening Sx

Case Study 2: Bipolar illness

- **Outcome**: Rapid resolution over next week
  - Continued on **lithium 1200mg/d**
  - **Week 16:** presented with Sx meeting DSM criteria for major depression,

  Rec: add **Wellbutrin®** (bupropion) **300mg/d**
  - **Week 38:** Had moved back to Detroit area for work, gone off Rx, "felt good, good job, didn't think I needed it anymore," relapsed

Case Study 2: Bipolar illness

- Likely undiagnosed bipolar illness, relapses attributed to simple choice appear more consistent with poor judgment which often accompanies this diagnosis
- Medication compliance is critical in maintaining recovery
- Mood stabilizers cap mania more efficiently than troughs of depression, may require addition of maintenance anti-depressant

General points on pharmacotherapy for co-occurring disorders

- **Avoid the trap of reacting to symptoms with polypharmacy**
- Many substance-use patients like taking drugs, *any drugs*
- Decision to medicate should always be with clear rationale and consideration of alternatives including psychosocial and behavioral interventions.

Generally contraindicated due to risk of cross-dependency:

Benzodiazepines: Ativan, Xanax, Klonopin, Valium, Librium, Restoril, Tranxene, Versed

Benzodiazepine analogs: Ambien, Sonata, Lunesta

Other Sedative-Hypnotics: Soma, meprobamate, chloral hydrate, etc.

Barbiturates: Fiorinal, Fioricet, phenobarbital

How do you treat anxiety complaints?

- **Psychotherapy (CBT), optimize supports +/-**
- **First line:**
  - **SRI**, dose higher than lower; may take up to twice as long for max. effect vs. treatment of major depression
- **Second line: SNRI**'s (generally more activating SE profile), **TCA**'s
  - Rescue medication:
  - ***Neurontin® (gabapentin)** (100-600+mg 1-3x/d)
  - ***low dose Seroquel® (quetiapine)** (12.5-50mg 1-3x/d)

**off label*

How do you treat sleep complaints?

- **Sleep hygiene** (sleep habits most likely cause of insomnia in a neurologically intact adult)
- **Short-term symptomatic treatment:**
  - **Deseryl® (trazodone)** 25-300mg at HS
  - **Neurontin® (gabapentin)** 100-1800mg at HS
  - **Seroquel® (quetiapine)** 12.5-300mg at HS *(weight gain/metabolic SE)*
  - **Remeron® (mirtazepine)** 7.5-15mg at HS *(higher doses are activating)*
  - **Elavil® (amitriptyline)** 10-100mg or **imipramine** 25-100mg at HS
    - *(All above are off label)*
- **Melatonin, chamomile tea**
  - **Rozerem® (ramelteon)** – binds to MT 1, MT 2 receptors in the SCN

ADHD, *be cautious:*

- Avoid "rubber stamping" a diagnosis and treatment regimen
- Most common explanation for cognitive complaints in adults w/o early ADHD history is untreated mood disorder
- get neuropsychiatric testing if necessary for clarification
- Consider non-pharmacologic interventions
- Psychostimulants are best avoided due to risk of re-activation of addictive disease (always risk versus benefit, untreated ADHD can be a risk for relapse, but reactivation of addiction can be lethal)

ADHD, *be cautious:*

- Controlled release (i.e. **Adderall**®, **Concerta**®) or pro-drug preparations (**Vyvanse**®) have some lessened abuse potential as harder to get high peak effects by snorting or injecting
- *However*, they all activate mesolimbic and mesocortical areas of the brain involved in addictive disease and have the capacity to kindle craving, re-activate addiction, and all have been abused

Medical procedures and pain management in recovering persons:

- Generally avoid elective procedures in 1st year of recovery
- Co-ordination of care with other providers is essential (PCP, surgeon, dentist, etc.)
- Consider non-opioid measures such as long-lasting local anesthesia (i.e, bupivicaine), NSAIDS, acetominophen, anti-convulsants for neuropathic pain, topical analgesics, physical therapy

Medical procedures and pain management in recovering persons:

- opioids (inc. Ultram®) only after other measures are considered or proven ineffective
- Involve natural and treatment supports
- Scheduled dose for specified duration, avoid PRN's
- Communicate expectations for length of treatment, educate on natural course of painful condition
- Never hesitate to seek consultation

Consider possibility of relapse in presence of psychotropics

- **ETOH + valproic acid:** Can inc. hepatotoxicity
- **ETOH +TCA**: Can get additional cardiac conduction effects
- **ETOH withdrawal + TCA or bupropion**: Can inc. seizure risk
- **ETOH, cocaine or AMP + lithium**: Dehydration can inc. toxicity
- **Opioids, CNS depressants + valproic acid or gabapentin**: Can inc. CNS depression

Dual recovery – integrated interventions include:

- Screening and assessment for both psychiatric *and* substance related disorders
- Dual recovery mutual self-help meetings
- Dual recovery groups (i.e, S-DBT)
- Motivational enhancement interventions
- Group interventions (demonstrated efficacy over individual therapy)
- Combined psychopharmacological interventions

Remember

- Abstinence is necessary but doesn't equal recovery
- Addictive disease is frequently accompanied by:

the formation of cognitive distortions and maladaptive patterns of behavior

resulting in disturbances of mood and function

Remember

- Simple abstinence does not address these complex issues
- Psychosocial interventions are necessary therapeutic elements in the process of recovery

Remember

- Not only are psychosocial interventions potent, they are the mainstay of addiction treatment
- Medications are unlikely to work without psychosocial therapy and in the presence of ongoing substance use.

Successful adaptation to the substance-free state for most means:

- Abstinence plus engagement in a psychosocial process which can facilitate a transfer of dependency needs to sources of supply which are:

*non-destructive

*intrinsically rewarding

*inexhaustible