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**Outline**

- Prevalence
- Psychiatric symptoms and abstinence
- Diagnosis
- Treatment

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## Prevalence of dual diagnosis patients

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## Prevalence

- Epidemiologic Catchment Area Study (ECA)
- National Comorbidity Study (NCS)

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## ECA (1980-1984)

- Lifetime prevalence of any psychiatric disorder = 23%
- Lifetime prevalence for all Substance Use Disorders (SUD) = 17%
- Association between a primary psychiatric disorder and a SUD was:
  - 4.5 (odds ratio) for any Drug Use Disorder
  - 2.3 for any Alcohol Use Disorder

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### ECA (continued)

- MDD: risk for SUD increased x2
- Panic Disorder: risk for SUD increased x3
- Schizophrenia: Risk for SUD increased x5
- Bipolar d/o: Risk for SUD increased x7
- ASPD: Risk for SUD increased x30

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### NCS (1990-1992)

- 48% of people 15-54 have a lifetime psychiatric illness or SUD
- 27% had a lifetime SUD
  - 14% with lifetime Alcohol Dependence
  - 8% with lifetime Drug Dependence

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### Depression and SUDs

- MDD:
  - 17% comorbid ETOH Dependence
  - 18% other Drug Dependence
- Cocaine Dependence
  - Approximately 40% with lifetime MDD
- Alcohol Dependence
  - Approximately 40% with lifetime MDD
- Opiate Dependence
  - Approximately 60% with lifetime MDD

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## Bipolar Disorder and SUDs

- Bipolar Disorder
  - 56% with any lifetime SUD
  - 33% with lifetime Alcohol Abuse
  - Most commonly abused substances: Alcohol >> cocaine/Marijuana
- Cocaine Dependence: 20% lifetime Bipolar d/o
- Alcohol Dependence: 7% lifetime Bipolar d/o
- Opiates: 1% lifetime Bipolar d/o

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## Psychotic disorders and SUDs

- 47% of Schizophrenics have a lifetime SUD (Alcohol, Cocaine, Marijuana)
- Approximately 80% of Schizophrenics are Nicotine Dependent
- Co-morbid SUD in Schizophrenics strongly predicts poor treatment outcome

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## ADHD and SUDs

- 52% of Adult ADHD with lifetime SUDs, mostly cocaine, alcohol and opiates
- Treatment with stimulants in both teens and adults decreases future substance abuse
- In teens, co-morbid conduct disorder and bipolar disorder mediate future substance abuse rather than ADD per se

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## Axis II Disorders and SUDs

- 60% co-morbidity of Personality disorders and SUDs
- Anti-social Personality Disorder the most prevalent followed by Borderline PD
  - ◆ ASPD: From ECA study– having ASPD increased the relative risk of having any substance use disorder by a factor of 30 (84% co-morbidity)

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## Anxiety disorders and SUDs

- Any Anxiety d/o: co-occurrence of any SUD is 24%
- PTSD: 52% of men and 28% of women with a lifetime SUD
- Panic disorder: 28% with lifetime Alcohol Dependence

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## Relationship between Psychiatric Symptoms and Abstinence

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## Drug Induced Psychopathology

### DRUG STATES

- Withdrawal
  - ◆ Acute
  - ◆ Protracted
- Intoxication
- Chronic Use

### SYMPTOM GROUPS

- Depression
- Anxiety
- Psychosis
- Mania
- Personality disorders

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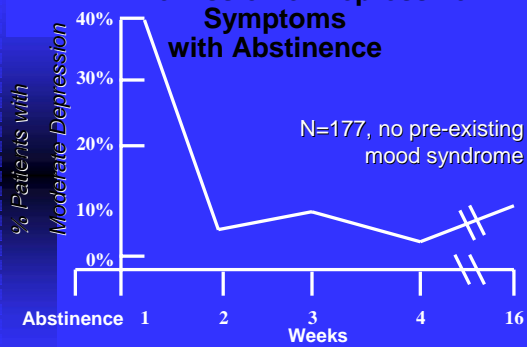
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## Remission of Depressive Symptoms with Abstinence



Brown S, Schuckit M. *J Stud Alcohol*. 1988;49:412-417.

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## Psychotic symptoms and abstinence

- 165 chronic psychotic patients with cocaine abuse or dependence
- 6 weeks of abstinence needed for diagnosis of schizophrenia
- 81% could not make a definitive diagnosis
  - ◆ 78% insufficient abstinence, 24% poor memory
  - ◆ After 18 months, 75% still diagnostic uncertain
  - ◆ Shaner, *Psych Ser*, 1997

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## Results:

- Diagnosis of depression after one week of abstinence was associated with greater antidepressant effect
- A trend for medication effect to be larger in studies of alcohol than drug dependence
- High placebo-response rates (nonabstinent or no long-standing depression)

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## Results

- Antidepressant medication effective for treatment of depressive syndromes among patients with substance dependence
- Antidepressant medication can diminish quantity of substance use but not helpful in sustained abstinence
- Improvement in substance use correlated with improved depression regardless of medication response

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## Conclusions:

- Diagnosis of depression, a period of abstinence is preferred but not required
- Current recommendations that alcohol and drug abuse not to be a barrier to treatment of depression
- Antidepressant treatment may have some impact on alcohol and drug use (reduced amount vs. abstinence)

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## Diagnosis of Dual Diagnosis Patients

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- ### Initial Treatment
- Treatment of severe symptoms- withdrawal symptoms, severe psychiatric symptoms, medical symptoms
  - Assess Motivation for Change
  - Matching the patient to treatment

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- ### Help in making the diagnosis
- Primary vs Secondary Diagnosis- Age of onset
  - Premorbid history
    - ◆ Development
    - ◆ Relationships
    - ◆ Work function
    - ◆ School performances
  - Family history: (+)FH= more likely to be the primary disorder (i.e. bipolar disorder)
  - Periods of abstinence; but how long?
  - Severity of symptoms during periods of active substance abuse vs. sober period

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## Help in making the diagnosis (cont)

- Collateral history: family, friends, case managers, treatment providers
- Toxicology monitoring: Urine, breath, blood, hair, saliva, sweat
- Despite best efforts, it is often difficult to establish a definitive Dx:
  - ◆ Selection bias: Tendency to see patients who are advanced in the course of illness- difficult to reconstruct the past chronology of events

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## Heterogeneous Population of Dual Diagnosis Patients (ASAM placement criteria)

- Addiction Only
- Mildly-Moderately Severe
- Highly Severe
- Diagnostic Uncertainty
  - Mee-Lee, David (2001) ASAM PPC-2R. ASAM
  - Tsuang, J, Shaner, 1997

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## Addiction Only Patients

- Patients with substance abuse or dependence problems
- No axis I and/or II psychiatric diagnosis or mental health issues
- Need addiction service only

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## Mildly to Moderately Severe

- Sub threshold diagnosis (traits of Axis I or II psychiatric disorders)
- Diagnosis of Axis I or II, stable on treatment
  - ◆ Anxiety or mood disorders- stable
  - ◆ Bipolar mood disorder- resolving
  - ◆ Need primary substance abuse treatment, available psychiatric treatment capability

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## Highly Severe

- Axis I or II psychiatric diagnosis-unstable
  - ◆ Schizophrenia spectrum disorders
  - ◆ Severe mood disorders with psychosis
  - ◆ Severe anxiety disorders
  - ◆ Severe personality disorders
- Needs concurrent psychiatric and substance abuse treatment

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## Diagnosis Uncertainty

- Most severe patients (poor histories, no collaterals, homeless)
- Unstable and persistent mental and addictive disorders
- No sobriety
- Cognitive impairment
- Unclear diagnosis? Still need treatment
- Needs integrated, concurrent psychiatric and substance abuse treatment

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## Integrated Treatment Program

### Treatment approach

- Combine mental health/Substance abuse treatment
- Outpatient/inpatient
- Comprehensiveness
- Medication management
- Outreach
- Social support

Drake, Psych Ser 2001, Tsuang, Psych Ser 1997, Ho, AJP 1999

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## Treatment of Dual Diagnosis Patients

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## Treatment

- Pharmacological Interventions
- Abstinence based vs. Harm Reduction
- Psychosocial interventions-integrated treatment
- Relapse Prevention
- Alternative Modalities
- Case Management Services

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## Pharmacological Strategies for Treatment of Substance Use Disorders

- Treat Withdrawal Symptoms (acute/protracted)
- Initiate and Facilitate Abstinence
- Relapse Prevention
  - ◆ Treat Associated Psychiatric Syndromes
  - ◆ Decrease Craving
  - ◆ Aversive Agents

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## Pharmacotherapy

- NO MAGIC BULLET!!
- When do I treat?
- Can I use other addictive medications (benzodiazepines and stimulants?)

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## Current Pharmacological Agents for Treatment of Alcohol Dependence

- BZD, Anti-Seizure Medications, Anti-Hypertensive, Lithium, SSRs, Buspirone
- Disulfiram (1948)/Calcium Carbamide
- Naltrexone (ReVia)-1994
- Acamprosate (Amino Acid Derivative)-2004  
Mimics GABA<sub>A</sub> Receptor/Amino Acid derivative
- Long-acting IM injectable naltrexone (Vivitrol)

Volpicelli, AGP 1997, Littleton, Addiction 1995, Johnson, JAMA 2000, Krystal, NEJM 2001

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## Pharmacological Agents for Treatment of Alcoholism

- Investigational drugs
  - ◆ SSRIs
  - ◆ Ondansetron-SHT3 antagonist
  - ◆ Topiramate(Topamax)

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## Current Pharmacological Agents for Treatment of Stimulant Dependence

- Dopaminergic Agents (Agonist, partial agonist, antagonist)-Bromocriptine, Levodopa, Amantadine
- Serotonergic Agents-Sertraline, Fluoxetine, Desipramine
- Others- Carbamazepine, Bupropion, Selogiline, Modafinil (Provigil), Disulfiram

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## Current Pharmacological Agents for Treatment of Opiate Dependence

- Clonidine/BZDs for Withdrawal
- Naltrexone for Maintenance
- Methadone for Withdrawal and Maintenance
- Buprenorphine for Withdrawal and Maintenance

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## Pharmacotherapy

- Nicotine- Nicotine replacement (patch, gum, nasal inhaler, lozenge) and Wellbutrin  
All double quit rates as does psychosocial interventions
- Varenicline (Chantix)-selective acetylcholine receptor partial agonist

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## Psychosocial Interventions

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| Motivational Enhancement Therapy (MET)   | Family Psychotherapy-                         |
| CBT (i.e. Relapse Prevention), DBT, Dual Schema Focus Therapy  | Family systems, CBT, Network Therapy          |
| Group Psychotherapy (integrated)- AA/NA, Double Trouble Groups, DBT, psychoeducation, relapse prevention | Behavioral interventions:                     |
| Case Management  | Contingency Management, Therapeutic Community |

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## Relapse Prevention

- Based on Social Learning Theory
  - > Modifying Maladaptive Behaviors
- Relapse Episode Determinants:
  - > Intrapersonal- negative emotional states, negative physical states, testing personal control
  - > Interpersonal- coping with frustration, social pressures, enhancing positive emotional states

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## Relapse Prevention (continued)

- Identify High-Risk factors
- Dealing with cues, cravings, and frustration
- Dealing with social pressures
- Coping with cognitive distortions
- Managing a slip or a full relapse

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## Spiritually based treatment

- AA/NA as the prototype
- Group cohesion
- Inherent structure and slogans
- Diverse model: Disease, social learning (ie relapse prevention), moral models, and psychodynamic (self-psychology)

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## Alternative Addiction therapies

- Music– drum circle
- Art
- Acupuncture
- Yoga
- Breathing/relaxation exercises
- Dance/movement

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## Treatment Outcome

- No one treatment fit all, matching patients to different treatment modalities!!
- Better outcome: integrated approach, intense treatment, longer, employed, family support
- Severity of symptoms better predictor of outcome (vs. diagnosis)
- Denial and pre-contemplation stage, worse outcome

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