CO-OCCURRING DISORDERS:

The Epidemiology, Conceptual Issues & A Pragmatic Approach to Treatment

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CASE EXAMPLE-1

• 63 year old white male

• Recurrent major depression and dysthymia

• Generalized anxiety

• Alcohol use disorder

• Presented with suicidal plan to cut his wrists
CASE EXAMPLE-2

• 49 year old single female

• Who has been admitted to the hospital more than a dozen times

• With h/o suicidal behavior, aggressive behavior
CASE EXAMPLE-2

- She has a h/o Bipolar I disorder
- Eating disorder
- Post-traumatic Disorder
- Borderline Personality Disorder
• Chronic Pain
• On very high doses of opioids
• H/o cocaine abuse
• Heavy smoker
CASE EXAMPLE-3

• 36 year old male
• H/o schizoaffective disorder, Bipolar type
• Has been living on the streets
• H/o non-adherence to his medications
CASE EXAMPLE-3

• Has heavy alcohol use, 4 or more times a week

• H/o cannabis abuse and cocaine abuse

• Smokes cigarettes daily
CONCEPTUAL ISSUES
Is this the population we work with?
Or is this the population we work with?
DUAL DIAGNOSIS?

• Terms used to describe dual diagnosis
  • MICA (mentally ill chemically addicted)
  • CAMI (chemical abusing mentally ill)
  • MISA (mentally ill substance abuser)
  • SAMI (substance abusing mentally ill)
  • MICD (mentally ill chemically dependent)
  • COAMD (co-occurring addictive and mental disorders)
  • ACD (addiction and co-occurring disorders)

These conditions are common and complex.
The term ‘dual diagnosis’ is an ‘unfortunate misnomer’

Firstly, the term has been used to describe other combination of illnesses, such as individuals with mental illness and developmental disabilities.
Secondly, individuals rarely experience only two disorders. They have “multiple interacting disabilities, psychosocial problems, and disadvantages.”
CO-OCCURRING DISORDERS

Individuals who have at least one mental disorder as well as alcohol or drug use disorder

At least one disorder of each type can be diagnosed independently of the other
CO-OCCURRING DISORDERS

Co-occurring disorders vary by severity, chronicity, symptomatology, degree of impairment, and motivation to address the problem.
Multiple Psychiatric Issues
Axis 1 & 2

- One psychiatric issue: Frequency
- Two psychiatric issues: Frequency
- Three psychiatric issues: Frequency
EPIDEMIOLOGY
How many people suffer from co-occurring disorders?
3 Generations of Epidemiologic Studies

1\textsuperscript{st} GEN: Pre World-War II- From Professional informants (likely to miss untreated cases)

2\textsuperscript{nd} GEN: Midtown Manhattan and Stirling County Studies (focus was on non-substance psychopathology)

3\textsuperscript{rd} GEN: ECA survey (79-81); NCS (91-92); NCS-R (2001-2003): NESARC (Wave 1- 2001-2003), (Wave 2- five years later), (Wave 3- 2012-2013)
CO-OCCURRING DISORDERS

Common and highly complex

Affect 7 to 10 million adult Americans in any one year
According to the U.S Surgeon General report in 1999, 41-65% of individuals with a lifetime substance abuse disorder also have a lifetime history of at least one mental disorder.
Also, *51% or more lifetime mental disorders* also have a lifetime history of at least one substance abuse disorder.
CO-OCCURRING DISORDERS

According to the National Co-morbidity Survey,

• 47% of individuals with schizophrenia also had a substance abuse disorder (4 times more than the general population)

• 61% of Individuals with Bipolar disorder also had a substance abuse disorder (5 times as likely as the general population)
Individuals with co-occurring disorders should be the expectation, not the exception in addiction and mental health treatment systems.

If that is the expectation, does having separate treatment systems, make sense?
“Our consumers do not have the opportunity to separate their addiction from their mental illness, so why should we do so administratively and programmatically”

-Fred Osher, M.D.
CO-OCCURRING DISORDERS

These individuals have particular difficulty seeking and receiving diagnostic and treatment services.

They present significant challenges to the Nation’s public health and to health policy makers as well - they are a high cost, high risk and high priority population.
The difficulty is compounded by the existence of two separate service systems, one for mental health services and another for substance abuse treatment.

They are excluded from many mental health programs due to substance use and from many addiction programs due to mental health issues.
CO-OCCURRING DISORDERS

These two service systems **differ markedly** with respect to staffing, philosophy of treatment, funding sources, community political factors, types of assessments and procedures performed and treatment approaches.
“Behavioral health systems have historically been organized to see people and families with co-occurring mental health and substance use disorders – and other complex needs - as misfits”

- Kenneth Minkoff, M.D.
“America’s mental health service delivery system is in shambles.”

...access problems

...individuals who are incarcerated or homeless

...a nearly total disconnect between substance abuse and mental health treatment”
CO-OCCURRING DISORDERS

If one of the co-occurring disorders goes untreated, both usually get worse and additional complications often arise.
IMPLICATIONS

• Increased risk of relapse and hospitalizations
• Poor treatment adherence and worse outcomes
• Increased risk of suicide
• Increased burdens on family, interpersonal conflicts
• More hostility, aggression, violence
• Housing instability and homelessness
IMPLICATIONS

• More legal encounters
• Increase high risk behaviors- leading to HIV, Hepatitis
• Prone to victimization
• Considerable morbidity and early mortality
Co-occurring disorders are frequently interactive and cyclical: Substance abuse can worsen the course of psychiatric illness, and worsening psychiatric disorders can lead to increased substance abuse.
• The NASMHPD-NASADAD National dialogue recognized in 1999
  • There is no single locus of responsibility for people with COD
  • Both MH and SA systems largely operate independent of each other
  • Lack of coordination means that neither consumers nor providers move easily among service settings
Figure 1: Past Year Treatment Among Adults Aged 18 or Older With Both Serious Psychological Distress (SPD) and a Substance Use Disorder, 2005.

- 53.0% No Treatment
- 34.3% Treatment Only for Mental Health Problems
- 8.5% Treatment for Both Mental Health and Substance Use Problems
- 4.1% Substance Use Treatment Only

5.2 Million Adults with Co-Occurring SPD and Substance Use Disorder

Source: (SAMHSA, 2006)
A PRAGMATIC APPROACH
EVOLUTION OF TREATMENT MODELS

• Serial or Sequential
• Parallel
• Integrated
“Ping-Pong Therapy”

- If their mental health issues are more than the S.A facility can handle many a times instead of sending the patient back they are just discharged
- In essence this becomes “No treatment”
Many mental health professionals are not well trained to deal with addictions and vice versa.
SERIAL OR SEQUENTIAL MODEL

Many mental health professionals

• Feel Ineffective
• Feel patient is resistant or unmotivated
• As long as patient is using they can’t be helped
• Significant negative attributions to this population which leads to significant counter-transference issues
Philosophical differences in the two separate systems leaves the client confused.
The tough task of navigating two systems, with different appointments, different philosophies, conflicting advice, and multiple providers falls on the fragile and already challenged patient.
PARALLEL MODEL

Various funding sources provide widely disparate benefits for mental health and substance abuse treatment, forcing clinicians to decide which of the disorders is primary.
The current state of how our health care system is designed only tends to focus on acute states, leaving many aspects of care for the chronically ill unfulfilled.
Despite strides in research over last 20 years, little remains known about the etiology and temporal ordering of co-occurring disorders

For this reason, many researchers and clinicians believe that both disorders must be considered as primary and treated as such
INTEGRATED MODEL

- Clinically more effective
- Better outcomes
- Has evidence base to support it
INTEGRATED MODEL

• Fiscally more sound
• Much more patient centered
• Recognizes that there is a need to make clinical decisions and interventions even in the context of diagnostic uncertainty
An integrated framework recognizes that quality evidence-based individualized care can be provided within a behavioral health delivery system using existing resources and partnerships (TIP 42).
DHMH is on track to implement an integrated system on January 1, 2015.
The Four Quadrant Framework for Co-Occurring Disorders

Less severe mental disorder/
more severe substance abuse disorder

More severe mental disorder/
more severe substance abuse disorder

Less severe mental disorder/
less severe substance abuse disorder

More severe mental disorder/
less severe substance abuse disorder
The four-quadrant conceptual framework is meant to guide systems integration and resource allocation in treating Individuals with co-occurring disorders.
Mental Health/Substance Abuse Severity Quadrants

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<th>Mental Health Severity</th>
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- Study participants classified into 4 mutually exclusive groups, defined by high or low severity on mental health and substance abuse disorders.
- Because mental health and substance abuse are highly correlated, the low-low and high-high categories are the largest.
- Gabriel R unpub ‘04
CO-OCCURRING DISORDERS

Low MH in an acute psych ER might be High MH in an Addictions Outpatient clinic

Low Addiction in a Methadone program might be High Addiction in a primary care clinic
STAGES OF TREATMENT
STAGES OF CHANGE

- CONTEMPLATION
- RELAPSE & RECYCLE
- MAINTENANCE
- ACTION
- PREPARATION
Engagement
Persuasion
Active Treatment
Relapse Prevention
DEFINITION

Patient does not have regular contact with clinician

GOAL

To establish a working alliance with the patient
EXAMPLES OF CLINICAL INTERVENTIONS

Outreach

Practical Assistance (food, clothing, housing, benefits, transportation)

Crisis Intervention

Support and assistance to social networks
EXAMPLES OF CLINICAL INTERVENTIONS

Stabilization of psychiatric symptoms
Advocating in legal situations
Family meetings
Close Monitoring
DEFINITION

Patient has regular contact with clinician, but does not want to work on reduction of substance use.

GOAL

To develop the client’s awareness that substance use is a problem and increase motivation.
EXAMPLES OF CLINICAL INTERVENTIONS

- Individual and Family Education
- Peer groups
- Social skills training (to address non-substance-related conditions)
- Motivational Interviewing
EXAMPLES OF CLINICAL INTERVENTIONS

Structured Activity (supported employment, volunteering, hobbies etc.,)
Sampling constructive activities (social & recreational)
Medications to treat psychiatric disorders
DEFINITION
Patient is motivated to reduce substance abuse, at least for a month, but less than 6 months

GOAL
To help the patient further reduce substance use and, if possible, attain abstinence
EXAMPLES OF CLINICAL INTERVENTIONS

Self Help Groups (12 step, Smart Recovery)
Cognitive-Behavioral counseling
Psychoeducation
Coping Skills
Social skills to address substance-related conditions
EXAMPLES OF CLINICAL INTERVENTIONS

Stress Management

Medications to support abstinence

Safe ‘dry’ housing

Substituting Activities (work, sports)
DEFINITION

Patient has not experienced problems related substance use for at least 6 months

GOAL

To maintain awareness that relapse can happen, and to extend recovery to other areas (e.g., social relationships and work)
EXAMPLES OF CLINICAL INTERVENTIONS

Continuous Care Groups (Active treatment or Relapse Prevention)

Independent Housing

Self Help Groups (12 step, Smart Recovery)

Social skills groups to address other areas
EXAMPLES OF CLINICAL INTERVENTIONS

Becoming a role model for others
Family problem solving
Lifestyle improvements
Expanding involvement in employment
Cast a wide net, assume substance use is likely
Explore past use before current use
Use lab tests to screen
If use is detected, discuss negative consequences
A SAMPLE FROM OUR CO-OCCURRING DISORDERS PARTIAL HOSPITALIZATION PROGRAM

270 of the 393 samples submitted were positive
146 were positive for cannabinoids
116 were positive for benzodiazepines
35 were positive for opiates
12 were positive for cocaine
CO-OCCURRING DISORDERS

Presence of severe mental illness may create additional vulnerability so that even small amounts of psychoactive substances may have adverse consequences for individuals with schizophrenia and other brain disorders.

-Robert Drake, M.D.
Determine which diagnoses apply

Tap **multiple sources** of information
Gather information across various domains of functioning

Assess range of needs

Identify their strengths
Identify **factors** that maintain substance use, interfere with sobriety or pose a risk of relapse.
PAYOFF MATRIX

Using Substances  Not Using Substances

Advantages

Disadvantages
Develop an integrated treatment plan that addresses substance abuse and mental illness through concurrent treatment.

Evaluate patient’s goals & motivation to deal with various issues.
Patients with persistent psychiatric syndromes do respond to medications, but their substance abuse does not automatically improve.
PSYCHOPHARMACOLOGY

The most serious concerns

Medication non-adherence

Substance-medication interactions

Potential for some meds to be abused
The most common difficulty is that physicians fail to identify and appreciate comorbid substance use disorders and the related non-adherence to medications.
Some guidelines

Use medications with low-abuse potential

Use medications with low-lethality in overdose

Dispense limited amounts of medications

Consider medications specific for the treatment of addiction
Patients with severe or persistent psychiatric symptoms, such as psychosis, mania, may require pharmacological treatment for those symptoms, regardless of presumed cause or regardless of continued use.
Distinguishing the effects of substances from psychiatric illness can be difficult or impossible.

Do not wait for diagnostic certainty. It is ok to work with a presumptive diagnosis which can be re-evaluated periodically.
If one needs to consider stopping medication treatment, one can try slow tapering of medications after 6-24 months of sustained remission of symptoms, with careful monitoring and observation.
Medication is generally discontinued only when a patient has experienced a sustained remission of symptoms, and when psychosocial functioning is no longer impaired, usually in the context of sustained remission of substance use.
This rarely occurs; when it does, it tends to be in individuals with fairly recent onset of a psychiatric disorder, precipitated or complicated by substance use.
THE DEADLIEST & MOST UNDERTREATED CO-MORBIDITY
“Data from the National Health Interview Survey”
THE DEADLIEST & MOST UNDERTREATED CO-MORBIDITY

The percentage of patients on our co-occurring disorders inpatient unit that smoked were a staggering 81%
Breath Carbon Monoxide Monitor (It measures CO which is a measure of blood carboxyhaemoglobin (%COHb))

Audio visually motivational

Instant feedback to patients which can facilitate the conversation about quitting
PSYCHOPHARMACOLOGY

PSYCHOTROPIC MEDICATIONS:

POTENTIAL RISKS AND INTERACTIONS IN PATIENTS WITH CO-OCCURRING DISORDERS
CONVENTIONAL ANTIPSYCHOTICS

Risk of hyperpyrexia in combination with stimulants

Smoking can reduce blood levels (also true for clozapine, olanzapine)

Prolongation of QTc interval, could interact with cardiac effects of cocaine
ATYPICAL ANTIPSYCHOTICS

Risk of respiratory depression when combing clozapine, opioids and benzodiazepines

Alcohol can increase sedative effects of Clozapine
ANTIDEPRESSANTS

Venlafaxine can raise BP, as does alcohol use and withdrawal

Bupropion can reduce seizure threshold, if combined with cocaine or alcohol withdrawal
ANTIDEPRESSANTS

Chronic alcohol use can induce metabolism and reduce TCA levels.

TCAs can have additive cardiotoxicity with cocaine.
ANTIDEPRESSANTS

Tyramine levels in alcohol can raise BP and cause hypertensive crises in patients with MAOIs.

Potentiation of sympathomimetic effects of stimulants-causing hypertension or hyperpyrexia.
LIVER TOXICITY

Possible in combination with Valproic Acid, Carbamazepine, Antabuse, Naltrexone
ABUSE POTENTIAL

Benzodiazepines

Stimulants

Antiparkinsonian medications

Carisoprodol (soma)

Sedative-hypnotics like Zolpidem

Promethazine (Phenergan)
Comprehensive, Continuous, Integrated System of Care (CCISC) Model

Kenneth Minkoff, M.D.
The foundation of a recovery partnership is an empathic, hopeful, integrated, strength-based relationship
All people with co-occurring conditions are not the same, so different parts of the system have responsibility to provide co-occurring capable services for different populations.
When co-occurring issues and conditions co-exist, each issue or condition is considered to be primary.
Recovery involves moving through stages of change and phases of recovery for each co-occurring condition or issue.
Progress occurs through adequately supported, adequately rewarded skill-based learning for each co-occurring condition or issue.
Recovery plans, interventions, and outcomes must be individualized. Consequently, there is no one correct co-occurring program or intervention for everyone.
All policies, procedures, practices, programs, and clinicians need to become welcoming, recovery- or resiliency-oriented, and co-occurring capable.
Each provider with the healthcare delivery system has a responsibility to address the range of client needs wherever and whenever a client presents for care (CSAT 2000a)
THERE SHOULD BE NO “WRONG DOOR”
- New York Times, 04-28-12
Per Capita Health Expenditures: U.S. and Selected Countries, 2010

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According to CMS our National Healthcare Expenditure (NHE) is projected to hit $3.207 trillion this year. 2015 looks to be the first year healthcare spending will reach $10,000 per person.
Figure. Proposed “Wedges” Model for US Health Care, With Theoretical Spending Reduction Targets for 6 Categories of Waste

- "Business as usual" national health care expenditures
- Failures of care delivery
- Failures of care coordination
- Overtreatment
- Administrative complexity
- Pricing failures
- Fraud and abuse
- Growth in national health care expenditures matches GDP growth
Just 5% of Americans accounting for nearly 50% of costs and 1% accounting for more than 20% of costs. In Camden, a city where 38% of the population lives below the poverty level, 13% of the population accounts for 80% of healthcare costs citywide.
Welcome to the Hotspotting Data Toolkit
Created with support from the Commonwealth Fund