Comorbidity: Understanding and Helping People with Substance Use and Co-Occurring Mental Health Conditions

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Learning Objectives

1. Explain biopsychosocial processes underlying comorbid conditions
2. Describe a structured approach to conceptualizing people with comorbid conditions and explain why case conceptualization is so vital to effective treatment
3. Structure treatment sessions in ways that benefit individuals with comorbid conditions
Cannabis Use Disorder

Diagnostic Criteria

A. A problematic pattern of cannabis use leading to clinically significant impairment or distress, as manifested by at least two of the following, occurring within a 12-month period:

1. Cannabis is often taken in larger amounts or over a longer period than was intended.
2. There is a persistent desire or unsuccessful efforts to cut down or control cannabis use.
3. A great deal of time is spent in activities necessary to obtain cannabis, use cannabis, or recover from its effects.
4. Craving, or a strong desire or urge to use cannabis.
5. Recurrent cannabis use resulting in a failure to fulfill major role obligations at work, school, or home.
6. Continued cannabis use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of cannabis.
7. Important social, occupational, or recreational activities are given up or reduced because of cannabis use.
8. Recurrent cannabis use in situations in which it is physically hazardous.
9. Cannabis use is continued despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by cannabis.
10. Tolerance, as defined by either of the following:
    a. A need for markedly increased amounts of cannabis to achieve intoxication or desired effect.
    b. Markedly diminished effect with continued use of the same amount of cannabis.
11. Withdrawal, as manifested by either of the following:
    a. The signs and symptoms of withdrawal from cannabis use. This is indicated by 2 or more of the following:
       1. Intense physical or psychological discomfort.
       2. The emergence of a withdrawal syndrome following the abrupt cessation or marked reduction of cannabis use.
       3. The unsuccessful efforts to cut down or control cannabis use.
       4. A great deal of time spent in activities necessary to obtain and use cannabis.
       5. Craving, or a strong desire or urge to use cannabis.
Gambling Disorder

Diagnostic Criteria

A. Persistent and recurrent problematic gambling behavior leading to clinically significant impairment or distress, as indicated by the individual exhibiting four (or more) of the following in a 12-month period:

1. Needs to gamble with increasing amounts of money in order to achieve the desired excitement.
2. Is restless or irritable when attempting to cut down or stop gambling.
3. Has made repeated unsuccessful efforts to control, cut back, or stop gambling.
4. Is often preoccupied with gambling (e.g., having persistent thoughts of reliving past gambling experiences, handicapping or planning the next venture, thinking of ways to get money with which to gamble).
5. Often gambles when feeling distressed (e.g., helpless, guilty, anxious, depressed).
6. After losing money gambling, often returns another day to get even (“chasing” one’s losses).
7. Lies to conceal the extent of involvement with gambling.
8. Has jeopardized or lost a significant relationship, job, or educational or career opportunity because of gambling.
9. Relies on others to provide money to relieve desperate financial situations caused by gambling.

B. The gambling behavior is not better explained by a manic episode.
Six Core Components of Addiction

1) Salience – Importance; dominates thoughts, feelings, behaviors (Salience likely to increase with abstinence)

2) Mood modification – Addictive behavior induces a desired state, for example:
   a) Relief from discomfort, boredom, anxiety, or depression
   b) Increase in pleasant feelings, excitement, calm, etc.

3) Tolerance – Increasing amounts needed for same effect

Six Core Components of Addiction

4) **Withdrawal symptoms** – Unpleasant feelings and physical effects when activity is stopped or reduced

5) **Conflict** – Impairment; *interpersonal* discomfort (e.g., anxiety, depression, guilt, shame, desperation); *intrapersonal* problems

6) **Relapse** – Repeated slips or lapses and a return to addictive behavior

Overview of Comorbidity

• **Definition of comorbidity**: Two or more disorders in the same person; involves an interaction that effects the course, prognosis

• High comorbidity rates between substance use disorders (SUDs) and other mental health (MH) diagnoses (e.g., Generalized Anxiety Disorder, panic disorder, Post Traumatic Stress Disorder, depression, bipolar illness, Attention Deficit Hyperactivity Disorder, Borderline Personality Disorder...)

Greater than 60% of adolescents in SUD programs meet the criteria for another MH diagnosis

Patients in treatment for non-Rx painkillers: 43% have MH diagnoses

Approximately 1 of 4 people with serious mental illness (SMI) have a substance use disorder (SMI is defined as a mental, behavioral, or emotional disorder that causes serious functional impairment and limits major life activities)

Serious Mental Illness and Comorbidity

Understanding Comorbidity

Three main pathways contributing to comorbidity:

1. Common risk factors can contribute to both mental illness and substance use (e.g., genetics, brain region, environment, stress, trauma, adverse childhood experiences, etc.)

2. Mental illness may contribute to substance use and addiction (e.g., self-medication)

3. Substance use and addiction may contribute to the development of mental illness (e.g., may change the brain or “kindle an underlying predisposition”)

NIH (2020). Common comorbidities with substance use disorders research report
The Addiction Syndrome

Distal antecedents of the addiction syndrome

- Neurobiological elements (e.g., genetic risk, neurobiological system risk)
- Psychosocial elements (e.g., psychological and social risk factors)
- Exposure to object or activity X, Y or Z

Underlying vulnerability
If yes

Immediate neurobiological consequences resulting in desirable subjective shift
If yes

Premorbid addiction syndrome

- Proximal antecedents (e.g., biopsychosocial events)
- Repeated object interaction & desirable subjective shifts

Expressions, manifestations and sequelae of addiction syndrome

- Expression
  - Drinking
  - Gambling
  - Smoking
  - Intravenous drug using

  - e.g., liver cirrhosis
  - e.g., gambling debt
  - e.g., pulmonary carcinoma
  - e.g., sepsis

Biological cluster (e.g., tolerance, withdrawal, neuroanatomical changes, genetic expressions)

Psychological cluster (e.g., psychopathology & comorbidity)

Social cluster (e.g., deviant behaviors, delinquency, criminality, social drift)

Natural history (e.g., exposure, release rates, temporal sequencing of symptom progression or recovery)

Treatment non-specificity (e.g., CRB, pharmacotherapy)

Object substitution (e.g., increase in sedative use during decrease in opioid use)

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(e.g., genetic risk, neurobiological system risk)

Underlying vulnerability
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If yes

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  - e.g., pulmonary carcinoma
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**Unique manifestations & sequelae**

**Shared manifestations & sequelae**

**Biological cluster**
(e.g., tolerance, withdrawal, neuroanatomical changes, genetic expressions)

**Psychological cluster**
(e.g., psychopathology & comorbidity)

**Social cluster**
(e.g., deviant behaviors, delinquency, criminality, social drift)

**Natural history**
(e.g., exposure, relapse rates, temporal sequencing of symptom progression or recovery)

**Treatment non-specificity**
(e.g., CBT, pharmacotherapy)

**Object substitution**
(e.g., increase in sedative use during decrease in opioid use)
Scott and Kathy Case Study

• Couple in their 40s; married 15 years; self-referred by Scott, who heard that I treat MH diagnoses and addictions; his marriage is riddled with problems, and his wife has threatened to leave him
• Both have been in recovery for years (polysubstance use); they met at a Narcotics Anonymous meeting and began as friends
• Scott describes dozens of psychological and physical problems, symptoms, and intermittent relapses – as well as distal antecedents
• Kathy has not relapsed; she spends much of her time working a part-time job, taking care of their home, and attending to their special needs child; she says she can’t stand Scott: “He’s changed since we met. He was so different back then.”
Treatment Content and Process

**Content**

*What* is to be discussed for the purpose of facilitating change (especially symptoms)

**Process**

*How* change is facilitated in session (e.g., interpersonal and intrapersonal dynamics)
Treatment Content and Process

Content – **What** is to be changed

Examples of content areas; based on symptoms, skill deficits, etc:

- Behavior change
- Emotion regulation
- Distress tolerance
- Problem-solving skills
- Self-compassion

- Improved judgment
- Interpersonal skills
- Communication skills
- Mindfulness, awareness
- Other skill development
Treatment Content and Process

Process: *How* change is facilitated in session

(Five essential components of psychotherapy):

- Structure
- Collaboration/alliance
- Case conceptualization
- Psychoeducation
- Standardized Techniques

Case Conceptualization

- Collection and integration of clinically relevant information as an iterative process
- Identification of problems and change targets
- Ongoing and ever-evolving hypothesis formulation and testing
- Influenced by theoretical model, professional and personal life experiences
- Vital to therapy; everything else depends on it
- Requires substantial attention, organizational skills, and effort

Case Conceptualization Requires Attention to Cognitive *Content* and *Process*

- **Content** *(what patients/clients think):* e.g., automatic thoughts, basic beliefs, conditional beliefs, schemas
- **Processes** *(how patients/clients think):* e.g., ability to focus, psychological mindedness (insight), mindfulness, cognitive flexibility, inhibitory skills

Cognitive Behavioral Therapy (CBT) Model for Understanding Addictive Behaviors

Internal and external triggers, cues, stimuli, circumstances (e.g., emotional distress) → Thoughts and beliefs activated (e.g., “I can’t stand to feel upset.”) → Urges and craving (Impulses to engage in addictive behavior), experienced physically → Lapse or relapse, especially while in recovery, may trigger more distress → Permission to lapse (e.g., “Nothing else will provide relief.” or “Just this time.”) → Opportunity to abstain (ambivalence, which may contribute to distress)

Development of Addictive Behaviors

Early life experiences/Distal antecedents
Neurobiological, psychosocial, environmental (risk factors)

Development of vulnerability
Cognitive: Thoughts, beliefs, schemas
Behavioral: compensatory, habitual behaviors
Affective: depression, anxiety, anger, etc.

Exposure, experimentation, and continued engagement in maladaptive behaviors

Continued development and reinforcement of problematic patterns

Early life experiences
Distal antecedents (risk factors):
Neurobiological, psychosocial, environmental

Development of vulnerability
Cognitive: thoughts, beliefs, schemas
Behavioral: compensatory habitual behaviors
Affective: depression, anxiety, anger, etc.

Exposure, experimentation, and continued engagement in maladaptive behaviors

Continued development and engagement in addictive behaviors

Internal and external triggers, cues, stimuli, circumstances

Thoughts and beliefs are activated

Urges and Craving (Impulse to engage in behavior)

Lapse or relapse
That triggers potential AVE

Permission to engage in behavior

Opportunity to abstain

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Case Conceptualization

1. **Primary problems**: Addictive behaviors, depression, anxiety, etc.

2. **Social/environmental/health/cultural context**: Current living situation; close relationships; sociocultural factors; economic circumstances; legal or safety concerns; social determinants of health (SDoH); community norms and expectations

3. **Distal antecedents**: Neurobiological, genetic, cultural, family, community, and environmental influences

4. **Proximal antecedents**: Current internal and external cues, triggers, high-risk situations (circumstances, situations, physical conditions)

Case Conceptualization

5. **Cognitive processes**: Relevant beliefs and thoughts; values, mindfulness skills; principles; cognitive distortions

6. **Affective processes**: Predominant emotions, moods, physiologic sensations; distress tolerance; emotion regulation skills

7. **Behavioral patterns**: Adaptive versus maladaptive behaviors; coping versus compensatory strategies; committed actions

8. **Readiness to change and associated goals**: Precontemplation, contemplation, preparation, action maintenance

Case Conceptualization

9. **Integration of the data**: Salient processes and patterns; causal relationships between context, thoughts, feelings, behaviors

10. **Implications for treatment**: Strategies and techniques, based on data and hypotheses

Session Structure

Agenda: “What do you want to work on?”
  - Mood
  - Bridge
  - Prioritize and discuss items
  - Guided discovery/Functional analysis
  - Facilitate skill development
  - Feedback
  - Homework

Standardized Techniques

- Functional analysis
- Motivational interviewing
- Stimulus management
- Delay and distract
- Advantages-disadvantages analysis
- Hierarchy of values
- Activity monitoring and scheduling
- Behavioral activation
- Automatic Thought Records
- Acceptance and/or commitment
- Relaxation training
- Mindfulness and meditation training
- Contingency management
- Role playing

Functional (chain) analysis

Trigger, cue, situation, context

AT → C → AT → C → AT → C → AT

Clinical outcome patterns

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# Automatic Thought Record (ATR)

<table>
<thead>
<tr>
<th>Date and Time</th>
<th>Situations</th>
<th>Emotions (0-100)</th>
<th>Automatic thoughts or related beliefs (0-100%)</th>
<th>Alternative thoughts, beliefs, or responses (0-100%)</th>
<th>New Emotions (0-100)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Advantages-Disadvantages Analysis

<table>
<thead>
<tr>
<th>Engage in addictive behavior</th>
<th>Stop addictive behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Advantages</strong></td>
<td><strong>Disadvantages</strong></td>
</tr>
<tr>
<td>• Relief from distress</td>
<td>• Feel better about myself</td>
</tr>
<tr>
<td>• Forget my problems</td>
<td>• Get family off my back</td>
</tr>
<tr>
<td>• It’s medicine that makes me “normal”</td>
<td>• Improve my health</td>
</tr>
<tr>
<td>• My life is falling apart</td>
<td>• Feel worse before better</td>
</tr>
<tr>
<td>• My health is getting worse and worse</td>
<td>• Painful craving</td>
</tr>
<tr>
<td>• Not facing my problems</td>
<td>• Face failure again</td>
</tr>
<tr>
<td></td>
<td>• Lose acquaintances</td>
</tr>
</tbody>
</table>

Summary and Conclusions

• Comorbidity is common (SUDs and MH diagnoses)
• Having either one greatly increases the likelihood of having the other
• Comorbidity results in more severe symptoms and poorer outcomes
• The relationship between SUDs and mental health diagnoses is complex; a meticulous case conceptualization is essential
• Specialty treatment programs tend to treat one disorder or the other (anxiety disorder or SUD), but not both simultaneously
• Treating both has been shown to increase effectiveness
Summary and Conclusions

• Don’t experience comorbidity as overwhelming (e.g., by getting attached to outcomes or getting burned out)
• Don’t make assumptions like “You must fix either of the comorbid problems before you fix the other.”
• Structure sessions (and therapy in general), starting with the client’s/patient’s agenda (rather than the therapist’s)
• Continually conceptualize individuals and share with them
• Value small individual gains – they may be life-saving
• Focus on strengths since they will be necessary for change
• Maintain curiosity; experience learning as personally vital
References


References


References


