Understanding the Complex Relationship Between Addictive Disorders and Anxiety

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Learning Objectives

• Describe the complex relationship between addictive disorders and anxiety, including the presentation of case studies to demonstrate therapeutic components

• Explain the case conceptualization process, vital to planning treatment for individuals with co-existing addictive disorders and anxiety

• Describe at least one structured intervention for helping individuals with co-existing addictive disorders and anxiety
Addiction 30 Years Ago

• Cocaine epidemic (crack) “Greatest threat to the United States”
• Patients labeled “drug addicts” and “alcoholics” (stigmatized)
• Stereotypes were ubiquitous (addiction was attributed to or associated with race, religion, social class, appearance, etc.)
• DSM-IV – diagnoses were *Substance* abuse and dependence (dichotomous, included legal problems)
• Each addiction (e.g., alcohol, nicotine, cocaine, heroin) was considered unique, different, and often stereotyped
• The sole aim of treatment was abstinence
• Focused on relapse prevention (avoidance of acute relapse)
Addictions Today: Changes and Advances

• Opioid epidemic; alcohol and nicotine use continue to cause high morbidity and mortality rates; cannabis increasingly accessible

• We are more aware of stigmatizing behaviors and language

• There is extensive data to refute stereotypes (more emphasis on diversity); there are numerous, important differences between individuals with substance use disorders

• DSM-5 – craving added, legal problems removed, behavioral addiction recognized, diagnoses on a continuous scale (mild, moderate, severe)

• We realize there’s more to treatment than preventing relapse

• It’s understood that patients should determine their own goals

• Motivational Interviewing has contributed to emphasis on collaborative therapy process
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; intrapersonal discomfort (e.g., anxiety, depression, guilt, shame, desperation); interpersonal problems

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

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 drug or alcohol is taken in larger amounts than was intended
   b. Withdrawal symptoms (e.g., mood swings, anxiety, irritability, increased physical or psychological problems) occur upon abrupt or gradual withdrawal from the drug or alcohol

Tolerance
Conflict
Salience
Mood modification
Conflict
Conflict
Conflict
Conflict
Tolerance
Withdrawal
Gambling Disorder

Diagnostic Criteria 312.31 (F63.0)

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.
Fear, Anxiety, Posttraumatic Stress Disorder (PTSD) and Anxiety disorders (DSM-5)

- **Fear** – Emotional reaction to real or imagined imminent threat
- **Anxiety** – Emotional and/or behavioral reaction to a future imagined threat
- **PTSD** – Follows exposure to traumatic events; emotions vary and may include fear, helplessness, horror, re-experiencing of traumatic event
Fear, Anxiety, Posttraumatic Stress Disorder (PTSD) and Anxiety disorders (DSM-5)

- **Anxiety disorders**
  - Specific phobias – fearful, anxious, avoidant in response to specific situations
  - Social anxiety disorder – involves potential scrutiny in social situations
  - Panic disorder – abrupt surges of intense fear and its physiologic correlates
  - Agoraphobia – involves situations relating to crowds, open or closed spaces
  - Generalized anxiety – persistent, excessive, involving multiple settings
  - Substance/medication-induced anxiety disorder – due to use or withdrawal
Prevalence and Co-occurrence of Substance Use Disorders and Anxiety

- Approximately 11% of U.S. adults have an anxiety disorder (>28 million)
- Between 9-10% have a substance use disorder (>23 million)
- Approximately 9% of U.S. adults have an alcohol use disorder
- Approximately 2% have another SUD
- Approximately 18% with SUD have at least one anxiety disorder
- Approximately 15% of U.S. adults with an anxiety disorder have a SUD
- Very few have a substance-induced anxiety disorder
- Comorbidity associated with greater severity and poorer outcomes


Psychological Processes Underlying Anxiety

- Overestimation of threat
- Safety behaviors
- Intolerance of uncertainty
- Anxiety and disgust sensitivity
- Distress intolerance
- Experiential avoidance

- Worry and rumination
- Perfectionism
- Autobiographical memory bias
- Attention bias
- Interpersonal processes
- Interpretation bias

Abramowitz and Blakely (Editors; 2020). *Clinical Handbook of Fear and Anxiety: Maintenance Processes and Treatment Mechanisms*. 
Understanding the Bidirectional Relationship Between Substance Use Disorders and Anxiety

Three main pathways contributing to comorbidity:

• Common risk factors can contribute to both mental illness and substance use (or addiction)
• Mental illness may contribute to substance use and addiction
• Substance use and addiction can contribute to the development of mental illness
• Furthermore, they potentiate each other in a bidirectional manner

NIH (2020). Common comorbidities with substance use disorders research report
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 clinical content areas; based on symptoms, skill deficits, etc.:

- Behavior change
- Emotion regulation
- Decision-making skills
- Problem-solving skills
- Self-compassion
- Improved judgement
- Interpersonal skills
- Communication skills
- Mindfulness, awareness
- Other skill development

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Treatment Content and Process

**Process**: *How* change is facilitated in session

(Five essential components of psychotherapy):

- Structure
- Collaboration/alliance
- Case conceptualization
- Psychoeducation
- Standardized Techniques
Substantial variability across clients’ goals, including:

- Modification of addictive behaviors (e.g., abstinence, harm reduction)
- Control over undesired habits
- Feeling better
- Improving relationships
- Acquiring coping skills
- Increasing psychological mindedness
- Receiving support from therapist and/or group

These diverse goals beg the question, “How do you define recovery?”
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
CBT model for understanding addictive behaviors

- Internal and external triggers, cues, stimuli, circumstances (e.g., anxiety)
- Thoughts and beliefs activated (e.g., “I can’t stand to feel this anxiety.”)
- Permission to use/engage (e.g., “Nothing else will provide reliable relief.”)
- Urges and craving (Impulses to engage in addictive behavior)
- Opportunity to abstain (ambivalence itself may contribute to anxiety)

Lapse or relapse, especially while in recovery, may trigger more anxiety

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

CBT developmental case conceptualization diagram

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
Lapse or relapse
That rigged potential AVE

Thoughts and beliefs are activated

Permission to engage in behavior

Urges and Craving
(Impulse to engage in behavior)

Opportunity to abstain

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"I made a mental note of all the things my mother said people shouldn't do. Those were the things I feared most. As a child, if I did anything that was imperfect, I got the eyes like daggers. I had to do everything perfect. That's why I’m so anxious now."

"That’s also why I've enjoyed drinking. It stops the critical voice in my head.”

[While crying, she added] "When Mommy's not around I can drink all I want – to stop feeling shame and anxiety. Alcohol's the friend that helps me cope."
Case Conceptualization

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

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

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

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

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

Case Conceptualization

6. **Affective processes**: Predominant emotions, feelings, 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

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


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System 1 Thinking

- Automatic, fast, effortless, involuntary, reflexive, intuitive (scans)
- Biased to believe and confirm, suppress doubt
- Generates impressions, feelings, judgments
- Focuses on existing evidence and ignores absent evidence
- Responds more strongly to losses than gains (loss aversion)
- Seeks simple answers (i.e., heuristics) to complex questions
- Substitutes easy questions for difficult ones
- When System 1 thoughts are reinforced, they become core beliefs

System 2 Thinking

- Effortful, deliberate, intentional, reflective, slow
- Activated when cognitive load too much for System 1
- Searches memory
- Associated with attention, concentration, agency, choice
- Works by asking and answering questions
- Not the same as intelligence; more related to rationality
- Many people assume that their System 2 is in charge
- Smart, rational, but lazy

System 2 Might Be Especially Important in Therapy When Patients...

- Say they are committed to change, but continue the same problematic behaviors – or chronically relapse
- Continually describe barriers to change (e.g., “My anxiety.”)
- Don’t do homework they have agreed to do
- Seem disinterested or detached during sessions
- Say they can’t think of anything to work on
- Tell rambling stories and digress when describing problems
- Miss sessions or regularly come late to them
- Trigger therapist boredom, frustration, or detachment
Clinicians Need to Activate System 2 When Clients Say Things Like...

- “I need to…”
- “I’ll try…”
- “I’ll just…”
- “I already tried that…”
- “Sure.”
- “Maybe…”

Subtext important; may reflect lack of engagement, motivation

- “I should…”
- “Ok...ok...ok…” (intermittently)
- “You…” (when it means “I”)
- “If you say so.”
- “You’re the expert.”
Treatment 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 → Clinical outcome patterns
<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>
</table>

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engage in addictive behavior</td>
<td>Stop addictive behavior</td>
</tr>
<tr>
<td>• Relief from anxiety</td>
<td>• Feel better about myself</td>
</tr>
<tr>
<td>• Forget my problems</td>
<td>• Get family off my back</td>
</tr>
<tr>
<td>• Participate in life like “normal” people</td>
<td>• Improve my health</td>
</tr>
<tr>
<td>• No longer providing relief; anxiety worse</td>
<td>• Stay out of jail</td>
</tr>
<tr>
<td>• Addiction is no fun</td>
<td></td>
</tr>
<tr>
<td>• Not facing my problems</td>
<td></td>
</tr>
</tbody>
</table>


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Summary and Conclusions

- Approximately 1 in 10 individuals in the U.S. has an anxiety or substance use disorder.
- Having either one greatly increases the likelihood of having the other (approximately doubles the likelihood).
- The relationship between anxiety disorders and SUDs is complex; no one explanation (e.g., self-medication theory) has been validated.
- Comorbidity results in more severe symptoms and poorer outcomes.
- 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

• Treatment is far more complex than many clinicians realize
• Clients are more complex than most approaches have claimed
• Clinicians tend to underestimate the impact of developmental and environmental processes, including cultural marginalization
• Clinicians tend to exaggerate their expertise and view themselves as more important to the recovery process than we actually are
• Clinicians need to think more systematically, continually generating and testing hypotheses – in System 2
• Clinicians need to continually expand their range and not be locked into any single approach to addiction treatment
Summary and Conclusions

• Cognitive flexibility, curiosity, intentionality, deliberation: All important
• Fully understanding the complex and nonlinear nature of change: Vital
• Continually formulate and revise hypotheses that explain problems
• Closely attend to the contextual origins and functions of client choices
• Identify barriers to change – especially when working with marginalized and disadvantaged individuals
• Clinicians potentially benefit from maintaining self awareness
• Avoid exaggerating skills, expertise, attachment, boundaries
• Remember that all approaches to and definitions of recovery have some value; learn and draw from all that provide good care
References


References
References


