Understanding Addiction and Treatment Considerations for Individuals with Severe and Persistent Mental Illness

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www.centerforebp.case.edu
The Impact of Addiction

Substance Abuse Is Common In People With Mental Illness

- Over 50% of people with schizophrenia, bipolar disorder and other severe mood disorders have a substance use disorder at some time in their life.

- About 33% of people with anxiety and depressive disorders have a substance use disorder at some time in their life.
Additional Information from SAMHSA

- 73% of persons with a drug dependence disorder in substance abuse treatment had a co-occurring mental disorder at some point during their lifetime.

- In substance abuse settings, very common to see:
  - Major Depressive Disorder (and other mood disorders)
  - Post-Traumatic Stress Disorder


Course of Co-occurring disorders
(COD)

- Both substance use disorders and severe mental illness are chronic, waxing and waning.

- Recovery from mental illness or substance abuse occurs in stages over time.

Relationships between Substances of Abuse and Mental Disorders

SYMPTOMS RELATED TO INTOXICATION AND WITHDRAWAL

- MASK
- MIMIC
- INITIATE
- EXACERBATE

PSYCHIATRIC SYMPTOMS!!

(Lehman et al., 1999)
IT SERVES A PURPOSE

WITHOUT IT WE WOULD SEE THE WORLD AS IT REALLY IS!

IT IS A RELATIONSHIP

It's a...
- Loyal
- Dependable
- Relieving
- Predictable
- Unconditional
- BAD

FRIEND!
IT’S A HABIT:
A recurrent, often unconscious, pattern of behavior that is acquired through frequent repetition.

IT’S PHYSIOLOGICAL

What Contributes to the Development of an Addiction?

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Factors that contribute to addiction

• Genetic

• Culture

• The presence of an underlying biological deficit in the function of reward circuits

• The repeated engagement in drug use or other addictive behaviors, causing neuroadaptation in motivational circuitry

Factors that contribute to addiction

• Cognitive and affective distortions

• Disruption of healthy social supports and problems in interpersonal relationships which impact the development or impact of resiliencies

• Exposure to trauma or stressors that overwhelm an individual's coping abilities

Factors that contribute to addiction

• Distortion in meaning, purpose and values that guide attitudes, thinking and behavior

• Distortions in a person's connection with self, with others and with the transcendent (referred to as God by many, the Higher Power by 12-steps groups, or higher consciousness by others)

• The presence of co-occurring psychiatric disorders
Addiction and the Addictive Process

Addiction is a primary, chronic disease of brain reward, motivation, memory and related circuitry

- Affects neurotransmission and interactions within reward structures of the brain; alters “memory”
- Motivational hierarchies are altered and addictive behaviors supplant healthy, self-care related behaviors

How Does the Brain Become Addicted?

Typically it happens like this:

- A person takes a drug of abuse, activating the same brain circuits as do behaviors linked to survival, such as eating, bonding and sex.
- The drug causes a surge in levels of a brain chemical called dopamine, which results in feelings of pleasure. The brain remembers this pleasure and wants it repeated.
How Does the Brain Become Addicted?

• Just as food is linked to survival in day-to-day living, drugs begin to take on the same significance for the addict.

• Eventually, the drive to seek and use the drug is all that matters, despite devastating consequences.

How Does the Brain Become Addicted?

• Finally, control and choice and everything that once held value in a person's life, such as family, job and community, are lost to the disease of addiction.

• The addict no longer seeks the drug for pleasure, but for relieving distress / (Survival Salience)

What brain changes are responsible for such a dramatic shift?

Research on addiction is helping us find out just how drugs change the way the brain works. These changes include the following:

• Reduced dopamine activity.

• Altered brain regions that control decision making and judgment.
Reduced dopamine activity

- We depend on our brain's ability to release dopamine in order to experience pleasure and to motivate our responses to the natural rewards of everyday life, such as the sight or smell of food.

- Drugs produce very large and rapid dopamine surges and the brain responds by reducing normal dopamine activity.

- Eventually, the disrupted dopamine system renders the addict incapable of feeling any pleasure even from the drugs they seek to feed their addiction.

Altered brain regions that control decision making and judgment

- Drugs of abuse affect the regions of the brain that help us control our desires and emotions.

- The resulting lack of control leads addicted people to compulsively pursue drugs, even when the drugs have lost their power to reward.

Altered brain regions that control decision making and judgment

- The disease of addiction can develop in people despite their best intentions or strength of character.

- Drug addiction is insidious because it affects the very brain areas that people need to "think straight," apply good judgment and make good decisions for their lives.

- No one wants to grow up to be a drug addict, after all.
American Society of Addiction Medicine (ASAM) Definition

- Addiction is a primary, chronic disease of brain reward, motivation, memory and related circuitry.
- Dysfunction in these circuits leads to characteristic biological, psychological, social and spiritual manifestations.
- This is reflected in an individual pathologically pursuing reward and/or relief by substance use and other behaviors.

Adopted by the ASAM Board of Directors April 12, 2011.

American Society of Addiction Medicine (ASAM) Definition

- Like other chronic diseases, addiction often involves cycles of relapse and remission.
- Without treatment or engagement in recovery activities, addiction is progressive and can result in disability or premature death.

Adopted by the ASAM Board of Directors April 12, 2011.
VIDEO
The Pathology of Addiction

Characteristics of Addiction
Addiction is characterized by:

- The power of external cues
- Persistent risk and/or recurrence of relapse
  - Significant impairment in executive functioning
- Addiction is more than a behavioral disorder. – Cognitive and Emotional as well

Addiction is characterized by:

A. Inability to consistently Abstain

B. Impairment in Behavioral control

C. Craving; or increased “hunger” for drugs or rewarding experiences

D. Diminished recognition of significant problems with one’s behaviors and interpersonal relationships

E. A dysfunctional Emotional response.

Special Considerations for ACT Team clients (SPMI)
What Is So Different About Quadrant IV?

Stress Vulnerability Model
(Zubin and Spring, 1977)

- Heightened stress and intensity of circumstances contributes to exacerbation of and/or more rapid onset of MH symptoms
- High intensity interventions are counter-productive

Mental Status Implications

Why Don’t They “Get It”??!

- Insight & judgment are essential to processing consequences
  - Symptom manifestation in SPMI compromises insight and judgment
  - Thus, consequences are not being processed
- Anosognosia (Babinski, 1914; Lehrer and Lorenz, 2014)

Mental Status Implications

- Anosognosia is a deficit of self-awareness, a condition in which a person seems unaware of the existence of his or her disability.
- Anosognosia results from physiological damage to brain structures, typically to the parietal lobe or a diffuse lesion on the fronto-temporal-parietal area in the right hemisphere of the brain.
Mental Status Implications

- Substance abuse affects neurotransmission (serotonin, dopamine, etc.) and interactions within reward structures of the limbic system (McLellan et al., 2000; Robbins and Everitt, 2002)
  - "The hijacked brain"

- Disruption of the prefrontal cortex in addiction underlies not only compulsive drug taking, but also accounts for the disadvantageous behaviors that are associated with addiction and the erosion of free will. (Goldstein and Volkow, 2011)

- Essentially, the brain’s basic functions have been "rewired"

Let’s Stop With the Clichés…

- If you ever hear the phrase: "You shouldn’t be working harder than the client is", there are 2 things you should know about that

  1) The person saying that lacks understanding of severe and persistent mental illness and related symptom management dynamics
  2) The person saying that has no understanding of the stages of change/treatment

Outreach & “Enabling”

- If your insight and judgment have failed you because of the symptoms of your mental illness…

- If your brain’s reward circuitry has been physically altered…

- If your anosognosia has left you unable to comprehend you have an illness…

- If your coping skills have forced you to adapt to one bad circumstance after another…

- …then, you are not very likely to come seek help from the place that offers help for the problem that you don’t think you have.
Outreach & “Enabling”

- And, if you are not very likely to come seek help from the place that offers help for the problem that you don’t think you have....

- We have to go to you, as it may be a matter of life and death.

- Death is a poor predictor of recovery.


COD Services Strategy: Assertive Approaches to Continuing Care

- Post-treatment monitoring & support (recovery checkups)

- Stage-appropriate recovery education & coaching

- Assertive linkage to communities of recovery

- If and when needed, early re-intervention & re-linkage to Tx and recovery support groups

- Focus not on service episode but managing the course of the disorder to achieve lasting recovery.

COD Services Strategy: Assertive Approaches to Continuing Care

1. Provided to all clients not just those who “graduate”

2. Responsibility for contact: Shifts from client to the treatment organization/professional
COD Services Strategy: Assertive Approaches to Continuing Care

3. Timing: Capitalizes on critical windows of vulnerability (first 30-90 days following treatment) and power of sustained monitoring (Recovery Checkups)

4. Intensity: Ability to individualize frequency and intensity of contact based on clinical data

5. Duration: Continuity of contact over time with a primary recovery support specialist for up to 5 years

6. Location: Community-based versus clinic-based

7. Staffing: May be provided in a professional or peer-based delivery format

8. Technology: Increased use of telephone- & Internet-based support services

A Fundamental Flaw

- Repeated episodes of brief interventions have little ability to fundamentally alter the course of substance dependence and its related consequences.

- Failure does not result from client or the inadequate execution of clinical protocol by service professionals.
A Fundamental Flaw

• It flows instead from a fundamental flaw in the design of the intervention - an acute-care model of treating addiction that is analogous to treating diabetes or asthma through a single, self-contained episode of inpatient stabilization.

• In the Acute Care model, brief symptom stabilization is misinterpreted as evidence of sustainable recovery.

• It is misleading to frame single episode of care as “graduation”, “completion”, “discharge” when dealing with a chronic illness

COD Service Vulnerability: Frequency of Discharge, Relapse, Re-admission

• The majority of people completing addiction treatment resume AOD use in the year following treatment (Wilbourne & Miller, 2002).

• Of those who consume alcohol and other drugs following discharge from addiction treatment, 80% do so within 90 days of discharge (Hubbard, Flynn, Craddock, & Fletcher, 2001).

COD Services Vulnerability: Failure to Manage Addiction/Tx/Recovery Careers

• Most persons treated for substance dependence who achieve a year of stable recovery do so after multiple episodes of treatment over a span of years (Anglin, et al, 1997; Dennis, Scott, & Hristova, 2002).

• See also: Bill W.
**COD Service Vulnerability: Fragility of Early Recovery**

- Individuals leaving addiction treatment are fragiley balanced between recovery and re-addiction in the hours, days, weeks, months, and years following discharge (Scott, et al, 2005).

- Recovery and re-addiction decisions are being made at a time that we are often disengaging from their lives, but many sources of recovery sabotage are present.

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**COD Service Vulnerability: Timing of Recovery Stability**

- Durability of alcoholism recovery (the point at which risk of future lifetime relapse drops below 15%) is not reached until 4-5 years of remission (Jin, et al, 1998).

- 20-25% of narcotic addicts who achieve five or more years of abstinence later return to opiate use (Simpson & Marsh, 1986; Hser et al, 2001).

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**Harm Reduction**

- Consumers with COD are at higher risk for negative consequences than general population

- Examples of negative consequences
  - Physical effects, disease, malnutrition
  - Relapse of “other” disorder
  - Unsafe sex
  - Victimization
  - Loss of family support, housing
  - Legal, incarceration, DUI

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Harm Reduction

Strategies to promote health and safety:

• Teaching safe sex practices
• Needle exchange programs
• Tobacco cessation
• Support switching to use of less harmful substance

The Interactive Course of Co-occurring Disorders

• Too often, we don’t have the luxury of determining whether the chicken or the egg came first…they’re both here now, so now what?
• “Primary” and “Secondary” distinctions are insurance concepts, not clinical treatment classifications.
• Substance use is a potential threat to mental health recovery, and unmanaged mental health symptoms are a threat to substance abuse recovery
Traditional Co-Occurring Disorders Treatment

- Treat each disorder separately
  - May be parallel or sequential
- Separate treatment is less effective (Drake et al, 2008)

Pharmacological Best Practices

- Medical professional trained in COD
- Works with client and team to support medication adherence
- Abstinence is not a requirement for medications

Pharmacological Best Practices

- Avoid prescribing addictive psychotropic medications
- Offer medications that may reduce addictive behavior
  - Naltrexone, et al
- Role of nursing…
Self-Help Participation & Active Linkage

- Practitioners connect clients in *active treatment or relapse prevention stages* with substance abuse and/or mental health self-help programs

- How might symptoms of SPMI affect an individual’s experience of self help?

Program Checklist

- Do our providers understand Stress Vulnerability dynamics and implications for the Quadrant Model of COD?

- Are we taking Mental Status implications into account?

- Is our Diagnostic Assessment:
  - A process and not an event?
  - Longitudinal vs. Parallel?

- Is our programming Stage appropriate?

Program Checklist

- Are we providing sufficient, timely and targeted Outreach?

- Does our program accommodate the needs associated with multiple chronic illnesses, taking into account the interactive course of those disorders?

- Does our program accommodate those needs in an integrated (not parallel or sequential) manner?
Program Checklist

- Does our program incorporate individualized and structured harm reduction interventions when warranted?
- Does our program incorporate Pharmacological best practices?
- Does our program make appropriate and well informed use of Self Help resources?

Pre-Contemplation/Engagement Stage Strategies

- Create comfort with open honest discussion about substance use.
- Be consistent and kind
- Explore what goals the veteran has
Contemplation/Motivation Stage Treatment Strategies

• Start education on areas of impact
  – Short and succinct
  – Keep it general – not skewed toward sobriety
  – Stimulate interest in topics

• Motivational Interviewing and approaches
  – Explore and express understanding of purpose / impact of use
  – Suppress expectations for change (for now)
  – Don’t create situations where they will defend their substance use.
• Help model and teach decision making
  – Pay Off Matrix
  – Columbo technique

• Provide option of harm reduction
  – Set “mini-goals”

• Develop Discrepancy
  – Keep everything tied to veterans goals

• Facilitate peer interaction
  – Groups work well for this purpose

• Low expectation for change, but high support for participation, attendance, communication

• Demonstrate patience and provide optimism

Transition to Early Action Stage
Treatment Strategies
Identifying Consequences of Use

• Harmful Consequences Exercise(s)

Teaching How to Manage Cues to Use

• Internal Triggers
• External Triggers
• Coping with Cravings

Internal Trigger Questionnaire

During the early and middle stages of cocaine addiction there are often certain feelings or emotions that trigger the brain to think about using cocaine. Read the following list of emotions and indicate which of them can trigger (or used to trigger) cocaine cravings for you:

_____ Afraid
_____ Exhausted
_____ Jealous
_____ Angry
_____ Frustrated
_____ Lonely
_____ Confident
_____ Guilty
_____ Neglected
_____ Criticized
_____ Happy
_____ Nervous
_____ Depressed
_____ Inadequate
_____ Passionate
_____ Embarrassed
_____ Pressured
_____ Excited
_____ Irritated
_____ Relaxed
_____ Sad

1. I thought about using cocaine when I felt:

2. Circle the above emotional states or feelings that have triggered your cocaine use recently.

3. Has your cocaine use in recent weeks/months been
   ______ 1. Primarily tied to emotional conditions
   ______ 2. Routine and automatic without much emotional triggering

4. Are there any times in the recent past in which you were attempting to stay drug free and a specific change in your mood clearly resulted in cocaine use? (For example, you got in a fight with someone and used cocaine in response to getting angry.)
   Yes__________ No__________
   If yes, describe:

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External Trigger Questionnaire

1. Place a check mark next to activities or situations in which you frequently used cocaine. Place a zero (0) next to activities or situations in which you never have used drugs.

   - Home alone
   - Home with friends
   - Friend's home
   - Sporting event
   - Movie
   - Bar/Club
   - Parties
   - Concerts
   - School

2. List any other settings or activities where you frequently use drugs.

3. List activities or situations in which you would not use drugs.

4. List people you could be with and not use drugs.

   - After going past dealer's residence

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Coping With Cravings (NIDA, 1989)

Remember that running into problems/crises is part of life and cannot always be avoided, but having a major problem is a time to be particularly careful about relapse.

If I run into a high risk situation:

1. I will leave or change the situation

   Safe place I can go:
   ____________________________________________________________________
   ____________________________________________________________________
   ____________________________________________________________________

2. I will put off the decision to use for 15 minutes. I'll remember that my craving usually goes away in ___ minutes and I have dealt with craving successfully in the past

3. I'll distract myself with something to do

   Good distracters:
   ______________________________________
   ______________________________________
   ______________________________________

4. I'll call my list of emergency numbers

   Name: ____________________________ Contact Info ____________________________
   Name: ____________________________ Contact Info ____________________________
   Name: ____________________________ Contact Info ____________________________

5. I'll remind myself of my success to this point

   ______________________________________
   ______________________________________
   ______________________________________

6. I'll challenge my thoughts about using with positive thoughts

   ______________________________________
   ______________________________________
   ______________________________________

Teaching Drug and Alcohol Refusal Skills

- Role play and group process

- Functional Analysis
Functional Analysis Trigger Worksheet

<table>
<thead>
<tr>
<th>Trigger</th>
<th>What was I thinking?</th>
<th>What was I feeling?</th>
<th>What did I do then?</th>
<th>What positive thing happened?</th>
<th>What negative thing happened?</th>
</tr>
</thead>
</table>

Problem-Solving Skills Training to Avoid High-Risk Situations

- Role play and group process
- Recommended resources

Coping Skills and Social Skills Training

- What skill deficits may result from addiction and/or mental illness?
- What skills training needs may need to be introduced into treatment groups?
- Recommended resources
**Teaching relapse prevention strategies**

- Understanding relapse
- Relapse prevention planning
- Recommended resources

**Preventing Substance Abuse and Mental Illness Relapse**

<table>
<thead>
<tr>
<th>Early Warning Signs</th>
<th>How to Deal with It</th>
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<tr>
<td>Attitude and Thinking changes</td>
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<tr>
<td>Mood or Emotional Changes</td>
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<tr>
<td>Behavior Changes</td>
<td></td>
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<tr>
<td>Changes in Daily Living/Physical Changes</td>
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</tbody>
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**Action Stage Treatment Strategies**
10 Things Addictions Clinicians Do With Individuals in the Action Stage of Treatment

1. Educate about signs, symptoms and illness of chemical dependency (family and client)

2. Address cognitive distortions and unhelpful thinking patterns

3. Address pathological pattern of defense mechanisms

4. Help identify internal and external triggers and cues to use

5. Help manage cravings and urges to use

6. Help manage negative emotional mood states

7. Facilitate understanding of 12 step supports and teach how to use self-help supports

8. Teach recovery skills (coping skills, refusal skills, relaxation skills, leisure skills, social skills, et al.)

9. Teach problem-solving skills training to avoid high-risk situations

10. Develop recovery and relapse prevention plans
Helpful Resources


Helpful Resources


Contact Us

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Our Mission

The Center for Evidence-Based Practices at Case Western Reserve University is a technical-assistance organization that promotes knowledge development and the implementation of evidence-based practices (EBPs) for the treatment and recovery of people diagnosed with mental illness or co-occurring mental illness and substance use disorders.

Our technical-assistance services include the following:
- Service-systems consultation
- Program consultation
- Clinical consultation
- Training and education
- Program evaluation (fidelity & outcomes)
- Professional peer-networks
- Research

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