UPMC

University of Pittsburgh Medical Center

Biopsychosocial Factors in Mental Illness Module 3

Mental Illness and Substance Use Disorders

This presentation will cover the major categories of mental illness and substance use disorders, often referred to as co-occurring disorders. This will include typical symptoms as well as treatments.

Since one important aspect of treatment is medication, basic psycho-pharmacology will also be reviewed.
This will include categories of anti-psychotics, mood stabilizers, anti-convulsants, and anti-depressants.

Objectives

Upon completion of this section, you will be able to:

- Recognize the factors which influence mental illness and substance use disorders;
- List the different categories of medications and what illnesses they are used to treat.

Selected Categories of Mental Illness According to the DSM-5

- Schizophrenia
- Bipolar Disorder
- Other Major Mood Disorders
- Personality Disorders

Epidemiology of Schizophrenia

- About 11% in population
- Occurs in ALL cultures, all socioeconomic groups
- Peak onset in males: Ages 15-25
- Peak onset in females: Ages 25-35
- Prevalence equal in men and women

Epidemiology of Schizophrenia (continued)

- 50% of patients attempt suicide
- 10% succeed
- Most expensive of ALL mental disorders
- 10x greater chance if family history

Social Impact of Schizoprenia

- 1% of US population (About 2 million)
- 20% total hospital beds
- 40% of long-term care days
- 20% Social Security benefit days
- $33 billion in lost economic output
- 1990--$16 billion for treatment per year average

Positive Symptoms of Schizophrenia

Positive does not mean ‘good’. It refers to obvious symptoms that are exaggerated forms of thinking or behavior that become irrational.

- Delusions
- Hallucinations (Auditory [Command Hallucinations] /Visual)
- Disorganized Speech
- Disorganized (Catatonic) Behavior

Types of Schizophrenia

Paranoid Type

- Most common; someone feels that they are being persecuted or spied on.

Disorganized Type

- Positive symptom; Someone can appear confused or incoherent.

Catatonic Type

- Someone can be physically immobile or unable to speak.

Undifferentiated Type

- A subtype in which no paranoid, disorganized or catatonic features are prominent.

Residual Type

- Psychotic symptoms are markedly diminished or no longer present.

Negative Symptoms

Negative does not mean ‘bad’. It reflects the absence of certain normal behaviors in people with schizophrenia, including a lack or very limited range of emotions; withdrawal from family, friends and social activities; reduced energy and speech; lack of motivation; loss of pleasure or interest in life; poor hygiene and grooming habits.

- Affective Issues
- Social Avoidance
- Relationship Issues
- Lack of Motivation

Bipolar Disorder

Types of Bipolar:

- Bipolar I
- Bipolar II
- Bipolar NOS

Epidemiology of Bipolar

- 1-2 million Americans diagnosed with Bipolar Disorder
- Both male and females diagnosed equally
- Women experience “rapid cycling” 3x more often than men

Epidemiology of Bipolar (continued)

- Average onset age 18 (children often misdiagnosed as ADHD)
- Family history of Bipolar or other SPMI

Bipolar Disorder

According to the DSM 5, there are nine types of Bipolar Disorder:

#1) With anxious distress

During the most recent or current mood episode (depressive, hypomanic or manic), at least two of the following symptoms are present: feeling keyed up or tense, feeling unusually restless, difficulty concentrating because of worry, fearful something bad will happen, or feeling on the edge of self-control. Anxious symptoms improve as the underlying mood episode resolves.

Bipolar Disorder, continued

#2) With mixed features

Denotes the presence of depressive symptoms during a manic or hypomanic episode, or hypo/manic symptoms during a depressive episode. This replaces the separate category for "mixed state" episodes, which required meeting full criteria for both poles at the same time.

#3) With rapid cycling

Technically, this simply means four or more mood episodes of any kind within a 12-month period—although people whose moods fluctuate quickly, sometimes within the course of a single day, often use "rapid cycling" to describe those mood gyrations. (The correct term for many ups and downs in a day is "ultradian cycling.")

Bipolar Disorder, continued

#4) With catatonic features

Used when certain extremes of physical activity and speech occur during a mood episode, including lack of response to stimuli, not moving or speaking, repeating words or movements of another person, or frantic movement with no purpose.

#5) With psychotic features

Noted when paranoia, delusions, or hallucinations—auditory (hearing voices), visual (seeing things) or sensory (feeling something that isn't there)—occur at any point during a mood episode. Religious delusions are common, such as believing you've been given a special mission or special message from God.

Bipolar Disorder, continued

#6) With melancholy features

Describes a depressive episode characterized by an almost complete lack of ability to feel pleasure even when something good happens. Typically, there is also insomnia and significant slowing of speech and activity.

#7) With atypical features

Applies to a depressive episode in which the person sleeps and eats more than usual, often gaining weight. Other traits: Feeling sluggish and "leaden," and being abnormally affected by rejection. If there is low mood, spirits may lift in reaction to a positive experience.

Bipolar Disorder, continued

#8) With seasonal pattern

This is also used for depressions that recur during certain seasons—typically in fall or winter—that can't be attributed to events like school starting or seasonal unemployment. More rarely, people experience a pattern of summertime depressions.

#9) With peripartum onset

Indicates mood episodes that begin during pregnancy or in in the months after giving birth. This replaces "postpartum onset," the term used in previous DSM editions, to reflect the fact that many women have mood symptoms that pre-date delivery.

Other Mood Disorders

- Major depressive disorder
  - w/ psychotic features
  - w/o psychotic features
- Depressive Disorder NOS

Epidemiology of Mood Disorders

- 9.9 million Americans being treated for depression a year
- 2x as many females are diagnosed with depression (6.7 million females; 3.2 million males)

Epidemiology of Mood Disorders (continued)

- Depression occurs in all age ranges, first episode occurring anytime throughout life
- More than 50% will experience more than one episode during a lifetime

Epidemiology of Mood Disorders (continued)

- Some will experience more than one episode a year
- Left untreated, episodes can last for more than 6 months at a time

Epidemiology of Mood Disorders (continued)

- Left untreated, risk for suicide is greatly increased
- Highest rate of successful treatment. 80-90% return to normal lives.

Personality Disorders

- Borderline Personality Disorder
- Narcissistic Personality Disorder
- Anti-Social Personality Disorder
- Obsessive-Compulsive Personality Disorder
- Dependent Personality Disorder
- Passive-Aggressive Personality Disorder

Substance Abuse Trends Nationally

The following slides contain information obtained from the 2012 DRUG ABUSE WARNING NETWORK-(DAWN)

https://www.samhsa.gov/data/data-we-collect/dawn-drug-abuse-warning-network

SAMHSA's ---DAWN

- There is a 2 year lag time in reporting, so the 2012 report presents the 2010 findings.
- Data is gathered from (237) metropolitan hospital emergency departments.
- Began in the 1970s so DAWN is able to reflect trending
- DAWN monitors all illegal, prescription, and over the counter (OTC) drug related admissions
- Alcohol is ONLY reported when the individual admitted is under the age of 21.

Overview of 2010 Findings

- In 2010-(46.8%) or 2.3 million of the drug ED visits were classified as drug *MISUSE* or *ABUSE.*
- In 2010-(47.4%) of the drug ED admissions were related to *ADVERSE DRUG REACTIONS.*
- Between the years of 2004-2010, ED admissions for the *MISUSE/ABUSE* of Pharmaceuticals has increased (115%)

Further 2010 Findings

Most significant finding is the dramatic increase In the ED admissions for NONMEDICAL use of Opioid Pain Relievers.

Buprenorphine (Suboxone)	**2006----2010**	**+255%**
Hydromorphone (Dilaudid)	**2006----2010**	**+161%**
Oxycodone (Oxycontine)	**2006----2010**	**+126%**
Hydrocodone (Vicodin)	**2006----2010**	**+67%**

Increasing Trends

Overall, ILLICIT drugs have not shown a significant increase between 2004-2010. There are a couple of exceptions as follows:

2004-2010 Marijuana (64% increase)
2004-2010 Ecstasy (114% increase)

*** Marijuana ED visits are often for related panic attacks**

Increasing Trend

Two other classes of pharmaceuticals have witnessed a dramatic increase across 2004-2010 and these are:

1.Anti-anxiety and *Insomnia* medications

2.Benzodiazepines

Anti-Anxiety/Insomnia up (124% between 2004-2001)
Benzodiazepines up (129% same period)

DAWN Summary

- Majority of **illicit drug** ED visits have remained flat between 2004-2010 with the exceptions of **Marijuana** and **Ecstasy.**
- Opiate pain medication misuse/abuse continues to increase dramatically.
- **Anti-anxiety** and **sleep medications** remain a major and growing concern.
- Alcohol related ED visits between 2004-2010 revealed no significant change among those 21 and under.
- Of significance is patients under age 20, account for 18.8% or nearly 1/5 of the total drug related ED admissions.

Oxycodone

- Oxycodone is a semi synthetic narcotic/analgesic for pain relief
- Oxycodone combined with aspirin becomes *Percodan* and when mixed with Tylenol becomes *Roxicet*
- BUT, Oxycodone alone is marketed as OXYCONTIN—the major opiate of abuse
- OxyContin is also referred to as Oxy, Kicker, and Hillbilly Heroin

New Concern-Synthetic Stimulants

BATH SALTS

- Synthetic derivatives of a chemical stimulant found in the KHAT plant
- Names include Bliss, Cloud Nine, Snow Leopard, White Dove
- Primarily sold in powder form in small 200-500 mg packets
- Route of intake, by mouth, nasal, smoked or injected
- Affect on mind includes, PARANOIA, agitation, irritability, sleeplessness, panic attacks, seizures, and suicidal thoughts
- Affect on body can include rapid heart rate and possible heart attack or stroke
- Sold in convenience stores, online, and in head shops

Alcoholic Energy Drinks

- SPARKS the first recognized alcohol energy drink in the U.S.
- More recent brands include

24/7	Rockstar 21
Catalyst	Tilt
3 SUM	Liquid Charge
Four	Torque
Four Loko	

Alcoholic Energy Drinks

- Typically contain 6-12% alcohol content and 24 ounce cans
- This means 4-5 times the alcohol of a typical 12 ounce can of beer
- Some contain over 200 mg of caffeine
- Produces a WIDE EYED DRUNK
- Yields to increased intoxication and more risky behavior
- In 2011 warnings and bans have been established

Benzodiazepines

- As with pain medications, “Benzos” abuse has increased dramatically past 4-5 years
- Benzos are central nervous system depressants that have similar effects as alcohol and sleeping pills
- Adolescents and young adults are at greatest risk
- Typically take it by mouth, but more seasoned users crush and snort them
- Serious life threat in that overdose can result in coma and death
- They are a schedule IV controlled substance and can be obtained by prescription only in the United States
- Many to choose from include Valium, Xanax, Ativan, Tranxene
- Xanax and Valium are most popular
- Obtained for the illegal market by obtaining the medications from multiple physicians and forging prescriptions

K2 or Spice

- Mix of herbs and spices sprayed with a synthetic chemical similar to the THC found in Marijuana
- Marketed as “Incense” or “Fake Weed”
- Retail outlets and head shops carry, but internet purchases continue to increase
- Psychological and physical effects closely mimic marijuana
- March 2001, the Drug Enforcement Agency moved several of the key ingredients to a Schedule I status which will serve to greatly hamper production

Salvia

- A perennial herb in the mint family that is a natural hallucinogen
- Street terms include Sally-D, Maria Pastora
- Affect on mind is bright lights, vivid colors, shape distortions, and uncontrollable laughter
- Legal status-complicated. Salvia is not controlled under the Controlled Substance Act. But several states control it.
- PA has a current bill (Summer 2011) that would classify Salvia as a PA Schedule I drug therefore making possession illegal in PA

Summary

- The shift from drugs such as methamphetamine and cocaine towards pain medications has been dramatic
- Many drugs of abuse have remained fairly consistent past 4-5 years to include marijuana and hallucinogens
- Alcohol remains our major “drug” of abuse and the 18-26 year olds have the most alcohol related problems
- The street chemists are creative and there are more designers drugs today and more to come

Co-Occurring Disorders

Many terms have been used to define co-occurring disorders

- MICA – mentally ill chemical abuser
- MISA – mentally ill substance abuser
- MISU – mentally ill substance using
- SAMI – substance abusing mentally ill
- MICD –mentally ill chemical dependent
- ICOPSD – individuals with co-occurring psychiatric and substance disorders
- Dually diagnosed
- Dually disordered
- Co morbid disorders

https://www.samhsa.gov/kap

National Co-Morbidity Study: Prevalence of Dual Disorders

- More than 10 million in U.S. have co-occurring disorders
- Rule of “half” = 51% with a mental disorder have a substance use disorder
- 41%-66% with a substance abuse disorder have a mental disorder

Serious and Persistent Mental Illness

Rates of Substance Use Disorders by Psychiatric Diagnosis

OCD	(32.8%)
Major depression	(27.2%)
Bipolar disorder	(60.7%)
Schizophrenia	(47%)
Antisocial personality disorder	(84%)

Levels of Care Quadrants for Co-Occurring Disorders

(Quadrant I)
Mental disorder ***less severe*** – substance use disorder ***more severe***
Care – primary care (health) system

(Quadrant II)
Mental disorder ***more severe*** – substance use disorder ***less severe***
Care – mental health system

(Quadrant III)
Mental disorder ***less severe*** – substance use disorder ***more severe***
Care - substance abuse system

(Quadrant IV)
Mental disorder ***more severe*** – substance use disorder ***more severe***
Care – state hospitals, jails/prisons, emergency rooms

The 6 Guiding Principles in Treating Clients with Co-Occurring Disorders

- Employ a recovery perspective
- Adopt a multi-problem viewpoint
- Develop a phased approach to treatment
- Address specific real-life problems early in treatment
- Plan for the client's cognitive and functional impairments
- Use support systems to maintain and extend treatment effectiveness

Main Beliefs of Co-Occurring Practice

- ***EXPECT*** co-occurrence – it is not an ***EXCEPTION***
- Both disorders are ***PRIMARY***. e.g. if alcohol abuse is present, do not think of it as a "symptom" or secondary to the bipolar disorder or schizophrenia. The substance use disorder is a stand alone diagnosis just as the mental illness.
- The traditional ***CONFRONTATIONAL*** approach utilized by addictions must be balanced with ***EMPATHY***.
- Standard addictions treatment is not effective with co-occurrence and these consumers require ***INDIVIDUALIZED*** and ***INTEGRATED*** treatment.

Psychopharmalogical Treatment

The following presentation reviews the various psychopharmalogical treatment strategies used in treating individuals with mental illness.

Psychopharmalogical Treatments

- Anti-Psychotics
- Atypical Anti-Psychotics
- Mood Stabilizers
- Anti-Depressants

Anti-Psychotics

- Thorazine
- Halidol
- Melleril

Side Effects of Typical Anti-Psychotics

- Stiffness
- Tremors
- Tardive Dyskinesia
- Weight gain
- Agitation
- Sleeplessness
- Sexual dysfunction
- Many others

Atypical Anti-Psychotics

- Clozeril
- Zyprexa
- Risperadol
- Serequel
- Abilify

Side Effects of Atypical Anti-Psychotics

- Severe weight gain
- Drooling
- Sleeplessness

Mood Stabilizers/ Anti-Convulsants

- Lithium
- Tegratol
- Depakote
- Lamictal

Anti-Depressants/ Anti-Anxiety

- Prozac
- Serazone
- Celexa
- Wellbutrin
- Zoloft
- Paxil

Resources

The following are several websites which can provide you with valuable information in performing your duties as a case manager. Please feel free to review them at your convenience.

- http://www.pacode.com/
- Mental Health Procedures Act (pdf)
- MH/Intellectual Disability Act of 1966 (pdf)
- http://www.cms.hhs.gov/default.asp
- http://www.dhs.pa.gov/
- http://www.nami.org
- http://www.namikeystonepa.org/
- http://www.pmhca.org
- https://www.samhsa.gov/find-help/disorders
- http://www.grants.gov/

Summary

Please continue by completing the following quiz: https://www.oerp.pitt.edu/wp content/uploads/2019/04/TEST-Module-3.pdf

Return the completed quiz to your supervisor.

Comments

Please refer any comments or questions regarding this training to:

Doreen Barkowitz, LSW
UPMC Western Psychiatric Hospital / OERP
3811 O'Hara Street, Champion Commons, 3rd floor
Pittsburgh, PA 15213
or via email to: barkowitzdh@upmc.edu

You have completed Module 3.

Please click here to return to the Main Menu.