What Are Mood Disorders?

- In mood disorders, disturbances of mood are intense and persistent enough to be clearly maladaptive
- Extreme & persistent sadness, despair, loss of interest in activities

What Are Mood Disorders?

- The two key moods involved are mania and depression
- In unipolar disorders the person experiences only severe depression
- In bipolar disorders the person experiences both manic and depressive episodes
The Prevalence of Mood Disorders

- Higher in industrialized than developing countries
  - May be due to higher rates of diagnosis
- Twice as likely for women than men
  - In the U.S., 19–23% of women and 8–11% of men
  - May be due to differences in coping style

The lifetime prevalence for bipolar disorder ranges from 0.4–1.6%

Onset and Duration

- First episode usually occurs before age 40
- Symptoms may last days, weeks, or months
- May be one or more repeated episodes
- Children and adolescents can be depressed
  - May also experience Anxiety and Loneliness

Depressive Symptoms

- Poor appetite and weight loss
- Sleep disturbance
- Loss of energy and interest
- Difficulty concentrating
- Feelings of worthlessness, guilt
- Thoughts of suicide
- Inability to experience pleasure
Unipolar Mood Disorders

- Two fairly common causes of depression that are generally not considered mood disorders are
  - Loss and the grieving process
  - Postpartum blues

- The two main categories of mild to moderate depressive disorders are
  - Adjustment Disorder with Depressed Mood
  - Dysthymic Disorder - Not severe as major depression - Chronic

Major Depressive Disorder

- Clinical Depression
- The diagnostic criteria for major depressive disorder require
  - That the person exhibit more symptoms than are required for dysthymia
  - That the symptoms be more persistent
- Subtypes of major depression include
  - Major depressive episode with melancholic features
  - Severe major depressive episode with psychotic features
  - Major depressive episode with atypical features
Depressive Symptoms

Sometimes include delusions
- False beliefs inconsistent with reality
- May induce feelings of guilt, shame, or persecution

Difficulty with reality testing
- Inability to judge demands accurately and respond appropriately

Major Depressive Disorder

- If major depression does not remit for more than two years, chronic major depressive disorder is diagnosed
- Some people who experience recurrent depressive episodes show a pattern commonly known as Seasonal Affective Disorder

Biological Bases of Mood Disorders
Biological Theories

Neurotransmitters

Monoamine theory of major depression
- Depression results from problems with monoamine neurotransmitters
  - Dopamine, norepinephrine, epinephrine, serotonin
  - May be too few of these neurotransmitters
  - May not bind effectively to receptors
- Drugs that increase binding relieve depression
- Not effective for all cases of depression

The Motor Neuron

The Synapse
- Small space between neurons

Cellular Level

The Functioning of Neurons
- Communication is an electrochemical process
  - Within neurons it is electrical
  - Between neurons it is chemical
  - A thin membrane around the neuron allows the process
The Function of Neurons

- Partially permeable cell membrane
  - Traps charged particles inside or outside the neuron
  - At rest, the interior carries a negative electrical charge
  - The exterior carries a positive electrical charge
  - This difference in charges creates a state of polarization

The Function of Neurons

- Each neuron has a threshold
  - Level of stimulation required for activation
- When the threshold is reached:
  - "Gates" open in cell membrane
  - Positive ions rush into cell
  - Neuron is depolarized
    - Relative charge is reversed
    - Action potential has formed

The Function of Neurons

- Action potential
  - The "spike charge" is an electrical current that travels down an axon
  - If the threshold is not reached, the neuron will not fire
  - All-or-none Principle
    - Either the neuron fires or it doesn’t
    - Action potential is always the same strength
The Function of Neurons

- Neuron must recover between firings
  - **Refractory Period**
    - No action potentials can occur until resting state is re-established

Neurotransmitters and Behavior

- Communication must cross the **synapse** between neurons
- Chemical signal
  - At the axon terminal, the action potential causes the release of **neurotransmitters**

Synaptic Transmission

1. Within the axons of the neuron are neurotransmitters, which are held in storage-like vesicles until they are released when the neuron is stimulated.
2. The small space between the axon terminal and the dendrites of the next neuron is called the synapse. An action potential stimulates the release of neurotransmitters across the synapse.
3. The neurotransmitter binds itself to the receptor sites on dendrites of the next neuron, causing a change in potential.
Neurotransmitters

- After binding with an adjacent neuron, one of two processes occurs
  - Breakdown by enzymes
  - **Reuptake** back into the releasing neuron
- Neurotransmitters have two effects
  - **Excitatory**: receiving neuron fires more easily
  - **Inhibitory**: receiving neuron fires less easily

Neurotransmitters

- There are at least 50 different neurotransmitters
- Examples:
  - **Acetylcholine (Ach)**
    - Excitatory
    - Receptors in skeletal muscles
    - Involved in memory and learning
    - Alzheimer’s disease involves insufficient production of acetylcholine

Serotonin

- **Inhibitory**
- Involved in sleep regulation, appetite, anxiety, and depression
- Antidepressants affect serotonin
- A monoamine neurotransmitter
Dopamine

- Inhibitory
- Involved in movement, learning and memory, emotions, pleasure
- Also involved in Schizophrenia, ADHD, Parkinson's Disease

Norepinephrine

- Excitatory
- Involved in arousal, hunger, learning, memory, & mood disorders.

Neuropeptides

- Chemicals similar to neurotransmitters
  - Endorphins
  - Inhibitory, Painkillers. Occur naturally in the brain & bloodstream. Similar to morphine.
Neurotransmitters, Drugs, and Behavior

Change the speed at which neurotransmitters are disabled after release
- Prozac and Zoloft slow reuptake of serotonin
- Bind to neurotransmitter receptor sites

Selective Serotonin Reuptake Inhibitors (SSRIs)

Alter levels of specific neurotransmitters in the brain
- Block reuptake of serotonin
- Prolongs action of serotonin at synapse
- Effects usually seen within about 4 week
- Prozac, Zoloft, Paxil

Side Effects

All Antidepressant drugs have some Side Effects
- Sexual side effects
- Nausea, changes in appetite
- Insomnia, headaches
Biological Causal Factors in Unipolar Disorder

- Family studies and twin studies suggest a moderate genetic contribution
- Altered neurotransmitter activity in several systems is clearly associated with major depression
- The hormone cortisol also plays a role
- Depression may be linked to low levels of activity in the left anterior or prefrontal cortex

Biological Causal Factors in Unipolar Disorder

- Disruptions of the following may also play a role:
  - Sleep
  - Circadian rhythms
  - Exposure to sunlight

Psychosocial Causal Factors in Unipolar Disorder

- Stressful life events are linked to depression
- Diathesis-Stress Models propose that some people have vulnerability factors that may increase the risk for depression
The Effects of Severe Stress: General Adaptation Syndrome

Phase 1: Alarm Reaction
Phase 2: Stage of Resistance
Phase 3: Exhastion

The Effects of Severe Stress:
General Adaptation Syndrome

Psychosocial Causal Factors in Unipolar Disorder

- Freud believed that depression was anger turned inward
- Beck proposed a cognitive model of depression

Cognitive Theories

Depression results from negative thinking
- Aaron Beck’s approach
  - Negative views of self, environment and the future
  - Magnifies errors and misfortunes
  - Such cognitive distortions predict depression across ages and cultures

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Beck's Cognitive Model of Depression

- Early experience
- Formation of dysfunctional beliefs
- Critical incident(s)
- Beliefs activated
- Negative automatic thoughts
- Symptoms of depression
  - Behavioral
  - Motivational
  - Affective
  - Somatic

Psychosocial Causal Factors in Unipolar Disorder

- Reformulated Helplessness Theory: A pessimistic attributional style is a diathesis for depression
- Hopelessness Theory: A pessimistic attributional style and one or more negative life events will not produce depression unless one first experiences a state of hopelessness
- Seligman's Learned Helplessness: Repeated trying eventually lead to a person giving up

Bipolar Disorder

- Previously called manic–depressive disorder
- Alternating depression and mania
  - Excitement, euphoria, boundless energy
  - Rapid speech
  - Inflated self-esteem
  - Impulsivity
- Much less common than major depression
- No gender differences in prevalence
- Hypomania
Bipolar Disorder

• Usually appears in late adolescence/early adulthood
• Time in and between each phase varies widely from person to person
• Substantial genetic component
• Often treated successfully with drugs
  – Low compliance with drug treatment because manic phases are often pleasant for the individual
  – Untreated bipolar disorder is associated with suicide risk and other maladaptive behaviors

Bipolar Disorders

- Bipolar disorders are distinguished from unipolar disorders by the presence of manic or hypomanic symptoms
- Some people are subject to cyclical mood swings less severe than those of bipolar disorder; these are symptoms of cyclothymia

Bipolar Disorders: Features

The Bipolar Depression Spectrum

- Normal mood
- Cyclothymic personality
- Cyclothymic disorder
- Bipolar II
- “Unipolar mania”
- Bipolar I
Bipolar Disorders

- People may be diagnosed with Schizoaffective Disorder if they have a period of illness during which they:
  - Meet the criteria for a major mood disorder
  - Exhibit at least two major symptoms of schizophrenia

Biological Causal Factors in Bipolar Disorders

- There is a greater genetic contribution to bipolar disorder than to unipolar disorder
- Norepinephrine, serotonin, and dopamine all appear to be involved in regulating our mood states
- Bipolar patients may have abnormalities in the way ions are transported across the neural membranes

Biological Causal Factors in Bipolar Disorders

- Other biological influences may include
  - Cortisol levels
  - Disturbances in biological rhythms
  - Shifting patterns of blood flow to the left and right prefrontal cortex
Psychosocial Causal Factors in Bipolar Disorder

- Psychosocial causal factors include
  - Stressful life events
  - Personality variables (such as neuroticism and high levels of achievement striving)
- According to psychodynamic theorists, manic reactions are an extreme defense against or reaction to depression.

Sociocultural Factors Affecting Unipolar and Bipolar Disorders

- The prevalence of mood disorders seems to vary considerably among different societies
  - The psychological symptoms of depression are low in China and Japan
  - Among several groups of Australian aborigines there appear to be no suicides.
- In the United States, rates of unipolar depression are inversely related to socioeconomic status.

Mood Disorders in Writers and Artists

- Figures such as these indicate such individuals are particularly likely to have a mood disorder.

- Major depressive illness
- Cyclothymia/Bipolar II
- Manic-depressive illness (Bipolar I)
Robert Schumann's Work: Number of Compositions by Year

- Severe depression (1833)
- Hypomanic throughout (1840)
- Severe depression throughout (1844)
- Hypomanic throughout (1849)
- Suicide attempt (1854)
- Died in insane asylum (1856)

Treatments and Outcomes

- Psychotherapy
  - Cognitive-behavioral therapy
  - Interpersonal therapy
  - Family and marital therapy

- Many patients never seek treatment, and many of these patients will recover
- Antidepressant, mood-stabilizing, and antipsychotic drugs are all used in the treatment of unipolar and bipolar disorders
Antidepressant drugs usually require at least 3 to 4 weeks to take effect. Discontinuing the drugs when symptoms have remitted may result in a relapse. Lithium therapy has now become widely used as a mood stabilizer in the treatment of bipolar disorder. Electroconvulsive therapy is often used with severely depressed patients.

Electroconvulsive Therapy (ECT)
- Electrical current applied to the head to produce a seizure
- Overused in the 1940s and 1950s
- Effective in short-term treatment of Severe Depression not responsive to antidepressants
- Drug treatment and talk therapy needed to maintain long-term change

Treatments and Outcomes
- The following forms of psychotherapy are also often effective:
  - Cognitive-behavioral therapy
  - Interpersonal therapy
  - Family and marital therapy
Suicide

Suicide is more likely than violence against others
- Suicide attempters are unsuccessful
  - More likely to be young, female, make less lethal attempts
- Suicide completers are successful
  - More likely to be White, male, older, and use more lethal means
- Substance abuse increases risk

Suicide

- 60–70% of people with major depression think about suicide
- Those with antisocial personality disorder or bipolar disorder also at higher risk
- White men over age 75 at highest risk
Suicide: Who Attempts and Who Commits Suicide?

- Rates of suicide among children seem to be increasing
- Rates of suicides for people 15–24 tripled between the mid-1950s and mid-1980s
- Conduct disorder and substance abuse are relatively more common among the completers of suicide
- Mood disorders are more common among nonfatal attempters

Violence as Risk for Developing Mental Disorder

- Child abuse increases risk of a range of mental disorders
- Also increases risk of becoming an abuser
- Most abusers do not have a mental disorder
  - Poor parenting and environmental stress interact to create abusive parents

Domestic Violence

- Common throughout the world
- Married and unmarried partners
- Victims are at increased risk for PTSD, eating disorders, and depression
- May explain higher rates of these disorders among women
Rape

Women also more likely to be raped
- Date or acquaintance rape more common than stranger rape
- Experiences of male and female victims is similar
  - Increase risk for PTSD, anxiety disorders, depression, suicide, substance abuse
- Rapists unlikely to have a mental illness
  - Mental disorders less predictive of rape than social factors and attitudes

Suicide: Causal Factors

- Genetic factors may play a role in risk for suicide
- Reduced serotonergic activity appears to be associated with increased risk
- Whites have much higher rates of suicide than African Americans
- Rates of suicide vary across cultures and religions

Suicide: Suicidal Ambivalence

- Some people do not really wish to die but instead want to communicate a dramatic message concerning their distress
- Research has clearly disproved the tragic belief that those who threaten to take their lives seldom do so
Suicide: Prevention and Intervention

- Treatment of the person’s current mental Disorder(s)
- Crisis Intervention
- Preventive programs aimed at alleviating the problems of people who are in high-risk groups