Mood Disorders in Childhood

Overview of Mood Disorders

- The spectrum runs from severe depression to extreme mania
- DSM-5 divides mood disorders into two general categories
  - Depressive disorders excessive unhappiness (dysphoria) and loss of interest in activities (anhedonia)
  - Bipolar disorder mood swings from deep sadness to high elation (euphoria) and expansive mood (mania)

Depression

- A pervasive unhappy mood disorder
  - More severe than the occasional blues or mood swings everyone experiences
- Children who are depressed cannot shake their sadness - interferes with their daily routines, social relationships, school performance, and overall functioning
  - Often accompanied by anxiety or conduct disorders
  - Often goes unrecognized and untreated

History

- In the past, it was mistakenly believed that depression did not exist in children in a form comparable to that in adults
- We now know:
  - Children do experience recurrent depression
  - Depression in children is not masked, but rather may be overlooked
    - It frequently co-occurs with other more visible disorders

Depression in Young People

- Almost all young people experience some symptoms of depression
  - Many experience significant depression at some time displayed as a lasting depressed mood with disturbances in thinking, physical functioning, and social behavior
- Suicide among teens is a serious concern
- 90% of youngsters with depression show significant impairment in daily functions

Depression and Development

- Experience and expression of depression change with age
- In children under age 7 (as young as 3-5)
  - Tends to be diffuse and less easily identified
  - Anaclitic depression (Spitz) - infants
    - Infants raised in a clean but emotionally cold institutional environment showed depression-like reactions, sometimes resulting in death
    - Similar symptoms can occur in infants raised in severely disturbed families

Depression and Development (cont'd.)

- Preschoolers
  - May appear extremely somber and tearful, lacking exuberance; may display excessive clinging and whiny behavior around mothers
- School-aged children
  - The above, plus increasing irritability, disruptive behavior, and tantrums
- Preteens
  - The above, plus self-blame, low self-esteem, persistent sadness, and social inhibition

Anatomy of Depression

- Depression *(symptom)*: feeling sad or miserable
  - Occurs without existence of serious problem, and is common at all ages
- Depression *(syndrome)*: a group of symptoms that occur together more often than by chance
  - Mixed symptoms of anxiety and depression that tend to cluster on a single dimension of negative affect

Anatomy of Depression (cont'd.)

- Depression *(disorder)*
  - Major depressive disorder (MDD):
    - Has a minimum duration of two weeks
    - Is associated with depressed mood, loss of interest, and other symptoms; and significant impairment in functioning
  - Dysthymic disorder depressed mood is generally less severe but with longer lasting symptoms (a year or more) and significant impairment in functioning

Major Depressive Disorder (MDD)

- Diagnosis in children
  - Same criteria for school-age children and adolescents
  - Depression is easily overlooked because other behaviors attract more attention
  - Some features (e.g., irritable mood) are more common in children and adolescents than in adults

Major Depressive Disorder (cont'd.)

TABLE 10.1 | Diagnostic Criteria for Major Depressive Disorder

DSM-5

(A) Five (or more) of the following symptoms have been present during the same 2-week period and represent a change from previous functioning; at least one of the symptoms is either (1) depressed mood or (2) loss of interest or pleasure.

Note: Do not include symptoms that are clearly attributable to another medical condition.

(1) Depressed mood most of the day, nearly every day, as indicated by either subjective report (e.g., feels sad, empty, hopeless) or observation made by others (e.g., appears tearful). (**Note:** In children and adolescents, can be irritable mood.)

(2) Markedly diminished interest or pleasure in all, or almost all, activities most of the day, nearly every day (as indicated by subjective account or observation).

(3) Significant weight loss when not dieting or weight gain (e.g., a change of more than 5% of body weight in a month), or decrease or increase in appetite nearly every day. (**Note:** In children, consider failure to make expected weight gains).

(4) Insomnia or hypersomnia nearly every day.

(5) Psychomotor agitation or retardation nearly every day (observable by others, not merely subjective feelings of restlessness or being slowed down).

(6) Fatigue or loss of energy nearly every day.

(7) Feelings of worthlessness or excessive or inappropriate guilt (which may be delusional) nearly every day (not merely self-reproach or guilt about being sick).

(8) Diminished ability to think or concentrate, or indecisiveness, nearly every day (either by subjective account or as observed by others)

(9) Recurrent thoughts of death (not just fear of dying), recurrent suicidal ideation without a specific plan, or a suicide attempt or a specific plan for committing suicide.

Major Depressive Disorder (cont'd.)

(B) The symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.

(C) The episode is not attributable to the physiological effects of a substance or to another medical condition.

Note: Criteria A-C represent a major depressive episode.

Note: Responses to a significant loss (e.g., bereavement, financial ruin, losses from a natural disaster, a serious medical illness or disability) may include the feelings of intense sadness, rumination about the loss, insomnia, poor appetite, and weight loss noted in Criterion A, which may resemble a depressive episode. Although such symptoms may be understandable or considered appropriate to the loss, the presence of a major depressive episode in addition to the normal response to a significant loss should also be carefully considered. This decision inevitably requires the exercise of clinical judgment based on the individual's history and the cultural norms for the expression of distress in the context of loss.

(D) The occurrence of the major depressive episode is not better explained by schizoaffective disorder, schizophrenia, schizophreniform disorder, delusional disorder, or other specified and unspecified schizophrenia spectrum and other psychotic disorders.

(E) There has never been a manic episode or hypomanic episode.

Note: This exclusion does not apply if all of the manic-like or hypomanic-like episodes are substance-induced or are attributable to the physiological effects of another medical condition.

Prevalence

- Between 2% and 8% of children ages 4-18 experience MDD
- Depression is rare among preschool and school-age children (1-2%)
  - Increases two- to threefold by adolescence
- The sharp increase in adolescence may result from biological maturation at puberty interacting with developmental changes

Comorbidity

- As many as 90% of young people with depression have one or more other disorders; 50% have two or more
- Most common comorbid disorders include:
  - Anxiety disorders (especially GAD), specific phobias, and separation anxiety disorders
- Depression and anxiety are more visible as separate, co-occurring disorders:
  - As severity of the disorder increases and the child gets older

Comorbidity (cont'd.)

- Other common comorbid disorders are:
  - Dysthymia, conduct problems, ADHD, and substance-use disorder
- 60% of adolescents with MDD have comorbid personality disorders, especially borderline personality disorder
- Pathways to comorbid conditions may differ by disorder/sex

Onset, Course, and Outcome

- Onset may be gradual or sudden
  - Usually a history of milder episodes that do not meet diagnostic criteria
- Age of onset usually between 13-15 years
- Average episode lasts eight months
  - Longer duration if a parent has a history of depression

Onset, Course, and Outcome (cont'd.)

- Most children eventually recover from initial episode, but the disorder does not go away
  - Chance of recurrence is 25% within one year, 40% within two years, and 70% within five years
  - About one-third develop bipolar disorder within five years after onset of depression (bipolar switch)
- Overall outcome is not optimistic

Gender, Ethnicity, and Culture

- No gender differences until puberty; then, females are two to three times more likely to suffer from depression;
- Symptom presentation is similar for both sexes, although correlates of depression differ for the sexes
- Physical, psychological, and social changes are related to the emergence of sex differences in adolescence

Persistent Depressive Disorder [P-DD] (Dysthymia)

- Is characterized by symptoms of depressed mood that occur on most days, and persist for at least one year
  - Child with P-DD also displays at least two somatic or cognitive symptoms
- Symptoms are less severe, but more chronic than MDD

Persistent Depressive Disorder (cont'd.)

- Characterized by poor emotion regulation
  - Constant feelings of sadness, of being unloved and forlorn, self-deprecation, low self-esteem, anxiety, irritability, anger, and temper tantrums
  - Children with both MDD and P-DD are more severely impaired than children with just one disorder

Prevalence

- Rates of P-DD are lower than MDD
  - Approximately 1% of children and 5% of adolescents display P-DD
- Most common comorbid disorder is MDD
  - Nearly 70% of children with DD may have an episode of major depression
- About 50% of children with P-DD
  - Also have one or more nonaffective disorders that preceded dysthymia, e.g., anxiety disorders, conduct disorder, or ADHD

Onset, Course, and Outcome

- Most common age of onset 11-12 years
- Childhood-onset dysthymia has a prolonged duration, generally 2-5 years
- Most recover, but are at high risk for developing other disorders:
  - MDD, anxiety disorders, and conduct disorder
- Adolescents with P-DD receive less social support than those with MDD

Associated Characteristics of Depressive Disorders

- Intellectual and academic functioning
  - Difficulty concentrating, loss of interest, and slowness of thought and movement may have a harmful effect on intellectual and academic functioning
    - Lower scores on tests, poor teacher ratings, and lower levels of grade attainment
  - Interference with academic performance, but not necessarily related to intellectual deficits
    - May have problems on tasks requiring attention, coordination, and speed

Cognitive Biases and Distortions

- Selective attentional biases
- Feelings of worthlessness, negative beliefs, attributions of failure, self-critical and automatic thoughts
- Depressive ruminative style; pessimistic outlook; and negative self-esteem
- Negative thinking and faulty conclusions generalized across situations, hopelessness, and suicidal ideation

Social, Peer, and Family Problems

- Social and peer problems
  - Few close friendships, feelings of loneliness, and isolation
  - Social withdrawal and ineffective styles of coping in social situations
- Family problems – child with depression:
  - Has less supportive and more conflicted relationships with parents and siblings
  - Feels socially isolated from families and prefer to be alone

Depression and Suicide

- Most youngsters with depression think about suicide, and as many as one-third who think about it, attempt it
  - Most common methods for those who complete suicide are firearms, hanging, suffocation, poisoning, and overdose
  - Worldwide, the strongest risk factors are having a mood disorder and being a young female
  - Ages 13 and 14 are peak periods for a first suicide attempt by those with depression

Theories of Depression

TABLE 10.2 | Overview of Theories of Depression

Psychodynamic	Actual or symbolic loss of love object (e.g., caregiver) that is loved ambivalently; anger toward love object turned inward; excessive severity of the superego; loss of self-esteem
Attachment	Insecure early attachments; distorted internal working models of self and others
Behavioral	Lack or loss of reinforcement or quality of reinforcement; deficits in skills needed to obtain reinforcement
Cognitive	Depressive mindset; distorted or maladaptive cognitive structures, processes, and products; negative view of self, world, and future; poor problem-solving ability; hopelessness
Self-Control	Problems in organizing behavior toward long-term goals; deficits in self-monitoring, self-evaluation, and self-reinforcement
Interpersonal	Impaired interpersonal functioning related to grief over loss; role dispute and conflict; role transition; interpersonal deficit; single parenting; social withdrawal; interaction between mood and interpersonal events
Socio-environmental	Stressful life circumstances and daily hassles as vulnerability factors; social support, coping, and appraisal as protective factors
Neurobiological	Neurochemical and receptor abnormalities; neurophysiological abnormalities; neuroendocrine abnormalities; genetic variants; abnormalities in brain structure and function; effects of early experience on the developing brain

Psychodynamic Theories

- Depression is viewed as the conversion of aggressive instinct into depressive affect
  - Results from the actual or symbolic loss of a love object
- Children and adolescents were believed to have inadequate development of the superego or conscience
  - Therefore, they do not become depressed

Behavioral Theories

- Emphasize the importance of learning, environmental consequences, and skills and deficits during the onset and maintenance of depression
- Depression is related to a lack of response-contingent positive reinforcement

Cognitive Theories

- Focus on relationship between negative thinking and mood
- Emphasize “depressogenic” cognitions
  - Negative perceptual and attributional styles and beliefs associated with depressive symptoms
- Hopelessness theory
  - Depression-prone individuals have a negative attributional style (blame themselves for negative events in their lives)

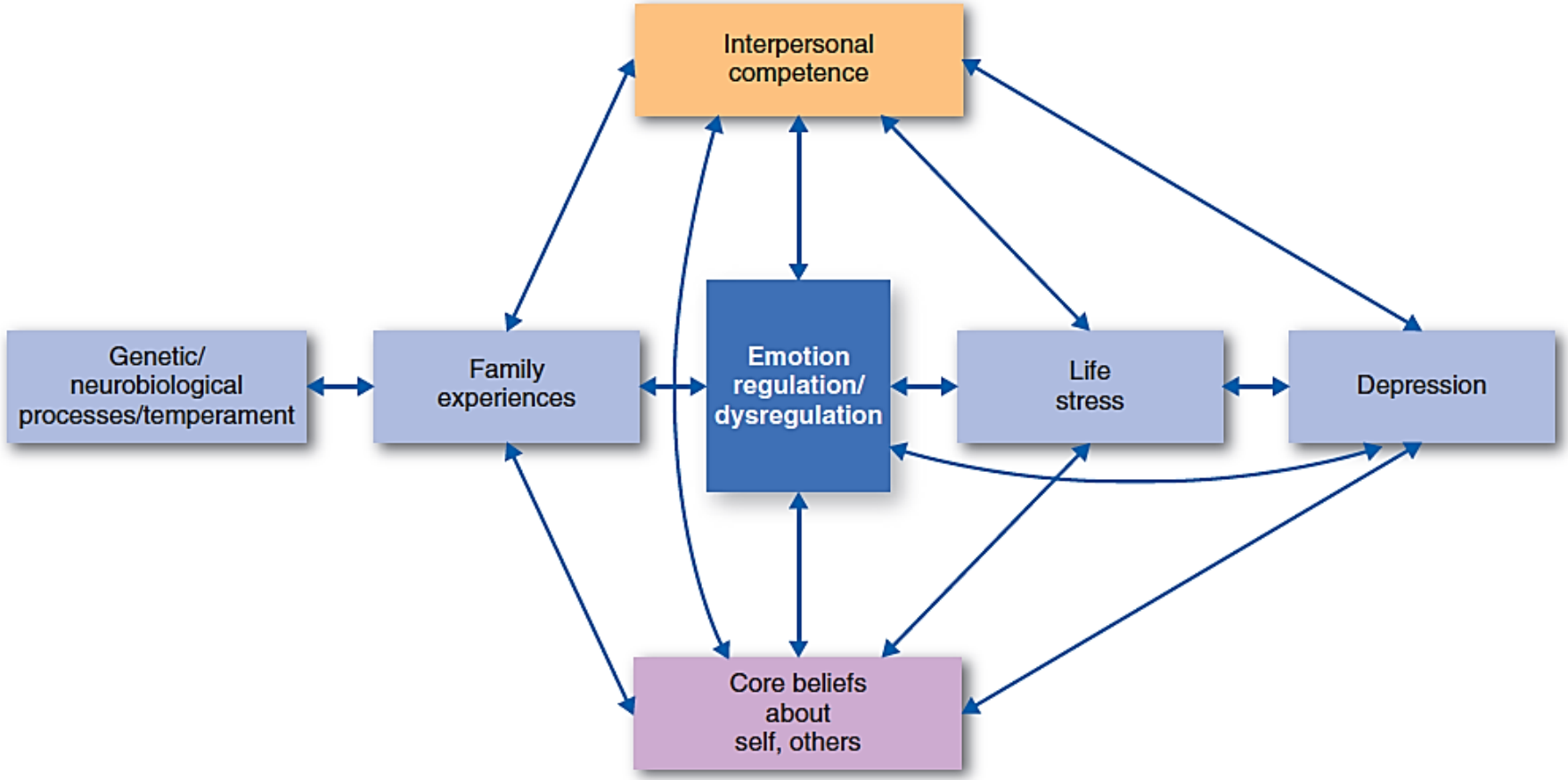
Cognitive Theories (cont'd.)

- Beck's cognitive model: depressed individuals make negative interpretations about life events
  - Biased and negative beliefs are used as interpretive filters for understanding events
  - Three areas of cognitive problems
    - Information-processing biases
    - Negative outlook regarding oneself, the world, and the future (negative cognitive triad)
    - Negative cognitive schemata

Causes of Depression

- Due to the many interacting influences, multiple pathways to depression are likely
  - Genetic risk influences neurobiological process and is reflected in early temperament characterized by:
    - Oversensitivity to negative stimuli
    - High negative emotionality
    - Disposition to feeling negative affect
  - These early dispositions are shaped by negative experiences in the family

A Developmental Framework for Depression



Genetic and Family Risk

- Twin and other genetic studies suggest moderate genetic influence, with heritability estimates ranging from 30-45%
- Children of parents with depression have about three times the risk of having depression
- What is inherited is likely a vulnerability to depression and anxiety
  - With certain environmental stressors needed for these disorders to be expressed

Neurobiological Influences

- Abnormalities in the structure and function of several brain regions that regulate emotional functions
  - Abnormalities in amygdala, cingulate, prefrontal cortex, hippocampus
  - HPA axis dysregulation, sleep abnormalities, and neurotransmitters (serotonin, dopamine, and norepinephrine) have also been implicated

Family Influences

- When children are depressed
  - Families display more critical and punitive behavior toward the depressed child than toward other children
- When parents are depressed
  - Depression interferes with the parent's ability to meet the needs of the child
  - Child experiences higher rates of depression phobias, panic disorder, and alcohol dependence as adolescents and adults

Stressful Life Events

- Triggers for depression may involve:
  - Interpersonal stress and actual or perceived personal losses (e.g., death of a loved one and abandonment)
  - Life changes (e.g., moving to a new neighborhood)
  - Violent family environment
  - Daily hassles and other nonsevere stressful life events

Emotion Regulation

- Children who experience prolonged periods of emotional distress and sadness, or who are exposed to maternal negative moods
  - May have problems regulating negative emotional states and may be prone to depression
  - May use avoidance or negative behavior regulate distress, rather than problem-focused and adaptive coping strategies

Treatment of Depression

- Fewer than half of children with depression receive help for their problem
  - Rates vary by racial/ethnic background
- Cognitive-behavioral therapy (CBT)
  - Has shown the most success in treating children and adolescents with depression

Treatment of Depression (cont'd.)

- Interpersonal Psychotherapy for Adolescent Depression (IPT-A)
  - Focuses on improving interpersonal communication and has also been effective
- Psychopharmacological treatments
  - With the exception of SSRIs, which have problematic side effects, medications have been less effective than CBT and IPT-A

Treatment of Depression Summary

TABLE 10.3 | Treatments for Youngsters with Depression

Behavior Therapy	Aims to increase behaviors that elicit positive reinforcement and to reduce punishment from the environment. May involve teaching social and other coping skills, and using anxiety management and relaxation training.
Cognitive Therapy	Focuses on helping the youngster with depression become more aware of pessimistic and negative thoughts, depressogenic beliefs and biases, and causal attributions of self-blame for failure. Once these self-defeating thought patterns are recognized, the child is taught to change from a negative, pessimistic view to a more positive, optimistic one.
Cognitive–Behavioral Therapy (CBT)	The most common form of psychosocial intervention. Combines elements of behavioral and cognitive therapies in an integrated approach. Attribution retraining may also be used to challenge the youngster's pessimistic beliefs.
Interpersonal Psychotherapy for Adolescent Depression (ITP-A)	Explores family and interpersonal interactions that maintain depression. Family sessions are supplemented with individual sessions in which youngsters with depression are encouraged to understand their own negative cognitive style and the effects of their depression on others and to increase pleasant activities with family members and peers (Mufson, et al., 2004).
Medication	Treats mood disturbances and other symptoms of depression using antidepressants, especially selective serotonin reuptake inhibitors (SSRIs).

Psychosocial Interventions

- Behavior therapy
  - Focuses on increasing pleasurable activities and events, and providing the youngster with the skills necessary to obtain more reinforcement
- Cognitive therapy
  - Teaches depressed youngsters to identify, challenge, and modify negative thought processes

Psychosocial Interventions (cont'd.)

- Cognitive-behavioral therapy (CBT)
  - Most common form of psychosocial intervention combining behavioral and cognitive therapies
- Interpersonal Psychotherapy for Adolescent Depression (IPT-A)
  - Focus is on depressive symptoms and social context in which they occur

Medications (cont'd.)

- SSRIs (e.g., Prozac, Zoloft, and Celexa) are the most commonly prescribed medications for treating childhood depression
  - Despite support for their efficacy, side effects include suicidal thoughts and self-harm as well as a lack of information about long-term effects on the developing brain
- Up to 60% of depressed youngsters respond to placebo

Prevention

- CBT and interpersonal psychotherapy are most effective at lowering risk for depression and for preventing recurrences
- School-based initiatives may provide a comprehensive program to enhance protective factors in the environment and to develop young people's individual resiliency skills
  - Recent studies did not yield significant results

Bipolar Disorder (BD)

- Features a striking period of unusually and persistently elevated, expansive, or irritable mood, alternating with or accompanied by one or more major depressive episodes
  - Elation and euphoria can quickly change to anger and hostility if behavior is impeded
    - May be experienced simultaneously with depression

Bipolar Disorder In Young People

- Young people with BP display:
  - Significant impairment in functioning, including previous hospitalization, MDD, medication treatment, co-occurring disruptive behavior and anxiety disorders
- History of psychotic symptoms, and suicidal ideation/attempts are common

Bipolar Disorder Symptoms and Types

- Symptoms include restlessness, agitation, sleeplessness, pressured speech, flight of ideas, racing thoughts, sexual disinhibition, surges of energy, expansive grandiose beliefs
- Three subtypes
  - Bipolar I disorder
  - Bipolar II disorder
  - Cyclothymic disorder

Bipolar Disorder
Mania in Young People

- Youngsters with mania may present with atypical symptoms - volatile and erratic changes in mood, psychomotor agitation, and mental excitation
  - Irritability, belligerence, and mixed manic-depressive features occur more frequently than euphoria
- Classic symptoms for children with mania include pressured speech, racing thoughts, and flight of ideas

Prevalence

- Lifetime estimates of BP range from 0.5-2.5% of youths 7-21 years old
  - It is difficult to make an accurate diagnosis
- In youngsters, milder bipolar II and cyclothymic disorder are more likely than bipolar I
  - Rapid cycling episodes are common
- Extremely rare in young children
  - Rate increases (nearly as high as that for adults) after puberty

Comorbidity

- High rates of co-occurring disorders are extremely common
  - Most typical are separation anxiety disorders, generalized anxiety disorders, ADHD, and oppositional and conduct disorders
  - Substance use disorders
  - Suicidal thoughts and ideation
- Co-occurring medical problems
  - Cardiovascular and metabolic disorders, epilepsy, and migraine headaches

Onset, Course, and Outcome

- About 60% of patients with BP have a first episode prior to age 19
  - Onset before age 10 is extremely rare
- Adolescents with mania typically have:
  - Psychotic symptoms, unstable moods, and severe deterioration in behavior
- Early onset and course is chronic and resistant to treatment
  - Long-term prognosis is poor

Causes

- Few studies have looked at the causes of BP in children and adolescents
- Research with adults suggests that BP is the result of a genetic vulnerability in combination with environmental factors (e.g., life stress and family disturbances)

Causes (cont'd.)

- Multiple genes may be involved
  - Genetic predisposition does not necessarily mean a person will develop BP
- Brain imaging studies suggest mood fluctuations are related to abnormalities in areas of the brain related to:
  - Emotion regulation prefrontal and anterior cingulate cortex, hippocampus, amygdala, thalamus, and basal ganglia

Treatment

- There is no cure for BP
- A multimodal plan includes:
  - Monitoring symptoms closely
  - Educating the patient and the family
  - Matching treatments to individuals
  - Administering medication, e.g., lithium
  - Addressing symptoms and related psychosocial impairments with psychotherapeutic interventions