# DEPRESSIVE DISORDERS



## Introduction

Like adults, children and adolescents experience depression with the accompanying feelings of hopelessness, guilt, or sadness. It is estimated that 15 to 20 percent of all youth experience depression by the age of 18 (Klein, Torpey, & Bufferd, 2008). The risk is greater for girls; beginning in early adolescence, females are 1.5 to 3 times more likely to experience depression than males (American Psychiatric Association [APA], 2013a). Common symptoms of depression include the following:

- Sadness or dejected mood
- Irritability
- Decreased energy and interest in activities
- Loss of feelings of pleasure
- Changes in sleep and appetite
- Difficulty thinking clearly, making decisions, and concentrating
- Lethargy and/or fidgetiness
- Feelings of hopelessness, worthlessness, and/or guilt
- Thoughts of death or suicide (APA, 2013a)

Depression in children and adolescents can manifest in different ways than it does in adults (American Academy of Child & Adolescent Psychiatry [AACAP], 2008). For instance, in adolescents, an irritable mood rather than a sad or dejected mood often predominates. Other signs include but are not limited to:

- Lack of interest in activities that once brought joy
- Frequent sadness or crying
- Newfound social isolation
- Low self-esteem
- Thoughts or expression of self-destructive behavior (AACAP)

Depressed youth may not always seem sad and can act out in ways that get them in trouble at school. It should also be noted that depression often runs in families (AACAP).

Because depressive disorders can result in suicide, depression among children and adolescents is of grave concern. Approximately 60 percent of adolescents with depression have recurrences throughout adulthood (Clark, Jansen, & Cloy, 2012). The emotional and behavioral dysfunction associated with these mood disorders can cause impairments across areas of functioning, including academic and social arenas.

### *Recent Changes from the DSM-IV to the DSM-5*

In 2013, the American Psychiatric Association (APA) released the fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders* (*DSM-5*) to replace the fourth text revision (*DSM-IV-TR*). Depressive disorders included in the *DSM-5* are listed below:

- Disruptive mood dysregulation disorder
- Major depressive disorder
- Persistent depressive disorder (dysthymia)
- Premenstrual dysphoric disorder
- Substance/medication-induced depressive disorder
- Depressive disorder due to another medical condition
- Other specified depressive disorder
- Unspecified depressive disorder (APA, 2013a)

The common feature of all of these disorders is the presence of sad, empty, or irritable mood, accompanied by somatic and cognitive changes that significantly affect the individual's capacity to function (APA, 2013a).

One major area of change in the *DSM-5* is that the *DSM-5* chapter on depressive disorders has been separated from the previous chapter, "Bipolar and Related Disorders." Furthermore, the *DSM-5* renamed dysthymia to persistent depressive disorder (dysthymia), and joined the prior description of dysthymia with chronic major depressive disorder (APA, 2013b). Another significant change in the *DSM-5* is the addition of new depressive disorders, including disruptive mood dysregulation disorder and premenstrual dysphoric disorder. Disruptive mood dysregulation disorder is a diagnosis reserved for children from six to 18 years of age who show persistent irritability and frequent episodes of extremely out-of-control behavior. This new diagnosis was added to address concerns about the potential over-diagnosis and overtreatment of bipolar disorder in children (APA, 2013a).

An additional change in the *DSM-5* is that premenstrual dysphoric disorder, which previously appeared in Appendix B of the *DSM-IV-TR* under "Criteria Sets and Axes Provided for Further Study," has been moved to the main body of the *DSM-5*. Premenstrual dysphoric disorder is a more severe form of premenstrual syndrome (PMS), which is characterized by strong emotional symptoms such as depression, anxiety, moodiness, and irritability (APA).

The *DSM-5* also removed what was known as the bereavement exclusion for major depressive episodes (APA, 2013b). Previously, any major depressive episode following the death of a loved one that lasted less than two months was not classified as a major depressive episode. By leaving out this exclusion, the *DSM-5* acknowledges that there is no scientifically valid reason for treating the grieving process

differently from any other stressor that might trigger a depressive episode (APA). The *DSM-5* includes information to assist clinicians in distinguishing between normal grief and a major depressive episode so they can make better decisions about whether a particular individual may benefit from treatment.

The *DSM-5* has also added some new specifiers to further clarify diagnoses. These specifiers are described below.

- **With mixed features:** This new specifier can be present in bipolar and depressive disorders. It allows for the presence of manic symptoms as part of the depression diagnosis in patients who do not meet the full criteria for a manic episode.
- **With anxious distress:** This specifier was added because the presence of anxiety can impact prognosis, treatment choices, and the patient's response to them.

The *DSM-5* is a manual for assessment and diagnosis of mental health disorders and does not include information for treatment of any disorder. In the future, more evidence supporting treatments of disorders with *DSM-5* classifications will be available as clinical studies using *DSM-5* criteria are conducted. As a result, this *Collection* will reference studies that utilize *DSM-IV* diagnostic criteria to explain symptoms and treatments.

## Categories

The following are descriptions of the eight categories of depressive disorders listed in the *DSM-5*.

### *Disruptive Mood Dysregulation Disorder*

This diagnosis is new. It was created to reduce the risk of overdiagnosis and treatment of bipolar disorder in children (APA, 2013a). The diagnosis is available for children from six to eighteen years of age.

The core feature of disruptive mood dysregulation disorder is chronic, severe, persistent irritability (APA). This irritability has two prominent clinical manifestations, the first of which is frequent temper outbursts. These outbursts typically occur in response to frustration and can be verbal or behavioral (behavioral outburst take the form of aggression against property, self, or others). Outbursts must occur frequently (i.e., on average, three or more times per week) over at least one year in at least two settings such as in the home and at school. Outbursts must be developmentally inappropriate. The second manifestation of severe irritability consists of a chronic, persistently irritable or angry mood that is present between outbursts. This irritable or angry mood must be characteristic of the child, being present most of the day, nearly every day, and noticeable by others in the child's environment (APA).

The clinical presentation of disruptive mood dysregulation disorder must be carefully distinguished from presentations of other related conditions, particularly pediatric bipolar disorder (APA, 2013a). Disruptive mood dysregulation disorder was added to *DSM-5* to address the considerable concern about the appropriate classification and treatment of children who present with chronic, persistent irritability relative to children who present with classic (i.e., episodic) bipolar disorder. In the *DSM-5*, the term bipolar disorder is explicitly reserved for episodic presentations of bipolar symptoms.

### *Major Depressive Disorder*

Major depressive disorder is characterized by a period of at least two weeks during which the youth experiences sadness, hopelessness, guilt, loss of interest in activities that are usually enjoyable, and/or irritability most of the time. Along with either a depressed or irritable mood or a loss of interest in previously pleasurable activities, youth diagnosed with major depressive disorder must experience at least four of the following:

- Significant change in weight (or failure to meet expected weight gain)
- Sleep disturbance
- Series of unintentional or purposeless motions (psychomotor agitation) or a visible slowing down of speech or other movements or reactions (psychomotor retardation)
- Fatigue or loss of energy most of the time
- Excessive feelings of worthlessness or guilt
- Difficulty thinking or concentrating
- Recurrent thoughts of death or suicide (APA, 2013a)

It is important to note that the youth's mood must differ from their usual mood and cannot be attributable to bereavement, a general medical condition, and/or substance abuse, although those conditions may co-occur and even contribute to depression. For major depressive disorder to be present, symptoms must be exhibited nearly every day and the depressed mood must last most of the day. Insomnia or fatigue is often the first noticeable and complained of symptom (APA).

### *Persistent Depressive Disorder (Dysthymia)*

Persistent depressive disorder (dysthymia) is a depressive disorder in which the symptoms are chronic and persistent but less severe than major depressive disorder (APA & AACAP, n.d.). The disorder occurs when youth experience a sustained depressed mood for most of the day, for more days than not, for at least one year (compared to two years for adults). Symptom-free intervals last no longer than two consecutive months. The youth must experience a depressed mood and have at least two of the following symptoms:

- Altered appetite (eating too much or too little)
- Sleep disturbance (sleeping too much or too little)
- Fatigue or loss of energy
- Low self-esteem
- Difficult thinking or concentrating
- Sense of hopelessness (APA, 2013a)

Because persistent depressive disorder (dysthymia) is a chronic disorder, youth often consider their symptoms a part of who they are and do not report them unless asked directly. Persistent depressive disorder (dysthymia) should not be diagnosed if the child or adolescent has ever experienced mania or if the onset of depressed mood meet criteria for major depressive disorder.

### *Premenstrual Dysphoric Disorder*

Premenstrual dysphoric disorder was previously included in the appendices of the *DSM-IV-TR*. However, this disorder is now officially a part of the depressive disorders section in *DSM-5*. The decision to move premenstrual dysphoric disorder to the main body of *DSM-5* was based on evidence that two to five percent of menstruating women experience a unique depressive disorder that begins following ovulation, remits within several days of menses, and leads to significant interference in daily life (Gotlib & LeMoult, 2014).

A diagnosis of premenstrual dysphoric disorder requires that at least five clinically significant symptoms occur repeatedly during the premenstrual phase of the cycle, and that these symptoms remit at or shortly after the onset of menses (APA, 2013a). At least one symptom must reflect disturbance in general mood: mood lability, irritability, dysphoria, or anxiety. In addition, individuals must endorse at least one of the following physical/behavioral symptoms:

- Anhedonia
- Difficulty concentrating
- Lethargy
- Appetite changes
- Sleep changes
- Overwhelmed feelings
- Physical symptoms.

These symptoms must have occurred in most of the menstrual cycles during the past year and must be severe enough to cause marked impairment in work or social functioning (APA).

### *Substance/Medication Induced Depressive Disorder*

According to the APA, the diagnostic features of substance/medication-induced depressive disorder include the symptoms of a depressive disorder, such as major depressive disorder; however, the depressive symptoms are associated with the ingestion, injection, or inhalation of a substance (e.g., drug of abuse, toxin, psychotropic medication, other medication), and the depressive symptoms persist beyond the expected length of physiological effects, intoxication, or withdrawal period (2013a). As evidenced by clinical history, physical examination, or laboratory findings, the relevant depressive disorder should have developed during or within one month of the use of a substance that is capable of producing the depressive disorder. Moreover, the diagnosis is not better explained by an independent depressive disorder.

Clinical judgment is essential to determine whether the substance or medication induced the depressive disorder or whether a primary depressive disorder happened to have its onset while the person was taking the substance or medication (APA, 2013a). Depressive symptoms are predominant in the clinical picture and develop during or soon after ingestion, injection, or inhalation of a substance (e.g. drug of abuse, toxin, psychotropic medication, and other medications) and the symptoms persist beyond the expected length of physiological effects, intoxication, or withdrawal period. This diagnosis should be made instead of a diagnosis of substance intoxication or substance withdrawal only when the symptoms (depressive) are sufficiently severe to warrant clinical attention. Depressive symptoms can occur in association with intoxication from alcohol, cannabis, phencyclidine, other hallucinogens, inhalants, stimulants (including cocaine), opioids, and other substances.

### *Depressive Disorder Due to Another Medical Condition*

Depressed disorder due to another medical condition occurs when there is evidence from history, physical examination, or laboratory findings that the disturbance is the direct pathophysiological consequence of another medical condition (Patricelli, n.d.). It must be established that the depressive symptoms can be etiologically related to the medical condition through a physiological mechanism before making a judgment that this is the best explanation for the symptoms of a specific individual. The presence of a clear association between the onset, exacerbation, or remission of the medical condition and the depressive symptoms is helpful in making this diagnosis. Numerous medical conditions are known to include depression as a symptomatic manifestation, including endocrine disease (e.g., hypothyroidism, Cushing's disease), cardiovascular disorders (e.g., stroke), metabolic disturbances (e.g., vitamin B12 deficiency, folate deficiency, iron deficiency), and neurological illness (e.g., Huntington's disease, Parkinson's disease, traumatic brain injury) (Patricelli).

### *Other Specified Depressive Disorder*

This category applies to presentations in which symptoms characteristic of a depressive disorder that cause clinically significant distress or impairment in social, occupational, or other important areas of functioning predominate but do not meet the full criteria for any of the disorders in the depressive

disorders diagnostic class. The other specified depressive disorder category is used in situations in which the clinician chooses to communicate the specific reason that the presentation does not meet the criteria for any specific depressive disorder. This is done by recording "other specified depressive disorder" followed by the specific reason (e.g., "short-duration depressive episode").

### *Unspecified Depressive Disorder*

This category applies to presentations in which symptoms characteristic of a depressive disorder that cause clinically significant distress or impairment in social, occupational, or other important areas of functioning predominate but do not meet the full criteria for any of the disorders in the depressive disorders diagnostic class (APA, 2013a). The unspecified depressive disorder category is used in situations in which the clinician chooses not to specify the reason that the criteria are not met for a specific depressive disorder. It includes presentations for which there is insufficient information to make a more specific diagnosis (e.g., in emergency room settings).

## Age-Specific Symptoms of Depressive Disorders

The behavior of depressed youth may differ by age. These age-related symptoms are discussed in the following paragraphs.

### *Preschool Children*

In recent years, researchers have found evidence that depression occurs in children as young as three years of age (Luby et al., 2009; Luby et al., 2003). Preschoolers with depression, compared to preschoolers who are disruptive, have significantly more sleep problems, feelings of guilt, changes in weight, diminished interest in activities that they previously enjoyed, and difficulty concentrating or thinking clearly (Luby et al., 2009). Additionally, children age three to five may be more accident-prone and have certain phobias (Harvard Mental Health Letter, 2002).

### *School-aged Children and Adolescents*

It is not uncommon for school-aged children and adolescents to experience depression (Klein, Torpey, & Bufferd, 2008). As a result, these youth frequently have impaired functioning at home, at school, and with friends (Klein, Torpey, & Bufferd). Children aged six to nine may be more aggressive, complain of physical problems of unknown origin, or cling to their parents and avoid new events and people (Harvard Mental Health Letter, 2002). As children enter adolescence, their symptoms may evolve into more typical adult symptoms, such as feelings of hopelessness, worry, and guilt (Harvard Mental Health Letter). It is interesting to note, however, that school-aged children experience less hopelessness, fewer incidents of sleep disturbance, fewer appetite changes, and fewer problems with motivation than do adolescents and adults (Klein, Torpey, & Bufferd).

Adolescents with depression tend to sleep more, have more appetite problems, and exhibit an irritable mood. Some experience suicidal ideation, and/or attempt suicide (Roberts, 2015). Depression may first appear at any age, but the odds increase as the child reaches puberty (APA, 2013a). Depression onset seems to peak during an individual's 20s and onset is certainly is not restricted to the teenage years (APA).

## Prevalence

Depression is prevalent in adolescents. It is estimated that between 15 and 20 percent of all youth experience depression by the age of 18 (Klein, Torpey, & Bufferd, 2008). One review estimated that as many as 24 percent of adolescents experience at least one clinically significant depressive episode before the age of 18 (Roberts, 2015). The National Institute of Mental Health in America reported over 11

percent of 13 to 17 year olds reported depression leading to social problems, interruptions in academic areas, and interference with cognitive functioning (Roberts).

The National Institute of Mental Health (NIMH) cites the *National Comorbidity Survey – Adolescent Supplement (NCS-A)*, which calculates the prevalence of major depressive disorder and dysthymic disorder in youth (NIMH, 2010). These results are highlighted below.

Depressive Disorders Affecting 13- to 18-year-old youth

| | |
|---|---|
| Some depressive disorder at some point | 11.2% |
| Seriously debilitating depressive disorder | 3.3% |

Prevalence by Age Range

| | |
|---|---|
| 13- to 14-year-old youth | 7.4% |
| 15- to 16-year-old youth | 12.2% |
| 17- to 18-year-old youth | 15.4% |

Lifetime Prevalence by Gender

| | |
|---|---|
| Females | 15.0% |
| Males | 7.5% |

## Causes and Risk Factors

According to the U.S. Department of Health and Human Services (1999), the exact causes of depressive disorders are not known. There is evidence, however, that genetics (specific genes passed from one generation to the next) contributes to a child's vulnerability to a depressive disorder. School-aged children and adolescents having family members who are depressed are more likely to experience depression themselves, although this does not appear to be the case for preschoolers (Klein, Torpey, & Bufferd, 2008).

Other contributing factors are environment (the conditions in which the child is growing up) and biology (neurotransmitters, hormones, and brain structure) (Klein, Torpey, & Bufferd, 2008). There is no research that shows whether family history and childhood onset of depression stems from genetic factors or whether depressed parents create an environment that increases the likelihood of a child's developing a depressive disorder (U.S. Department of Health and Human Services, 1999; Klein, Torpey, & Bufferd).

While not a risk factor, one study of children at ages three and six found that a diagnosis of an anxiety disorder at one age was likely to result in a diagnosis of depression at the other (Bufferd et al., 2012). More children in the study were diagnosed with depression at age six than at age three, but this may have been due to the children's increasing ability to verbalize their distress. Additionally, the children may have increased levels of depression due to the stress of school performance and peer comparison (Bufferd, et al.). The researchers compared this information to studies involving school-age children, adolescents, and adults and found consistent data (Bufferd, et al.). Although the study had several limitations, clinicians may find screening for both anxiety and depression fruitful if a child presents symptoms of one (Bufferd, et al.).

Depression in adults is studied more often than depression in children. Research on adults has pointed to a link between depression and serotonin and norepinephrine neurotransmitters, but this research has not been fully supported in children and adolescents (Klein, Torpey, & Bufferd, 2008). Research on adults with and without depression has also revealed differences in production levels of the hormone cortisol, which is often associated with stress. This finding is only partially supported in children and adolescents

(Klein, Torpey, & Bufferd). Depressed children and adolescents, however, are similar to depressed adults in that, like adults, they have an abnormal production of growth hormone (Klein, Torpey, & Bufferd). According to research compiled by NIMH, during childhood (pre-puberty), both males and females are equally at risk for depressive disorders (2000). However, during adolescence and continuing through adulthood, females are twice as likely as males to experience depression (Roberts, 2015; NIMH). Explanations for this significant gender difference include differences in temperament and emotional regulation, negative cognitive style and ruminative coping, relationship dependence and affiliation, biological/hormonal changes in puberty, and genetic depressive vulnerability (Roberts).

According to Roberts (2015) somatic and psychological symptoms of depression are believed to relate to biological dysfunctions in the hypothalamic-pituitary-adrenal axis (HPA) leading to sympathetic nervous system problems. Dysregulation in this area of the brain is believed to play a role in emotion regulation and feelings such as guilt and hopefulness.

Disruptive mood dysregulation disorder often presents in children with a vast history of protracted irritability (APA, 2013a). These children are often diagnosed first with oppositional defiant disorder (ODD), attention-deficit/hyperactivity disorder (ADHD), or anxiety disorders (APA). These children may also be distinguished from children at risk for bipolar disorder by examining their familial risk (APA).

## Assessment

Proper assessment of depressive disorders in children and adolescents is essential for accurate diagnosis, effective treatment formulation, and treatment monitoring (Rudolph & Lambert, 2007). According to the AACAP, clinicians may employ various approaches in making a diagnosis (1998). Assessment of depression in children and adolescents should include information obtained directly from the child, as well as from the child's parents and teachers. Information about symptom severity, frequency, and resulting impairment can be gathered through the use of structured or semi-structured clinical interviews, self-report questionnaires, observer questionnaires, and behavioral observation (Klein, Torpey, & Bufferd, 2008). Regardless of the method of assessment, clinicians should make the diagnosis only after other causes of the child's condition are ruled out (e.g., general medical conditions, substance use, and other psychiatric disorders) (APA, 2000). The child must then meet the diagnostic criteria set forth in the *DSM-5* (APA, 2013a).

Depression assessment instruments are valuable tools in the treatment of children and adolescents. Standardized instruments can greatly improve the assessment process (Huberty, 2012; Gray et al., 2009). Rudolph and Lambert (2007) identified the Schedule for Affective Disorders and Schizophrenia (K-SADS) (Kaufman et al., 1996) as an excellent measure-based diagnostic interview for youth ages six to 18. The Children's Depression Inventory (CDI-2) is a self-report measure that is appropriate for youth between seven and 17 years of age (Kovacs, as cited by Huberty). Overall, the reliability, validity, and clinical utility of the CDI-2 is strong, but should not be used as the sole source of information for diagnostic purposes (Huberty; Rudolph & Lambert, 2007). The Preschool Feelings Checklist (Luby et al., 2004) and the McAuther Health Behavior Questionnaire (HBQ) (Essex et al., 2002) are two questionnaires designed specifically for use with preschool children. Research indicates that both are good measures of depressive disorders in very young children (Rudolph & Lambert).

Along with assessment tools, observation may be quite helpful in diagnosing depression. Measuring non-verbal behavior in children and adolescents is most strongly associated with a depression diagnosis, and it best predicts its severity (Cusin et al., 2010).

The *DSM-5* states that clinicians should consider disruptive mood dysregulation disorder prior to potentially overdiagnosing or overtreating pediatric bipolar disorder (APA, 2013a). Severe and persistent irritability and frequent outbursts of temper occurring together should trigger consideration of disruptive mood dysregulation disorder (APA). However, it must be noted that suicidal ideation, suicide attempts,

severe aggression, and psychiatric hospitalization are common in both disruptive mood dysregulation disorder and pediatric bipolar disorder.

A major concern regarding children with depression is the increased risk for suicidal ideation and possible suicide attempts. Not all children who are depressed will attempt suicide, however, and not all children who attempt suicide meet diagnostic criteria for depressive disorders. However, based on responses to assessment instruments, the clinician may wish to pursue a lethality assessment (Huberty, 2012).

## Comorbidity

Research from various sources indicate that 40 to 90 percent of youth with major depressive disorder have at least one other psychiatric disorder (AACAP, 1998). The most commonly co-occurring disorders are persistent depressive disorder (dysthymia), anxiety disorders, disruptive disorders, and substance abuse disorders (AACAP). The *DSM-5* also notes that depression is often comorbid with panic disorder, obsessive-compulsive disorder, eating disorders like anorexia nervosa and bulimia nervosa, and borderline personality disorder (APA, 2013a). Depression is more likely to begin after the onset of the comorbid disorder, with the exception of substance abuse, which tends to occur after the onset of depression (AACAP). Disruptive mood dysregulation disorder is very often comorbid with oppositional defiance disorder (ODD), and frequently occurs with other disorders as well, including behavior, mood, anxiety, and autism spectrum disorder diagnoses (APA). However, if a child meets the diagnostic criteria for either ODD or intermittent explosive disorder (IED) along with the criteria for disruptive mood dysregulation disorder, the clinician should only diagnose disruptive mood dysregulation disorder (APA).

## Treatments

This section will focus on treatments for the most commonly diagnosed forms of depression among children adolescents: major depressive disorder and persistent depressive disorder (dysthymia). Disruptive mood dysregulation disorder is a new diagnosis in the *DSM-5*. At least one clinical trial to determine effective treatment for the disorder has begun, but the treatment path is not as fully defined as those for major depressive disorder and persistent depressive disorder (dysthymia).

Analysis conducted by Burns, Hoagwood, & Mrazek (1999) indicates that evidence-based treatments for major depressive disorder and persistent depressive disorder (dysthymia) are well-established for both psychosocial and pharmacological interventions. Research has shown a combination of the two treatments offers maximum therapeutic benefits. Because youth who experience the onset of depressive disorders at a younger age typically have a worse prognosis, early intervention is crucial in treatment (Brown, 1996). Early clinical intervention is critical to prevent additional functional breakdown, relapse, and suicidal behavior (Burns, Hoagwood & Mrazek).

### *Psychosocial Treatments*

The NIMH (2000) asserts that treating depressive disorders in children and adolescents often involves short-term psychotherapy and/or medication and targeted interventions addressing the home or school environment.

The evidence-based psychological treatments for depressive disorders are cognitive behavioral therapy (CBT) and interpersonal therapy (IPT) (Roberts, 2015; David-Ferdon & Kaslow, 2008). Psychodynamic therapy may gain popularity as a treatment protocol, as one study showed similar quality outcomes to CBT (Thoma et al., 2012). In their review of treatments for youth with depression, David-Ferdon and Kaslow reported that treatments that adhere to a treatment manual and were standardized led to greater gains than treatments that were not standardized (2008). The research also indicates that treatment gains were realized, regardless of where the treatment was provided (school, community clinics, primary care clinics, hospitals, or research settings) (David-Ferdon & Kaslow).

For this review, treatments are divided into two groups: What Works and What Seems to Work. Table 1 outlines psychosocial interventions for children and Table 2 lists those for adolescents.

### *Pharmacological Treatments*

Currently, only one pharmacological treatment has been approved for use with youth with depressive disorders by the Food and Drug Administration (FDA) (Treatment for Adolescents with Depression Study [TADS], 2004). This medication, fluoxetine (a selective serotonin reuptake inhibitor [SSRI]), has been approved by the FDA for treating children eight years of age or older (Roberts; 2015; APA & AACAP, n.d.). More research has been completed on fluoxetine than any other SSRI (Roberts).

**Table 1**
**Summary of Treatments for Children with Depression**

| | |
|---|---|
| **What Works** | |
| Stark's cognitive behavioral therapy (CBT) - child-only group or child group plus parent component | Stark's CBT includes mood monitoring, mood education, increasing positive activities and positive self-statements, and problem solving. |
| Fluoxetine (SSRI) in combination with CBT | Fluoxetine is the only antidepressant approved by the FDA for use in children (eight years old or older). For moderate to severe depression, pharmacological treatment in combination with psychosocial therapy may be warranted. However, because SSRIs can increase suicidal behavior in youth, children taking fluoxetine must be closely monitored by a mental health professional. |
| **What Seems to Work** | |
| Penn prevention program (PPP) | PPP is a CBT-based program that targets pre-adolescents and early adolescents who are at-risk for depression. |
| Self-control therapy | Self-control therapy is a school-based CBT that focuses on self-monitoring, self-evaluating, and causal attributions. |
| Behavioral therapy | Behavioral therapy includes pleasant activity monitoring, social skills training, and relaxation. |

Sources: David-Ferdon & Kaslow, 2008; Weisz, 2004.

A large, multisite study with important implications, TADS examined the effectiveness of fluoxetine alone, CBT alone, a combined treatment of fluoxetine and CBT, and a placebo. Study results indicated that a combined SSRI and CBT treatment approach is superior to SSRI or CBT treatment alone and better than placebo (TADS). Additionally, the SSRI treatment and the CBT treatment were equally effective in reducing depressive symptoms, and both were better than the placebo (TADS). This study further indicated that the use of tricyclic antidepressants for the treatment of youth with major depressive disorder is not supported (TADS). Additional studies have found that the lack of significant treatment effect and the presence of problematic side effects of tricyclic antidepressants indicate that they do not work with adolescents (Roberts, 2015).

### *Risk of Suicidal Behavior*

The U.S. Department of Health and Human Services (1999) asserts that depressive disorders dramatically increase the risk of suicide. Accordingly, the potential for suicidal behavior is a grave matter and

clinicians providing treatment must take it into account. One study found that depressed adolescents were five times more likely than adolescents without depression to attempt suicide (USDHHS).

**Table 2**
**Summary of Treatments for Adolescents with Depression**

| | |
|---|---|
| **What Works** | |
| Cognitive behavioral therapy provided in a group setting | CBT for depression focuses on identifying thought and behavioral patterns that lead to or maintain the problematic symptoms. |
| Interpersonal therapy (IPT) provided individually | In IPT, the therapist and patient address the patient's interpersonal communication skills, interpersonal conflicts, and family relationship problems. |
| Fluoxetine (SSRI) in combination with CBT | Fluoxetine is the only antidepressant approved by the FDA for use in children (eight years old or older). For moderate to severe depression, pharmacological treatment in combination with psychosocial therapy may be warranted. However, because SSRIs can increase suicidal behavior in youth, children taking fluoxetine must be closely monitored by a mental health professional. |
| **What Seems to Work** | |
| CBT in a group or individual setting with a parent/family component | CBT for depression focuses on identifying thought and behavioral patterns that lead to or maintain the problematic symptoms. |
| Adolecent coping with depression (CWD-A) | CWD-A includes practicing relaxation and addressing maladaptive patterns in thinking, as well as scheduling pleasant activities, and learning communication and conflict resolution skills. |
| Interpersonal psychotherapy for depressed adolescents (IPT-A) | IPT-A addresses the adolescent's specific interpersonal relationships and conflicts, and helps the adolescent be more effective in their relationships with others. |
| Physical exercise | Physical exercise has shown promise in improving symptoms of depression in adolescents. Group-based and supervised light- or moderate-intensity exercise activities 3 times a week for a period of between 6 to 11 or 12 weeks may bring about an improvement in depression. Additional research is need. |
| **Not Adequately Tested** | |
| Dietary supplements | Supplements such as St. John's Wort, SAM-e, and Omega-3 have not been adequately tested and may have harmful side effects or interact with other medications. Parents should discuss supplement use with a mental health care professional. |
| **What Does Not Work** | |
| Tricyclic antidepressants | These antidepressants can have problematic side effects and are not recommended for children or adolescents with depression. |

There has been considerable debate about the use of antidepressants to treat youth with depression, specifically whether their use increases the risk of suicidal behaviors. U.S. manufacturers are now required by the FDA to place a "black box" warning label on antidepressant medications prescribed for youth. A more detailed discussion of the use of antidepressants to treat children and adolescents is provided in the "Antidepressants and the Risk of Suicidal Behavior" section of the *Collection*.

### *Unproven Treatments*

Several treatments have been found to be ineffective in treating depression. Evidence indicates that tricyclic antidepressants are not efficacious (Klein, Dougherty, & Olino, 2005). The National Depressive and Manic-Depressive Association (2001) recognizes that various alternative treatments may positively affect depressive disorders but asserts that such treatments ought not to be endorsed. The Association asserts there is no scientific data supporting the use of dietary supplements such as Omega-3, St. John's Wort, or SAM-e; in fact, they may have harmful side effects. Accordingly, parents should discuss their use with the clinician.

## Cultural Considerations

As indicated by Yaylayan (2002), culture can influence how children communicate symptoms of depressive disorders. Complaints of nervousness and headaches are more common among Latino and Mediterranean cultures. Complaints of weakness or weariness are more prevalent among the Asian culture. According to Bender, there is no ethnic majority in the population of depressed children under the age of eight (2013). Minority children often have somatic complaints or are angry when they are depressed or anxious, and Asian children are often more emotionally reactive than their white counterparts (AACAP, 2013a). It is important that clinicians are aware of the youth's cultural background as well as the norms of their culture.

More research is being conducted on the impact of culture on the assessment and treatment of depressive disorders. As noted by Kaslow & Thompson (1998), there is a noticeable deficit of cultural information about treating depressive disorders in children and adolescents. Table 3 outlines some somatic (relating to, or affecting, the body) expressions that may signal depressive symptoms by culture.

There is great variability in the incidence of major depressive disorder diagnosis among different cultures. Additionally, there are culturally distinct ways that individuals express a distressing experience (Jenkins, Kleinman, & Good, 2001). In some cultures, people feel emotions introspectively. In others, people feel emotions within personal relationships or within events and situations (Jenkins, Kleinman, & Good). Some cultures may not permit members to express certain emotions, and these permissions may be further regulated by an individual's class or status within the culture (Jenkins, Kleinman, & Good).

The *DSM-5* warns against linking cultures to the likelihood of symptoms (APA, 2013a). Instead, clinicians should recognize that primary care practitioners often miss depressive symptoms when they occur as somatic symptoms (APA). Insomnia and loss of energy are the most-frequent complaints (APA).

**Table 3**
**Somatic Expressions Signaling Depressive Symptoms**

| Country or Culture | Expression |
|---|---|
| India | Sinking heart; feeling hot; gas |
| Nigeria | Heat in the head; biting sensation all over the body; heaviness sensation in the head |
| Mexican Americans | *Nervi's*; brain ache; "brain exploding" |
| Chinese | Neurasthenia |
| Dubai | "My chest feels tight"; "I am tired, fatigued"; broken body |
| United Arab Emirates | "The heart is poisoning me"; "as if there is hot water over my back"; "something is blocking my throat" |

Source: Ahmed & Bhugra, 2007.

## Overview for Families

There are three major types of depressive disorders that impact children and adolescents. Families may look for some or all of these symptoms if they suspect their child suffers from a depressive disorder.

### *Major Depressive Disorder*

For a child or adolescent to have major depressive disorder, the following symptoms must be present:

- A time of two weeks or more with some of the following symptoms:
- Sadness
- Hopelessness
- Guilt
- Loss of interest in activities that are usually enjoyable
- Irritability most of the time
- Additionally, the child must experience at least four of the following:
- Significant change in weight (or failure to meet expected weight gain)
- Sleep disturbance
- Series of unintentional or purposeless motions (psychomotor agitation)
- Fatigue or loss of energy most of the time
- Excessive feelings of worthlessness or guilt
- Difficulty thinking or concentrating
- Recurrent thoughts of death or suicide

The child's mood must be different from his or her usual mood, and it cannot be tied to mourning the loss of a loved one, a general medical condition, and/or substance abuse. The mood and symptoms must be present nearly every day, and the depressed mood must last for most of the day (APA, 2013a). Often, the family first notices or the child first complains of insomnia or fatigue (APA).

Other symptoms families should be aware of include:

- Feeling persistently sad or blue

- Talking about suicide or being better off dead
- Becoming suddenly much more irritable
- Having a marked deterioration in school or home functioning
- Reporting persistent physical complaints and/or making many visits to school nurses
- Failing to engage in previously pleasurable activities or interactions with friends
- Abusing substances

### *Persistent Depressive Disorder (Dysthymia)*

Symptoms of persistent depressive disorder (dysthymia) are less severe than major depressive disorder but tend to last longer. The child experiences a persistent depressed mood for most of the day, for more days than not, for at least one year. The symptoms cannot stop for more than two consecutive months. The youth must experience a depressed mood and have at least two of the following symptoms:

- Altered appetite (eating too much or too little)
- Sleep disturbance (sleeping too much or too little)
- Fatigue or loss of energy
- Low self-esteem
- Difficult thinking or concentrating
- Sense of hopelessness

Because persistent depressive disorder (dysthymia) is a chronic disorder, youth often consider symptoms a part of who they are and do not report them unless asked directly.

Persistent depressive disorder (dysthymia) should not be diagnosed if the child or adolescent has ever experienced mania or if the onset of depressed mood meets criteria for major depressive disorder.

### *Disruptive Mood Dysregulation Disorder*

Disruptive mood dysregulation disorder is a childhood condition of extreme irritability, anger, and frequent, intense temper outbursts. Diagnosis requires:

- Severe temper outbursts at least three times per week;
- Sad, irritable, or angry mood almost daily;
- The child's reaction is bigger than expected;
- The child must be at least six years of age with symptoms beginning before age ten;
- Symptoms are present for at least one year; and
- The child has trouble functioning in more than one place (AACAP, 2013b).

These symptoms should occur in two of the three environments:

- At school,
- At home, and/or
- With peers, and the symptoms must be severe in at least one of the settings.

A child with disruptive mood dysregulation disorder usually has a history of chronic irritability before he or she meets the diagnostic criteria (APA, 2013a). Doctors may have diagnosed the frustration as oppositional defiant disorder in the past (APA). Children with disruptive mood dysregulation disorder often struggle in school and during extracurricular activities because of their recurrent frustration (APA). Their relationships with both family and friends are also severely impacted (APA).

## Resources and Organizations

**American Academy of Child & Adolescent Psychiatry, Depression Resource Center**

http://www.aacap.org/AACAP/Families_and_Youth/Resource_Centers/Depression_Resource_Center/Home.aspx

**American Psychiatric Association**

https://www.psychiatry.org/

**American Psychological Association**

http://www.apa.org/

**Mental Health America**

Depression in Teens

http://www.mentalhealthamerica.net/conditions/depression-teens

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