D EPRESSION AND DYSTHYMIA

Introduction Categories Major Depressive Disorder (MDD) Dysthymia Causes and Risk Factors Assessment Comorbidity Evidence-based Treatments Psychosocial Interventions Pharmacological Treatments Risk of Suicidal Behavior Unproven Treatments Cultural Considerations

Introduction

Children and adolescents, like adults, experience depression with the accompanying feelings of hopelessness, guilt, or sadness. By the age of 18, it is estimated that between 15 to 20 percent of all youth experience depression (Klein, Torpey & Bufferd, 2008). Common symptoms include: sadness or dejected mood; decreased energy and interest in activities; changes in sleep and appetite; difficulty in thinking clearly, making decisions, and concentrating; lethargy and/or fidgetiness; and thoughts of death or suicide. Less frequently, children and adolescents suffering from depression experience psychosis, mania and/or catatonia (American Psychiatric Association [APA], 2000).

The Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision (DSM-IV-TR) classifies both Depressive Disorders and Bipolar Disorder as categories of Mood Disorders (APA, 2000). "Mood Disorder" also is used in this section's discussion of depression and dysthymia. The second category of Mood Disorders—Pediatric Bipolar Disorder—is discussed in a separate section of the *Collection*.

The following paragraphs provide age-specific descriptions of Mood Disorders in youth.

Preschool Children – In recent years, researchers have found evidence that depression occurs in children as young as three years of age (Luby, Belden, Pautsch, Si & Spitznagel, 2009; Luby, Heffelfinger, Mrakotsky, Brown, Hessler, Wallis & Spitznagel, 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 which they previously enjoyed, and difficulty concentrating or thinking clearly (Luby et al., 2009).

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). Depression, along with anxiety or behavioral disorders, more commonly affects prepubescent children than adolescents and adults, even though these children may lack the skills to articulate their sadness and other symptoms (APA, 2000). It is interesting to note, however, that school-aged children experience less hopelessness, fewer incidents of sleep disturbance, fluxuations in appetite, and problems with motivation than adolescents and adults (Klein, Torpey & Bufferd).

Categories

The following are descriptions of major depressive disorder (MDD) and dysthymia disorder (APA, 2000).

Major Depressive Disorder (MDD) – MDD is characterized by one or more major depressive episodes without a history of mania (i.e., persistent elevated, expansive or irritable mood). MDD 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 mood or loss of interest in previously pleasurable activities, youth diagnosed with MDD must experience at least four of the following:

- significant change in weight;
- sleep disturbance;
- changes in amount of physical activity;
- fatigue or loss of energy most of the time;
- > excessive feelings of worthlessness or guilt;
- difficulty thinking or concentrating; and/or
- > recurrent thoughts of death or suicide.

Finally, it is important to note that the youth's mood differs from their usual mood and cannot be attributable to bereavement, a general medical condition, and/or substance abuse.

Dysthymia – Dysthymia is a Mood Disorder in which the symptoms are less severe than MDD, but more chronic and persistent (APA & American Academy of Child & Adolescent Psychiatry [AACAP], n.d.). The disorder occurs when youth experience a persistent depressed mood for most of the day, for more days than not, for at least one year (compared to two years for adults), when 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;
- Iow self esteem;
- difficult thinking or concentrating; and/or
- sense of hopelessness.

Because dysthymia is a chronic disorder, youth often consider symptoms a part of who they are and do not report them unless asked directly. Dysthymia should not be diagnosed if the child or adolescent has ever experienced mania or if the onset of depressed mood met criteria for MDD.

Causes and Risk Factors

According to the U.S. Department of Health and Human Services (1999), the exact causes of Mood Disorders are not known. There is evidence, however, that genetics (specific genes passed from one generation to the next), contributes to the child's vulnerability to a Mood 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 which 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; Klein, Torpey & Bufferd).

More research has been conducted on adult depression than on 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 with adults with and without depression has also revealed differences in production levels of the hormone cortisol, which is often associated with stress. This finding has been 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 the National Institute of Mental Health (NIMH), during childhood (pre-puberty), both males and females are equally at risk for mood disorders (2000). During adolescence and continuing through adulthood, however, females are twice as likely as males to experience depression (NIMH).

Assessment

Proper assessment of mood 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-IV-TR* (APA).

Rudolph and Lambert (2007) have identified the Schedule for Affective Disorders and Schizophrenia (K-SADS) (Kaufman, Birmaher, Brent, Rao & Ryan, 1996) as an excellent measurebased diagnostic interview for youth ages six to 18. The Children's Depression Inventory (CDI) is a 27item self report measure that is appropriate for children as young as seven years of age (Kovacs, 1992). Overall, the reliability, validity, and clinical utility of the CDI is strong, but should not be used as the sole source of information for diagnostic purposes (Rudolph & Lambert, 2007). The Preschool Feelings Checklist (Luby, Heffelinger, Koenig-McNaught, Brown & Spitznagel, 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).

Comorbidity

Research from various sources indicated that 40 to 90 percent of youth with MDD have at least one other psychiatric disorder (AACAP, 1998). The most commonly co-occurring disorders are dysthymia, anxiety disorders, disruptive disorders, and substance abuse disorders (AACAP). 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).

Evidence-based Treatments

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

Psychosocial Interventions

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) (David-Ferdon & Kaslow, 2008). In their review of treatments for youth with depression, David-Ferdon and Kaslow reported that standardized treatments

which adhered to a treatment manual and were standardized led to greater gains than treatments that were not standardized. The research also has indicated that treatment gains were realized, regardless where the treatment was provided (school, community clinics, primary care clinics, hospitals, or research settings). It should be noted that the youth reported greater treatment gains than did their parents and clinicians.

While each of the studies reviewed by David-Ferdon and Kaslow (2008) used different criteria for including and excluding participants, the vast majority required that the youth have elevated depressive symptoms. Therefore, based on the research to date, the treatments listed are appropriate for youth with elevated depressive symptoms, whether they meet the diagnostic criteria for MDD or dysthymia.

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

Table 1

Psychosocial Treatments for Children with Depression

What Works	Description
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.
What Seems to Work	Description
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: Adapted from David-Ferdon & Kaslow, 2008 and Weisz, 2004.

Table 2

Psychosocial Interventions for Adolescents with Depression

What Works	Description
Cognitive Behavioral Therapy (CBT) 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 adolescent's interpersonal communication skills, interpersonal conflicts, and family relationship problems.
What Seems to Work	Description
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.
Adolescent 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.

Source: David-Ferdon & Kaslow, 2008.

Pharmacological Treatments

Currently, only one pharmacological treatment for depression has been approved for use with youth 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 (APA & AACAP, n.d.).

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 the 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 MDD is not supported (TADS).

Risk of Suicidal Behavior

The U.S. Department of Health and Human Services (1999) asserts that mood disorders dramatically increase the risk of suicide. Accordingly, the potential for suicidal behavior is a grave matter and must be taken into account by clinicians providing treatment. In a 10- to 15-year study of 73 adolescents diagnosed with MDD, it was reported that seven percent committed suicide sometime later. Depressed adolescents were five times more likely than adolescents without depression to have attempted suicide (U.S. Department of Health and Human Services).

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 cyclic antidepressants are not efficacious (Klein, Dougherty & Olino, 2005). The National Depressive and Manic-Depressive Association (2001) recognizes that various alternative treatments may have a positive effect on mood 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 mood 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. It is important that clinicians be 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 mood disorders but, as noted by Kaslow & Thompson (1998), there is a noticeable deficit of cultural information about treating mood disorders in children and adolescents. Most of the existing studies were conducted using children who were middle-class and Caucasian. Moreover, little attention has been paid to the relevance of the materials and interventions employed in treatment or to the clinician's education about cultural differences.

Sources

American Academy of Child & Adolescent Psychiatry. (AACAP). (1998). Practice parameters for the assessment and treatment of children and adolescents with depressive disorders. *Journal of the American Academy of Child and Adolescent Psychiatry*, 37.

- American Psychiatric Association (APA). (2000). *Diagnostic and statistical manual of mental disorders* (4th ed., text rev.) (*DSM-IV-TR*). Washington, DC: Author.
- American Psychiatric Association (APA), & the American Academy of Child and Adolescent Psychiatry (AACAP). (n.d.). The use of medication in treating childhood and adolescent depression: Information for physicians. [Online].
 Available: http://www.physiciansmedguide.org/parentsmedguide.html. [January 2011]. Not available May 13.
- Brown, A. (1996). Mood Disorders in Children and Adolescents. NARSAD Research Newsletter.
- Burns, B., Hoagwood, K., & Mrazek, P. (1999). Effective treatment of mental disorders in children and adolescents. *Clinical Child and Family Psychology Review, 2* (4), 199-254.
- David-Ferdon, C., & Kaslow, N. (2008). Evidence-based psychosocial treatments for child and adolescent depression. *Journal of Clinical Child and Adolescent Psychology*, *37*, 62-104.
- Essex, M., Boyce, W., Goldstein, L., Armstrong, J., Kraemer, H., Kupfer, D., et al. (2002). The confluence of mental, physical, social, and academic difficulties in middle childhood. II: developing the macarthur health and behavior questionnaire. *Journal of the American Academy of Child and Adolescent Psychiatry*, *41*, 588-603.
- Kaslow, N., & Thompson, M. (1998). Applying the criteria for empirically supported treatments to studies of psychosocial interventions for child and adolescent depression. *Journal of Clinical Child Psychology*, 27 (2), 156-165.
- Kaufman, J., Birmaher, B., Brent, D., Rao, U., & Ryan, N. (1996). Schedule for affective disorders and schizophrenia for school-age children-present and lifetime version (K-SADS-PL): initial reliability and validity data. *Journal of Clinical Child and Adolescent Psychology, 36*, 980-988.
- Klein, D., Dougherty, L., & Olino, T. (2005). Toward guidelines for evidence-based assessment of depression in children and adolescents. *Journal of Clinical Child & Adolescent Psychology, 34* (3), 412-432.
- Klein, D., Torpey, D., & Bufferd, S. (2008). Depressive disorders. *Child and adolescent psychopathology* (pp. 477-509). Hoboken, NJ: John Wiley & Sons, Inc.
- Kovacs, M. (1992). *Children's Depression Inventory Manual.* North Tonawanda, NY: Multi-Health Systems.
- Luby, J., Belden, A., Pautsch, J., Si, X., & Spitznagel, E. (2009). The clinical significance of preschool depression Impairment in functioning and clinical markers of the disorder. *Journal of Affective Disorders, 112,* 111-119.
- Luby, J., Heffelinger, A., Koenig-McNaught, A., Brown, K., & Spitznagel, E. (2004). The preschool feelings checklist: a brief and sensitive screening measure for depression in young children. *Journal of the American Academy of Child and Adolescent Psychiatry*, *43*, 708-717.
- Luby, J., Heffelfinger, A., Mrakotsky, C., Brown, K., Hessler, M., Wallis, J., & Spitznagel, E. (2003). The clinical picture of depression in preschool children. *Journal of the American Academy of Child and Adolescent Psychiatry, 4*2 (3), 340-348.
- National Depressive and Manic-Depressive Association. (2001). Guide to depression and manicdepression. GB 1000.

- National Institute of Mental Health (NIMH). (2000). Depression in children and adolescents. NIH Publication No. 00-4744.
- Rudolph, K., & Lambert, S. (2007). Child and adolescent depression. *Assessment of childhood disorders* (4th ed.). (pp. 213-252). New York: Guilford Press.
- Treatment for Adolescents with Depression Study (TADS) Team. (2004). Fluoxetine, cognitivebehavioral therapy and their combination for adolescents with depression: treatment for adolescents with depression study (TADS) randomized controlled trial. *Journal of the American Medical Association, 292*, 807-820.
- U.S. Department of Health and Human Services. (1999). *Mental Health: A Report of the Surgeon General*. Rockville, MD.
- Weisz, J. (2004). Psychotherapy for children and adolescents: Evidence-based treatments and case examples. New York, NY, US: Cambridge University Press.
- Yaylayan, S. (2002). Saint Margaret Mercy Hospital. *Depressive disorders in children and adolescents*. [Online]. Available: http://www.smmhc.com/goingon/newsletters/healthyliving/archives/arcdepressive.html. *Not available July 2005*.

Additional Resource

Gleason, M., Egger, H., Graham, E., Greenhill, L., Kowatch, R., Lieberman, A., et al. (2007). Psychopharmacological treatment for very young children: contexts and guidelines. Special Communication. *Journal of the American Academy of Child and Adolescent Psychiatry, 4*6 (12), 1532-1572.

Organizations

American Academy of Child & Adolescent Psychiatry (AACAP) http://www.aacap.org

American Foundation for Suicide Prevention (AFSP)

120 Wall Street, 22nd Floor - New York, NY 10005 888-333-AFSP (2377) http://www.afsp.org

Center for Effective Collaboration and Practice (CECP)

1000 Thomas Jefferson St., NW, Suite 400 – Washington, DC 20007 888-457-1551 http://cecp.air.org

National Federation of Families for Children's Mental Health 240-403-1901

http://www.ffcmh.org

Georgetown University Center for Child and Human Development

http://gucchd.georgetown.edu