An overview of teenage depression in the US

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Abstract
Drawing upon current and recent research, this article provides a brief overview of adolescent depression in the US. Previously considered to be non-existent in adolescents, this disorder affects about 5% of teens at any given time (Brent & Birmaher, 2002) and can feature irritability as well as other common signs of depression. High degrees of relapse and comorbidity can occur with adolescent depression, and risk factors can include the presence of parental depression, substance use, and sexual abuse. Cognitive-behavior therapy and interpersonal therapy are two psychotherapeutic approaches with empirical support. Pharmacotherapeutic treatments, particularly SSRI antidepressants, are also often used alone or in conjunction with therapeutic approaches.

Introduction
At some point in their lives, approximately one-half of Americans will suffer sufficient symptoms to meet a disorder from the Diagnostic and Statistical Manual of Mental Disorders-Fourth Edition (DSM-IV) (American Psychiatric Association, 1994), the primary source used for psychiatric diagnosis in the United States. The first onset for disorders tends to start early in life, as about half of all lifetime cases begin by age 14. More specifically, the most prevalent lifetime disorder among Americans is Major Depressive Disorder, faced by about 16.6% of the population (Kessler, Berglund,

Demler, Jin, Merikangas, & Walters, 2005). This prevalence rate has prompted depression to be called “the flu of mental disorders” in the United States (Norcross, Santrock, Campbell, Smith, Sommer, & Zuckerman, 2000, p. 231). What compounds the dilemma is the lack of recognition and treatment. As Friedman (2006) pointed out, “…the majority of mental illness in young people goes unrecognized and untreated, leaving them vulnerable to emotional, social, and academic impairments during a critical phase in their lives” (p. 2717).

This article provides an overview of a specific mood disorder—depression—that, for many Americans, begins during their teenage years. The purpose is to provide a summary for counselors and educators as a way for them to compare and contrast the current status of adolescent depression in the US with their specific areas. For the most part, references for this article have specifically been drawn from the literature of the past eight years, and, due to space constraints, the goal is to offer a relatively brief summary of symptoms, prevalence rates, prevention efforts, and psychotherapeutic approaches. It is also important to note that the term “American” is used to describe United States residents in this article.

**Symptoms of adolescent depression**

With an initial onset frequently occurring during adolescence, depression has been described as a “prototypical multifactorial disorder” affecting a variety of domains, including “emotions, thoughts, sense of self, behaviors, interpersonal relations, physical functioning, biological processes, work productivity, and overall life satisfaction” (Hankin, 2006, p. 102). The current edition of the *DSM* (DSM-IV-TR) (American Psychiatric Association, 2000) does not differentiate criteria for a major depressive episode in adults from adolescents, other than to note that irritability can replace a depressed mood when experienced almost every day and for a majority of the day. Brent and Birmaher (2002) summarized this point in writing, “Any child can be sad, but depression is characterized by a persistent irritable, sad, or bored mood and difficulty with familial relationships, school, and work” (p. 667).

Otherwise, as defined by the *DSM* (APA, 2000), the symptoms in both adult and adolescent depression are identical and include a decreased interest or pleasure in activities; weight loss; insomnia or hypersomnia; psychomotor agitation or retardation; fatigue/loss of energy, thoughts of worthlessness or excessive feelings of guilt; a decreased ability to concentrate; and repeated thoughts regarding death. Five or more symptoms—at least one of which must be depressed mood (irritable mood in adolescents) or interest/pleasure loss—must be evident within the same two-week timeframe, and overall functioning must represent a change from previous levels (APA, 2000). These criteria for Major Depressive Disorder appear to be appropriate for adolescents, as the expression of symptoms is similar for adolescents and young adults (Lewinsohn, Pettit, Joiner, & Seeley, 2003). Furthermore, the average number of symptoms experienced by
an adolescent who met the criteria for Major Depressive Disorder is 6.9 with the most prevalent one being depressed mood (Lewinsohn et al., 2001).

Lewinsohn, Rohde, and Seeley (2001) noted, “In the past 25 years, substantial progress has been made toward furthering our understanding of depression among adults. Much less is known, however, regarding depression…in adolescents” (p. 12). Significant changes in the knowledge base of adolescent depression have indeed occurred in recent decades. From an historical perspective, Compas, Connor, & Hinden (1998) offered three phases in the understanding of adolescent depression, the earliest of which was that true depression was not possible at this development point. However, if it did occur, it was masked by other challenges in the person’s life. In the 1970s and 1980s, the second phase of acknowledging the existence of genuine depression in adolescents took place. Finally, in the current phase, three characteristics are evident: 1) depression can be conceptualized both categorically and dimensionally; 2) differences exist between child and adolescent depression as well as between the depression experienced between teenage males and females; and 3) depression in adolescence tends to have significant comorbidity with other disorders. Kessler and Walters (1998) summarized the current phase aptly: “…depression among young people is much more than a normal self-limiting developmental phase” (p. 11).

A review of the literature
Prior to discussing the current literature on adolescent depression, three points must be made. First, many articles tend to combine Major Depressive Disorder with Dysthymic Disorder or address depressive symptoms in a broad manner. Second, despite the stance of the DSM that adult and adolescent depression are highly similar, some research has investigated whether this classification is indeed accurate (Hankin, 2006). Finally, other studies may include both child and adolescent depression.

Brent and Birmaher (2002) indicated that 5% of American teens were depressed at any given time. This rate compares to 7.5%, cited by Fassler (Goodwin, 2002) from data from the Centers for Disease Control, and past 12-month prevalence rate of 6.5% in Canada (Afifi, Enns, Cox, & Martens, 2005). It is important to note that such data do not necessarily mean that an individual’s first depressive episode occurred during adolescence (Rudolph, Hammen, & Daley, 2006). Kessler and Walters (1998) added that many youth relate depressive symptoms that are insufficient to meet the necessary diagnostic criteria. Such symptoms during the teenage years can be critical, as they can be predictive of major depression in adulthood (Pine, Cohen, Cohen, & Brook, 1999).

Furthermore, according to Fassler, 20% of adolescents will have experienced at least one depressive episode by the end of their high school years (Goodwin, 2002), and nearly 3 in 10 (about 28%) of adolescents will have suffered an episode of major depression by the age of 19 (Lewinsohn, Rohde, & Seeley, 1998). Overall, compared to previous decades,
“ample evidence” suggests that the rates of depression have increased (Rudolph, Hammen, & Daley, 2006, p. 303). Previous literature has speculated on the presence of other disorders, namely substance-related disorders and anxiety disorders, in earlier cohorts that produced current trends, as well as the notion that more recent cohorts were raised in a “more turbulent world than their predecessors,” which has been marked by higher divorce rates and teenage pregnancy, among other factors (Kessler & Walters, 1998, p. 4). Nonetheless, it is commonly believed that this disorder affects teens’ well-being from several aspects, including academic, social, personal, and interpersonal. Yet it not simply the prevalence rate that is striking: The average length of a depressive episode is 26 weeks, and approximately 40% of adolescents suffered a second episode in approximately the ensuing 12 months (Lewinsohn, Rohde, & Seeley, 1994).

According to a survey of approximately 1400 mental health professionals working in public high schools in the US, depression in students was found to be more serious than behavioral problems and violence. Over two-thirds of participants identified adolescent depression as either a great (14%) or a moderate (54%) school problem (“School officials identify,” 2004). In another national survey conducted by the Substance Abuse and Mental Health Services Administration (SAMHSA), depression was ranked among the top three problems for female students by 29% of the schools and for male students by 13% of the schools (as cited in Daley, 2006).

However, depression is often not the only disorder faced by adolescents at any given time. Other studies (Pine, Cohen, Gurley, Brook, & Ma, 1998; Angold, Costello, & Erkanli, 1999) have found that other disorders are likely to precede, occur at the same time, and follow depression in adolescents. One meta-analysis found that, even after other comorbidities were controlled, anxiety disorders were over eight times as common in depressed children and adolescents compared to non-depressed youth (Angold et al.). Furthermore, depression in teens also been linked to eating disorders in adolescent women (Lewinsohn, Striegel-Moore, & Seeley, 2000). Birmaher, Ryan, Williamson, Brent, Kaufman, and Dahl (1996) noted that comorbidity is often linked with more severe and persistent depression. Comorbidity tends to be greater for major depression in comparison to minor depression, and, in predicting future episodes, the number of past disorders tends to be more critical than the type of disorder (Kessler & Walters, 1998).

Finally, according to Rudolph et al. (2006), many researchers have speculated that depression may be the result of earlier disorders, as it often follows them.

The effects of comorbidity and gender are also noteworthy. Adolescent males who are only depressed were found to have a low likelihood of treatment, while the existence of a comorbid disorder heightens the probability of treatment, especially if a substance-related disorder is present. Meanwhile, the converse was found with adolescent females who were only depressed, as they were more likely to obtain treatment. When a comorbid
disorder was present, they were less likely to receive treatment. The highest rate of mental health utilization was found among depressed teens with comorbid substance-related disorders (Lewinsohn & Essau, 2002). A prevalent notion in the field has been that adolescents medicate their depression via substances and sexual behavior. However, this belief may not be the case: One large-sample study found that sex and substance use put adolescents at risk for future depression, especially in teenage females. In other words, these risk behaviors preceded depression in teens with the effects on adolescent females being more pronounced (Hallfors, Waller, Bauer, Ford, & Halpern, 2005).

Though girls and boys possess similar prevalence rates for childhood depression, these rates vary during adolescence. Teenage women are twice as likely to become depressed, which may be due to brain development and fluctuating hormones that result in confusing behaviors to both them and others (Hirsch & Brizendine, 2007). They also report weight/appetite disturbances and worthlessness/guilt more often than adolescent men (Lewinsohn et al., 2001). In adolescent women, Nolen-Hoeksema, Stice, Wade, and Bohon (2007) found that depressive symptoms predicted a heightened use of rumination, defined as an inclination to repeatedly focus on distress, problem etiology, and consequences without partaking in active problem-solving behavior (Nolen-Hoeksema, 2004).

Several factors have been linked to adolescent depression. In reviewing other studies, Berman, Jobes, and Silverman (2006) indicated that as many as 90 percent of teens committing suicide have a diagnosable psychopathology, most commonly mood disorder, and a recent increase in youth suicides (ages 10-24) in the US has been noted (Daly, 2007). Furthermore, according to Eaton et al.’s study (as cited in “Suicide, Facts at a Glance,” 2007), nearly 17% of high school students seriously considered suicide in the prior 12 months.

Galaif, Sussman, Chou, and Wills (2003) also noted four commonly found risk factors associated with adolescent depression in previous studies: sex (female), belonging to a minority status, low parental support, and substance use. In their study of 646 high school students, they found that adolescent women possessed higher levels of perceived stress and sought social support to a greater extent than adolescent men. In addition, the young women “externalized their depression by exhibiting anger coping and substance use” (p. 256).

Diego, Sanders, and Field (2001) found teenagers who met the clinical cutoff for depression to have poorer parental relationships, lower grades, and greater use of marijuana and cocaine. In their study, over half of the regression was accounted by such variables as physical affection from parents, homework, well-being, exercise, happiness, and overall parent relations.
Depression in parents is also an important risk factor for this disorder in youth. According to Jellinek, “About 40% of children with a depressed parent will suffer a depression before age 20” (2003, p. 13). The possible link between maternal depression and its effect on youth has been closely investigated: Sheeber, Davis, and Hops (2002) indicated that “modest empirical support” exists in the hypothesis that adolescent women of depressed mothers are at higher risk for depressive symptoms and depressive disorders (p. 253). In a study of 240 individuals in early adolescence, Garber and Flynn (2001) found a small, yet significant relationship between a history of depression in the teens’ mothers and the participants’ attributional style and sense of hopelessness. Furthermore, even after controlling for the variables of hopelessness and maternal depression history, participants’ hopelessness was predicted by negative life events, especially for youth with low self-worth or depressive attributions. In summarizing other studies on this specific subject, Garber and Martin (2002) concluded, “…these studies show that children of depressed parents have more negative cognitions, particularly about themselves and the causes of events, than offspring of nondepressed parents” (p. 126).

Burns, Cottrell, Perkins, Pack, Stanton, Hobbs et al. (2004) assessed youth who lived in rural areas at two points in time: The mean baseline age was 12.8 years of age, and the mean follow-up age was 14.6 years of age. Those youth who had greater baseline depression scores showed higher follow-up rates in the areas of drug abuse, sexual activity, substance use, and school problems. Another study of adolescent students living in two rural areas of Kentucky and Iowa found that 34% of participants had high levels of depressive symptoms. Predictors of such symptoms included inferior coping skills and poorer family relationships (Peden, Reed, & Rayens, 2005). According to Blitstein (as cited in Kubetin, 2003), depression in students who are in seventh grade (approximate age of 13) has also been one variable linked with violence in the ensuing 18 months. Finally, sexual abuse has been correlated with higher rates of depression: At a two-year followup, depressed teens with a history of sexual abuse had a higher likelihood of having been hospitalized and suffering a depressive relapse (Barbe, Bridge, Birmaher, Kolko, & Brent, 2004). Widom, DuMont, and Czaja (2007) also found an association between both childhood physical abuse and neglect and Major Depressive Disorder with the average onset of depression occurring in late adolescence (18.2 years of age).

The effect of experiencing depression in adolescence also influences the possibility of psychiatric disorders in young adulthood. About 45% of teenagers with a history of depression suffered another depressive episode between the ages of 19-24, marking a five-year recurrence rate of 9%. Adolescents with depression also showed higher rates of nonaffective disorders in early adulthood (Lewinsohn, Rohde, Klein, & Seeley, 1999).

In discussing psychotherapeutic approaches to adolescent depression, Mufson, Dorta, Moreau, and Weissman (2004) noted that, until recently, empirical investigations offered
many case studies and single-subject designs and that randomized, controlled outcome studies were largely absent. From their meta-analysis involving both children and adolescents, Weisz, McCarty, and Valeri (2006) concluded that “psychotherapy offers a reasonable option” to treatment, particularly for those preferring an alternative to medication (p. 144). Two psychotherapeutic approaches, cognitive-behavioral therapy (CBT) and interpersonal therapy (IPT), have gained empirical support in treating adolescent depression and are the most widely discussed interventions in the literature. Both are structured or semi-structured, directive, and based on a short-term model.

The premise of IPT is that an individual’s depression is “inextricably intertwined with the patient’s interpersonal relationships” and that improvement will come through, in part, enhanced communication skills in the person’s significant relationships (Mufson et al., 2004, p. 19). The modification of IPT specific to adolescents, interpersonal therapy for adolescents (IPT-A), was developed by Mufson and is founded on a 12-session model that focuses on a problem area, such as grief, role transition, interpersonal deficits, or role disputes (Bates, 2006). Research support has been found in teenagers and pre-teenagers in the US (Mufson, Weissman, Moreau, & Garfinkel, 1999; Mufson, Dorta, Wickramaratne, Olfson, & Weissman, 2004) as well as in Puerto Rico (Rosselló & Bernal, 1999).

In discussing CBT as a treatment for adolescent depression, Curry and Reinecke (2003) indicated that “accumulating evidence” points to this approach being able to reduce depressive symptoms and lower the risk of relapse (p. 96). In their meta-analysis on adolescent depression and depressive symptoms, Reinecke, Ryan, and DuBois (1998) acknowledged a limited number of controlled outcome studies on the topic, yet found consistent findings with previous outcome studies in support of CBT. They indicated that clinicians “would do well to…use a range of cognitive and behavioral techniques when working with dysphoric youth” (p. 31). Cognitive therapy has been found to offer specific effects on cognitive distortions when compared to systemic-behavioral family therapy and nondirective supportive therapy (Kolko, Brent, Baugher, Bridge, & Birmaher, 2000), and short-term support for CBT has also been found in adolescents who are both depressed and substance-abusing (Curry, Wells, Lochman, Craighead, & Nagy, 2003).

However, based on the largest study of adolescent depression to date (Bower, 2004), March and colleagues found a combination of CBT and the SSRI fluoxetine to have “yielded the most effective weapon against adolescent depression” when compared to placebo and both CBT and medication alone (Rosack, 2007, p. 28). This finding applies to both its short-term (12 weeks) effectiveness (Treatment for Adolescents with Depression Study (TADS) Team, 2004) as well as its long-term (36 weeks) effectiveness (The TADS Team, 2007). Furthermore, they found that “adding CBT to fluoxetine therapy minimizes persistent suicidal ideation and treatment-emergent suicidal events”

(The TADS Team, 2007, p. 1142). The latter finding is critical, given the “black box warning” by the US Food and Drug Administration for antidepressants prescribed for child and adolescents (Mahoney, 2005).

**Conclusion**
In the US, adolescent depression represents a significant, yet frequently under-recognized mental health dilemma that seriously affects overall functioning (Lewinsohn et al., 2001). Despite it being “an eminently treatable condition” (Brent & Birmaher, 2002, p. 670), less than 2 in 100 adolescents aged 15-18 obtain outpatient treatment for their depression, a rate that is below prevalence rate estimates (Olfson, Gameroff, Marcus, & Waslick, 2003). Yet identification efforts are intensifying: One large-scale voluntary program—the Columbia University TeenScreen Program—is available in 43 states and 450 communities nationwide to screen for mental health problems, including depression, in adolescents (“Our Mission,” 2003), and about 55,000 American youth were assessed in 2005 (Friedman, 2006). Even with these efforts, the need for help for teenagers suffering from depression is clear.

**References**


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