

Adolescent depression

Diagnostic skills can differentiate



teen angst from psychopathology

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Depression in teenagers is persistent and characterized by high rates of comorbid psychiatric conditions. Based on clinical evidence, the following strategies can help you determine appropriate treatment.

Adolescents with depressive disorders tend to arrive in psychiatrists' offices when their behavior has already been identified as problematic. Suicide attempts, academic failure, substance abuse, and family conflicts can all lead to teen psychiatric referrals. Other times, subtler changes in behavior may lead a family doctor or pediatrician to suspect depression and to send an adolescent to you for a psychiatric consultation.

The psychiatrist's task is challenging. Adolescents are usually brought in by their worried parents and may not want to talk to a psychiatrist. Or they may be unable to accurately describe their internal states. Even people who know an adolescent well may not discern the emotions that drive his or her behavior. Adding to the mix are the recurrent nature of major depression in adolescents and the likelihood of complicating comorbid psychiatric conditions (*Box*).¹⁻⁶

Based on clinical evidence, we offer advice to help you promptly identify and effectively treat adolescents with depressive disorders. We also provide preliminary information on two studies examining medication treatment, psychotherapy, and combined treatment for teens with major depression.

Adolescent depression disorders

Symptoms of depression in adolescents are similar to those in adults, and it is appropriate for psychiatrists to use DSM-IV diagnostic criteria for making the diagnosis. The three primary depressive disorders for both adults and adolescents are major depressive disorder (MDD), dysthymic disorder, and depressive disorder not otherwise specified (NOS).



Box

ADOLESCENT DEPRESSION: PORTRAIT OF A PERSISTENT DISORDER

Depression is relatively rare among children but becomes common after the onset of puberty. In particular, recurrent depression often starts in adolescence. Here are the statistics:

- Up to 9% of adolescents meet diagnostic criteria for major depressive disorder (MDD), and up to 25% suffer from it by their late teens.
- MDD affects boys and girls equally in childhood, but the prevalence seems to increase in girls after puberty.^{1,2}
- Depression in adolescents is characterized by high rates of comorbid psychiatric conditions. In general, the younger the age of onset, the higher the rate of comorbid conduct disorder, attention-deficit/hyperactivity disorder, and/or anxiety disorder.³
- Adolescent depression tends to persist. An estimated 45 to 70% of children and adolescents with MDD have recurrent episodes.⁴ At particularly high risk for recurrence are adolescent girls with depression, adolescents with multiple MDD episodes, and adolescents with a family history of recurrent depression.
- As many as 50% of teens with MDD attempt suicide within 15 years of their initial episode, and more than 20% make recurrent attempts.^{4,5} No good estimates of the rate of completed suicide are available. One 15-year follow-up of a sample of depressed adolescents reported a suicide rate of 7.7%.⁵ Boys are much more likely to complete suicide than girls across all racial groups.⁶

Although the symptoms that make up the diagnostic criteria are similar for adults and teens, the behavioral manifestations and response to treatment may differ. The adolescent may present as irritable and angry, rather than overly sad. Impairments in functioning are likely to be related to decline in school performance, social withdrawal, or increased conflicts with peers and family.

As for treatment, certain antidepressant medications of proven efficacy in adults (i.e., tricyclics) do not seem to work for adolescents.

MDD is a time-limited episode of depressive symptoms severe enough to cause functional impairment, such as decline in

school performance, social withdrawal, or increased conflicts with peers and family. Symptoms must be present at least 2 weeks.

Dysthymia is a chronic depression that is less severe than MDD and lasts 1 year or longer without sustained remission. It often begins early in childhood and may include periods of increased symptoms consistent with major depression (sometimes called “double depression”).

Depressive disorder NOS is a category of depression that, though clinically significant, does not meet the full criteria for severity, duration, or level of impairment of MDD or dysthymia.

Unless otherwise specified, the terms “depression” and “depressive disorder” in this article are used generically to include all three of these disorders.

Depressive disorders must be differentiated from bipolar disorder, which is characterized by at least one prior episode of mania (for bipolar type I) or hypomania (for bipolar type II). The clinical picture of bipolar disorder in youths may differ from that seen in adults. For example, bipolar youth often present with dysphoric mood interspersed with frequent, short periods of intense emotional lability and irritability, rather than “classic” euphoria.

Diagnosis

To diagnose a depressive disorder in an adolescent, information is typically obtained from multiple sources, most commonly the teenage patient and at least one of the parents. Because several sources are involved, however, the information may be conflicting. For instance, the adolescent may contradict a parent’s report that he or she is having difficulties in school or has a substance abuse problem.

Interviewing skills and clinical judgment are required of the clinician in these situations. It is important to:

- obtain a complete description of the adolescent’s behavior and mood over time and as accurate a description as possible of when changes occurred
- assess comorbid conditions (particularly anxiety, attention-deficit/hyperactivity disorder [ADHD], conduct disorder, and substance abuse)

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Table 1

DEPRESSION IN ADOLESCENTS AND ADULTS

Similarities	Differences
Same types of diagnostic categories (i.e., major depression, dysthymia, depression NOS)	To diagnose dysthymia, minimum duration of mood disturbance must be 1 year in adolescents (2 years in adults)
Same diagnostic symptoms criteria	Mood is often irritable in adolescents (rather than depressed)
More common in females	
Suicide is more common among males	
Evidence of efficacy of SSRI antidepressants	No evidence of efficacy of tricyclic antidepressants in adolescent depression

- differentiate between unipolar MDD and bipolar disorder
- evaluate the risk of suicide.

Interviewing Standardized diagnostic interviews, such as the Schedule for Affective Disorders and Schizophrenia for children (K-SADS), are commonly used to research adolescent depression but require special training and approximately 1 to 2 hours to administer. As an alternative, clinicians generally develop their own “semi-structured interview” to try to collect all the relevant information required for an accurate diagnosis.⁷

The interview should be conducted with the adolescent and the parent(s), first separately for ease of disclosure then together to reconcile any differences in the information they report. Open-ended questions and time for building rapport may facilitate disclosure from a reticent adolescent. At times, however, one must make the diagnosis by relying more on reports from others who know the child well. Building a trusting therapeutic relationship then becomes part of ongoing treatment.

Standardized measures In addition to the interview, standardized self-report and other-report measures can help:

- The Child Depression Rating Scale-Revised, commonly used in clinical research, can also be used in practice to quantify symptom severity and document treatment response. A score above 40 usually indicates major depression; a score below 28 indicates remission of depression.⁸⁻¹⁰

- The Beck Depression Inventory (BDI), a 21-item self-report questionnaire for adults, has reasonable reliability and validity for adolescents. Its modest specificity suggests that it may measure general distress and dysphoria, which is not specific to depressive disorders. The language may be too difficult for some younger adolescents and those with poor reading comprehension skills.
- The Children’s Depression Inventory, a version of the BDI for prepubertal children, can be considered for adolescents whose cognitive and/or reading skills are less mature.

- Achenbach’s Child Behavior Checklists and other standardized questionnaires can screen for comorbid psychopathology.

Assessing psychosocial stress, such as conflicts with parents or peers, school problems, or risk-taking behavior, is also important. Depressed youth often have family members with histories of depression, alcoholism, anxiety, and other psychiatric diagnoses. History of sexual abuse has been linked to depression.³ The depressed adolescent’s impaired functioning in school and at home may cause secondary stress, increasing the burden of illness and need for treatment.

Suicide risk Although suicide remains rare among adoles-

Families of depressed youth often have histories of depression, alcoholism, anxiety, and other psychiatric disorders

cents in general, the rate of suicide among this age group has risen dramatically over the past decade, particularly among younger teens and preteens. In 1997, suicide was the third leading cause of death in adolescents after accidental injuries and homicide.

Adolescents with depressive disorders are at increased risk for suicide, and boys are more likely than girls to attempt and complete suicide. It is therefore imperative to assess and document suicide risk for each adolescent who presents with depressive symptoms.

After establishing a rapport, the most effective screening is a straightforward conversation with the adolescent about suicidal ideation, intent, and behavior. Assess the social con-



text of support and psychopathology in the family, availability and accessibility of lethal suicide methods (e.g., firearms in the home), and presence of events that could influence imitative suicidal behavior (e.g., a friend's suicide).⁶

Treatment

Approaches to adolescent depression include (in increasing order of intensity and complexity) watchful monitoring, nonspecific supportive therapy, pharmacotherapy, specific psychotherapy (i.e., cognitive-behavioral or interpersonal therapy), and combined treatment (e.g., psychotherapy plus pharmacotherapy, adolescent psychotherapy plus family therapy).

There are no clear-cut guidelines as to whether pharmacologic or psychosocial therapy should be offered first.¹¹ In the community, patient and family preferences, past treatment response, and the clinician's background and expertise influence the choice of treatment. As with adults, adolescents deemed at high risk for suicidal behavior must receive immediate attention from mental health professionals and must be monitored, usually in an inpatient setting.

Watchful monitoring means to wait and see if the youth improves spontaneously.

In some studies, nearly one-half (48%) of adolescents with depression were found to go into spontaneous remission within 8 weeks.¹² Watchful monitoring, however, would leave

periodically reassess the teen and be available for consultation between assessments.

Nonspecific supportive therapy Most psychotherapy provided in the community probably is nonspecific (i.e., not theoretically driven or conducted according to a treatment manual) and supportive (i.e., aimed at providing encouragement). This approach is known to be less effective than specific psychotherapies or antidepressant pharmacotherapy, but we have virtually no data comparing it with lack of treatment.

Nonspecific supportive therapy can be considered a reasonable first-step treatment for depressed teens without complicating risk factors.¹³ Specific treatment is indicated, however, if the adolescent does not improve in a few weeks.

Pharmacotherapy A few placebo-controlled clinical trials have studied the efficacy of selective serotonin reuptake inhibitors (SSRIs) in outpatient adolescents with major depression. It must be noted that practically all the available data relate to major depression, and no systematic studies

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have been done in dysthymia and other types of depression in this population.

The SSRIs fluoxetine,^{8,9} citalopram,¹⁰ paroxetine,¹⁴ and sertraline¹⁵ can decrease symptoms of adolescent depression over 2 to 3 months when given at dosages similar to those used in adults (Table 2). At this time, there are no data that suggest the SSRI dosage must be different in younger (12-year-old) compared with older (18-year-old) adolescents, or in girls compared with boys.

The response rate (adolescents who were substantially improved at end of treatment) ranged from 52 to 65% with SSRI medication and 33 to 48% with a placebo. This means that one would need to treat about six adolescents in order to add one to those who would improve by taking a placebo. Thus, 6 is the number needed to treat (NNT), a common index used to make decisions in evidence-based medicine. As a comparison, the NNT is 1.5 for stimulant treatment of ADHD, indicating that stimulants are more effective in ADHD (i.e., the difference between an active drug and a placebo is greater) than SSRIs are in depression.

It must be noted that receiving a placebo in clinical tri-

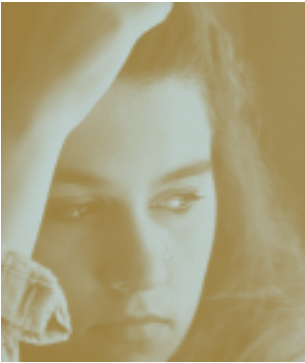
Table 2

SSRI DOSAGES FOUND TO BE EFFECTIVE IN ADOLESCENTS WITH MDD

Drug	Dosage (per day)	Reference
Fluoxetine	20 mg	Emslie et al, 1997 and 2001 ^{8,9}
Citalopram	20-40 mg	Wagner et al, 2001 ¹⁰
Paroxetine	20-40 mg	Keller et al, 2001 ¹⁴
Sertraline	50-200 mg	Donnelly et al, 2001 ¹⁵

most patients still depressed, and no predictors of spontaneous remission have been identified.

Because of the risks of suicide and social and academic impairment, monitoring alone is acceptable only for a few weeks, and only in cases where depression is mild and uncomplicated. In any case, "monitoring" requires that you



als of depression does not equal absence of treatment. Typically, research participants assigned to a placebo have weekly clinical contacts, so placebo treatment could be defined as “nonspecific clinical management.” In any case, the NNT for SSRIs in adolescent depression does not appear to be substantially different from that found in adults.

There is no evidence that tricyclic antidepressants, or TCAs, are more effective

There is no evidence that tricyclic antidepressants are more effective than a placebo in adolescents with depression

tive than a placebo in adolescents with depression. Considering TCAs’ side effects and potential cardiotoxicity in overdose, their use is not recommended in depressed adolescents. Other antidepressants, such as bupropion and venlafaxine, have been reported to be effective in open studies and clinical observations.

Antidepressants can trigger mania in persons predisposed to bipolar disorder. Before prescribing antidepressant medications, carefully evaluate depressed adolescents for present and past symptoms of mania or hypomania and check family history for possible bipolar disorder. During treatment, monitor the adolescent for signs that suggest emerging mania.

SSRIs and stimulant medications are commonly combined, as depression and ADHD often coexist. Clinical experience indicates that these medications can be safely combined in most cases, although no systematic studies of this combination have been performed in large, representative samples of teens. As with antidepressant monotherapy, adolescent patients must be monitored for signs of mania or hypomania.

Specific psychotherapy Among psychotherapies for depression, the best evidence of efficacy exists for cognitive-behavioral therapy (CBT), which attempts to correct cognitive distortions associated with depression and promotes healthy behaviors. In two clinical studies, CBT was more effective in depressed adolescents than no treatment (i.e., wait list), supportive therapy, or systemic behavior family therapy. About two-thirds of patients treated with CBT achieved remission from depressive symptoms.^{16,17}

Interpersonal therapy (IPT) has been adapted for use in depressed adolescents.¹⁸ Its efficacy is supported by one controlled study that found greater improvement after 12 weekly IPT sessions than after once-monthly clinical contact.¹⁹ There is no convincing evidence that family therapies are effective in treating depression in adolescents or add much to the benefit of CBT.¹⁷

Combined treatment Research on combined treatments for adolescent depression has been limited. One study found that adding family therapy to CBT does not improve the adolescent’s depressive symptoms.⁸ Although no data are available on the combination of SSRI medication and CBT (or IPT), the National Institute of Mental Health is funding two

studies on this important issue:

- The Treatment of Adolescents with Depression Study (TADS) is comparing the efficacy of fluoxetine plus CBT with that of fluoxetine or CBT alone in adolescents with major depression. The study, coordinated by John March, MD, of Duke University Medical Center, is being conducted with 432 teen subjects at 13 clinical sites.
- The Treatment of Resistant Depression in Adolescents (TORDIA) study is comparing the efficacy of antidepressant medication plus CBT to that of antidepressants alone in adolescents who have not improved on initial treatment with an SSRI. TORDIA, coordinated by David Brent, MD, University of Pittsburgh, is being conducted at six clinical sites.

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Depression in adolescents often remains undiagnosed, perpetuating problem behaviors and increasing the risk of suicide. Cognitive-behavioral therapy and SSRI antidepressants may be effective treatments. One-third of teens require second-step approaches or combined interventions.

BottomLine



Adolescent depression



Related resources

- ▶ National Institute of Mental Health. Child and Adolescent Mental Health. <http://www.nimh.nih.gov/publicat/childmenu.cfm>
- ▶ Depression in children and adolescents: A fact sheet for physicians. <http://www.nimh.nih.gov/publicat/depchildresfact.cfm>
- ▶ NIMH-funded treatment studies in adolescent depression:
 - ▷ Treatment for Adolescents with Depression Study (TADS) <https://trialweb.dcri.duke.edu/tads/index.html>
 - ▷ Treatment of Resistant Depression in Adolescents (TORDIA) study <http://clinicaltrials.gov/show/NCT00018902>

DRUG BRAND NAMES

Bupropion • Wellbutrin
Citalopram • Celexa
Fluoxetine • Prozac

Paroxetine • Paxil
Sertraline • Zoloft
Venlafaxine • Effexor

DISCLOSURE

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Have a case from which other psychiatrists can learn?



Check your patient files—past and present—to identify a case that offers “lessons learned” and send it to Senior Editor Pete Kelly, pete.kelly@dowdenhealth.com. Keep it to 1,500 words, outlining history and treatment options, with interspersed commentary to point up the key decision points.

If you have questions before writing, check with Pete Kelly. He'll submit it to our Editorial Board and Case History Editor for review—and you'll hear from us soon.