

Chapter 9

ADHD and Depression



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Case Example

Courtney, an active and vivacious 14-year-old ninth grader, had been diagnosed with ADHD (with a predominantly inattentive presentation) during the early elementary school years. After some deliberation, her family had made the decision to pursue psychopharmacological treatment when increasing academic demands, in combination with Courtney's attentional difficulties, began to take a toll on her academic performance, when she was in the fourth grade. Over recent years, her parents were very pleased with their daughter's continued educational progress. Courtney had also chosen to pursue several extracurricular interests, joining a dance class and a community swim team, and she had a close group of friends.

However, since Courtney's transition to high school earlier in the year, her parents began to notice concerning changes in their daughter. She seemed increasingly reluctant to participate in her swim and dance practice, frequently complaining about being too tired or preferring to stay alone in her room at home instead. At home she was often irritable and cranky; she frequently picked fights with her younger brother or argued over petty matters during family dinners. On her second-semester report card, several of Courtney's teachers indicated concern about her attention during classroom instruction, and she was missing homework assignments in several of her classes.

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Background

All teenagers can be moody, and adolescence is a period of time which is fairly notorious for emotional turmoil and drama. For many youngsters, intermittent sadness, mood swings, and emotional turbulence are not all that unusual and may in fact be developmentally normative. However, if accompanied by other changes, such as sudden or marked social withdrawal, decline in academic performance or motivation, and/or changes in sleep or appetite, these mood changes may be signs of clinical depression. While all teens are vulnerable toward experiencing such difficulties, teenage girls are especially susceptible; beginning in adolescence, depression is about twice as common in females, relative to males.

Depression can strike at any age across the lifespan, but the incidence of this disorder increases profoundly during adolescence and young adulthood.

There are two main types of clinical depression: major depressive disorder (MDD; Table 9.1) in which defining symptoms are present for at least 2 weeks and persistent depressive disorder (or dysthymia; Table 9.2) where symptoms are more

Table 9.1 DSM-5 criteria for major depressive disorder

Major depressive disorder	
Five or more of nine symptoms for at least 2 continuous weeks (one symptom must be either depressed/irritable mood or diminished interest and pleasure):	
	1. Depressed mood most of the day, nearly every day. In children and adolescents, can substitute “irritable” mood
	2. Diminished interest and pleasure
	3. Significant decrease in weight (5%). In children, failure to make expected weight gains
	4. Sleep disturbances (difficulty falling or staying asleep, early waking, sleeping more than usual)
	5. Psychomotor agitation or retardation
	6. Fatigue or loss of energy
	7. Feelings of worthlessness or excessive guilt
	8. Diminished ability to think or concentrate or indecisiveness
	9. Thoughts of death or suicidal ideation
Symptoms cause meaningful impairment	
Symptoms are not caused by substance use or another medical condition	

Adapted from American Psychiatric Association [37]

Table 9.2 DSM-V diagnostic criteria for persistent depressive disorder (dysthymia)

Persistent depressive disorder (dysthymia)	
A. Depressed mood (or irritability for children and adolescents) for most of the day, for more days than not for at least 1 year for children and adolescents (2 years in adults)	
B. Presence while depressed of two or more of the following:	1. Poor appetite/overeating
	2. Insomnia or hypersomnia
	3. Low energy or fatigue
	4. Low self-esteem
	5. Poor concentration or difficulty making decisions
	6. Feelings of hopelessness
During the 1 year period of the disturbance, the person has never been without symptoms in Criteria A or B for >2 months at a time	
There has never been a manic or hypomanic episode	
The symptoms do not occur exclusively in the context of a chronic psychotic disorder, and symptoms are not due to the effects of a substance or a general medical condition	

Adapted from American Psychiatric Association [37]

intermittent or less severe but can persist for a year or longer. Both of these types of depression can lead to significant impairment with regard to an individual’s emotional, social, and academic functioning and (particularly if unaddressed) may lead to far-reaching and at times devastating consequences at this developmental stage. Even when symptoms of depression are below threshold to meet diagnostic criteria for either of these disorders, they can create significant disruption and disarray in one’s overall health and well-being.

Prevalence

Adolescents with attention-deficit/hyperactivity disorder (ADHD) are at higher risk for developing depression, compared to their peers who do not have ADHD. While ADHD is a neurodevelopmental disorder that begins in childhood, with symptoms that typically persist across the lifespan into adulthood, the incidence of major depressive disorder (MDD) peaks during the adolescent and young adult years. Moreover, though a single lifetime episode of MDD is certainly possible, most commonly MDD relapses following its initial occurrence. In those with ADHD and MDD, MDD usually presents several years after the onset of symptoms of ADHD [1, 2].

MDD alone has been found to occur in approximately 2% of children and 8% of adolescents [3]. The rate of MDD in youths with ADHD is over five times higher, compared to youths without ADHD [4]. A prospective longitudinal study of

children diagnosed with ADHD in early childhood found that youth with ADHD were at significantly greater risk for single and multiple episodes of adolescent depression and suicidal behavior prior to age 18 than comparison children [5]. Furthermore, youth with both ADHD and depression have been found to have more severe symptoms, as well as higher rates of long-term impairment, compared to youth with either disorder alone. Importantly, early treatment of ADHD has been associated with lower risk of the development of subsequent symptoms of MDD [6]. This finding underscores the benefits of early identification and intervention to prevent or mitigate the onset of depressive symptoms and associated consequences.

Prevalence rates regarding the co-occurrence of ADHD and MDD have been found to be quite variable across studies. Estimates regarding the prevalence of depression in youngsters with a diagnosis of ADHD have been found to range from 12% to 50% [1, 4]. These numbers also vary markedly across sex and age [7]. For example, Beiderman et al. found that 11% of girls with ADHD had comorbid MDD, but by adulthood, 72% of women with ADHD also met diagnostic criteria for MDD [3]. The same authors found that in males, the rate of comorbid ADHD and depression was more stable across development, with 21% of boys with ADHD, and 35% of adult men with ADHD, also meeting diagnostic criteria for comorbid MDD. There is also evidence to suggest that prevalence rates of the two disorders diverge over the course of development. For example, in a longitudinal community study, the prevalence of ADHD symptoms was found to diminish with age, while in contrast, symptoms of depression were found to increase over the course of development [8].

Etiology

Given the potential for significant lifetime consequences related to having both disorders, it is important to consider the various factors that may be involved in the development of depression in the context of ADHD. Recognition and understanding regarding the various environmental, familial, and other risk factors for the development of comorbid depression in youth with ADHD may help to inform and guide prevention and intervention strategies for adolescents at risk for the development of both disorders. Why certain adolescents with ADHD are more vulnerable toward developing depression is not fully understood, and the reasons for the overlap between these two disorders are likely multifactorial and complex. However, a number of risk factors have been identified.

1. *Academic performance deficits* (which often may be either caused or exacerbated by symptoms of ADHD or related problems) may increase risk for the development of symptoms of depression. When children enter school, they are met with various demands regarding compliance, concentration, and participation in cooperative peer activities, all of which may present particular difficulties for youngsters with ADHD. The associated increased risk of academic failure, conflict with teachers, and general school dissatisfaction may in turn predispose youths with ADHD to the subsequent development of depressive symptoms.

2. Children and adolescents with ADHD are known to have various *difficulties across the social functioning domain*, and such impairments have also been implicated as risk factors for the development of depressive symptoms, for a range of reasons. For example, hallmark characteristics of ADHD, such as hyperactivity and impulse control problems, may contribute to peer rejection, particularly in later childhood and adolescence. Additionally, symptoms of inattention may make it more difficult for kids to adequately notice and attend to subtle social cues which are important in the context of the development and maturation of interpersonal skills, and as a result, social interactions may suffer. In such circumstances, it has been posited that peer rejection and social isolation may lead to the development of depressive symptoms.
3. Beyond the academic and social vulnerabilities that have been associated with ADHD, core ADHD symptoms in a child or adolescent may impact upon parenting practices and ultimately *parent-child relationships*, which may in turn increase risk for a child with ADHD to develop symptoms of depression. For example, symptoms associated with ADHD including impulsivity, hyperactivity, and inattention may inadvertently provoke more negative and inconsistent parenting practices [9]. Such parenting interactions have been found to be associated with negative cognitions that tend to be characteristic in children and adolescents with depression [10].
4. *Internal factors such as irritability and emotion regulation* have been studied as a link between ADHD and depression [11]. Emotion dysregulation is common in ADHD and contributes to the severity of impairment [12]. A study of adolescents with ADHD found emotion regulation to be a mediator in the relationship between ADHD and depression in youth [13].
5. The development of depression in youth with ADHD may also be influenced by factors pertaining to other *psychiatric comorbidities*. Both anxiety and disruptive behavior disorders have been found to increase one's risk of developing depressive disorder [14]. Roy and colleagues collected data from Tracking Adolescents' Individual Lives Survey (TRAILS) and examined the effects of ADHD, anxiety, and disruptive behaviors on the development of depression. They found that in adolescents who met diagnostic criteria for ADHD, as well as those with sub-threshold ADHD symptoms, there was increased risk for the development of symptoms of depression. These researchers concluded that the pathway from ADHD to depression is at least partially mediated by symptoms of anxiety and the presence of disruptive behavior problems.
6. Another variable that has the potential to impact development of depressive symptoms in youth with ADHD relates to the pharmacological treatment of this disorder. While there have been reports of mood changes with medications for ADHD, there is at least one study that found that *delayed pharmacotherapy for ADHD* increased the likelihood of later developing depression [14], and the authors suggest that treating ADHD in childhood may be protective against developing depression later in life. With regard to this topic, more research is needed to determine how other factors, such as female sex, may influence the treatment course and development of depression in youth with ADHD.

Morbidity

ADHD is a developmental disorder that begins in childhood. The symptoms of ADHD change throughout the life cycle. Most typically, symptoms of impulsivity and hyperactivity associated with ADHD are at their worst during the school-age years, but inattention persists and can worsen as cognitive demands increase, and as such these symptoms often persist into adulthood. Depression typically first manifests itself years after the onset of ADHD.

While it can occur as a single episode, depression is a chronic disorder for many patients, with a significant likelihood for relapse after first episode of major depression. While having either of these disorders individually may be associated with significant effects across various domains of development, when the two disorders co-occur, the symptom severity and accompanying impairment may be far worse. In addition, the rate of self-injurious behavior and suicide is higher in adolescents with ADHD and MDD relative to those with MDD alone [15]. Beiderman and colleagues followed adolescent and young adult females over a 5-year period and found that patients with both depression and ADHD tend to have earlier onset of depression, longer durations of depressive episodes, and higher rates of suicidality and psychiatric hospitalizations compared to those with depression alone [3].

Additional psychiatric comorbidity is common with both ADHD and depression. Oppositional defiant disorder (ODD) and conduct disorder (CD) are commonly diagnosed with ADHD, and anxiety disorders are frequently diagnosed with depression. When ADHD and depression occur together, they are often associated with one or more of these added other disorders, further complicating the presentation and treatment course.

Depressive episodes in youth with ADHD can be more prolonged and harder to treat, compared to such episodes in others who do not have ADHD.

Impairment often persists across the lifespan. Level of impairment later in life may be associated with the severity of the condition at onset, other comorbidities, or other environmental factors. Adults who have both ADHD and depression have been found to experience higher overall healthcare costs compared to those with depression alone [16]. Given the severity of symptoms and impairment when depression and ADHD occur together, it is important to understand effective assessment and intervention strategies in adolescents in order to optimize outcomes across a range of domains.

Assessment

If you suspect that your teenager is struggling with symptoms of depression, it is important to take some thoughtful next steps in order to better understand the nature of these difficulties:

- As a first step, parents are encouraged to initiate dialogue with their child in a gentle and nonjudgmental manner, noting symptoms that they've observed and soliciting input from their child regarding their sense about what might be going on. These conversations can certainly be challenging and fraught and may be optimized by parent efforts to focus on listening to their child and acknowledging and validating their perspectives.
- Reaching out for professional help may be warranted particularly if your child's current difficulties appear to be getting in the way of their daily functioning (e.g., interfering with social and/or family relationships, negatively affecting academic performance), represent a notable shift from their typical presentation, and/or are accompanied by thoughts about self-harm.
- Meeting with your child's pediatrician is a recommended next step in the evaluation process. The pediatrician may conduct preliminary assessment, including administering standardized parent- and self-report screening measures and talking with you and your child about your concerns. A thoughtful review about these matters may help to rule out any potentially contributing medical factors, and begin to shed some light on whether current difficulties may reflect an exacerbation of the child's ADHD (as the presentation of this developmental disorder can vary over time), or may be suggestive of concerns beyond the ADHD domain. Depending on the level and nature of concern, the pediatrician may recommend further, more in-depth assessment by a behavioral health professional. Some pediatric practices are staffed by behavioral health providers who can complete such assessment on-site, and others will refer your child to a child psychologist, psychiatrist, or similar professional in your community.
- A comprehensive and evidence-based evaluation is crucial in order to clarify the specific nature of teens' difficulties [17, 18]. Optimally, a thorough assessment is closely tied to subsequent treatment, and will be used to help inform and guide decisions about when and how to treat, as well as regarding specific targets of intervention [17]. Assessments typically consist of various components:
 - Interview (with both parents and adolescent) regarding current concerns and pertinent history (e.g., family, developmental, medical, school, social).
 - Completion of additional self- and parent-report symptom rating scales and questionnaires. These measures will typically include questions about both broadband and narrowly focused domains of functioning as symptoms of depression (particularly in overlap with ADHD) may mimic other concerns such as effects of substance use or other disorders of emotion or behavior regulation such as anxiety or disruptive behavior disorders [1]. Multi-informant perspectives (including input from teachers or other individuals working closely with your child) are often included in a comprehensive evaluation as well. Across parents, teachers, and the adolescents, there may not always be agreement about current concerns [19], and as such the integration and consolidation across information from multiple perspectives will help the clinician to derive a thorough and comprehensive understanding about your

child and to generate a nuanced conceptualization about the nature of their current difficulties.

- Formal assessment typically concludes with a feedback session, together with the adolescent and their parents, at which point the clinician will share their conceptualization and initiate discussions about treatment recommendations.

Ideally, over the course of treatment, more informal ongoing assessment will continue in order to monitor for the development of any new or changing symptoms, gauge progress, and modify treatment recommendations as needed.

Treatment

The recommended treatment for co-occurring depression in teens with ADHD will vary depending upon the specific circumstances, symptoms, and history of each individual. Ideally, your child's treatment course will be informed and guided, in a customized manner, by a thorough and comprehensive evaluation, in order to optimize its effectiveness. The behavioral health professional working with your child will generally conclude their assessment by meeting together with you and your child, in order to review assessment findings and to discuss treatment planning and goal-setting. In general, treatment for comorbid depression and ADHD will typically involve psychotherapy, pharmacological management, or a combination of these two approaches [20].

Thoughts about suicide and/or self-harm may at times accompany other symptoms of depression. Should you be concerned about such symptoms, a more acute assessment such as in a hospital emergency department or via a psychiatric emergency response program may be warranted.

Psychotherapy

Cognitive behavioral therapy (CBT) is a therapeutic approach with a strong evidence base for the treatment of symptoms of depression across a wide age range, and as such this is most often the psychotherapeutic approach of choice for teens with depression. This is a short-term treatment modality with roots in both cognitive and behavioral approaches. Beck's classic cognitive vulnerability model [21] identifies maladaptive thinking patterns (e.g., tendency to selectively attend to negative rather than positive attribute of situations) as major causal and maintaining factors in the context of depression, while behavioral theories [22] emphasize the role of maladaptive actions. CBT combines elements from both approaches and focuses on

the interrelations and connections among one's thoughts, feelings, and behavior, particularly in the context of the onset and maintenance of behavioral health problems such as depression. This therapeutic approach aims to promote self-awareness and self-understanding, particularly around one's tendency to get "stuck" in negative cycles, and entails structured sessions with active, collaborative goal-setting and skill-building, homework assignments for additional practice and skill-building outside of sessions, and continual efforts around treatment monitoring. CBT for depression in teenagers typically involves various specific components including behavioral activation (e.g., encouraging social connections, encouraging participation in pleasurable activities); bolstering of problem-solving skills; identifying and challenging of negative, maladaptive thoughts; and supporting the development of new, more adaptive coping strategies [23, 24].

Across many studies, including the large-scale Treatment for Adolescents with Depression Study (TADS), CBT has been found to have a moderate effect size for the treatment of depression in adolescents, to have a positive effect on suicidal ideation, and to facilitate the maintenance of therapeutic gains. Adolescents with moderate to severe depression who are treated with both medication and CBT have been found to show more rapid improvements in the early stages of treatment and to have a diminished risk of emerging suicidality [20, 25]. CBT has been found to be a well-established intervention for the treatment of adolescent depression in both individual and group formats [23].

To our knowledge, no CBT treatments have been specifically developed or tested for adolescents with comorbid ADHD and depression. There have been some studies in teens with both diagnoses, in which CBT alone or in combination with medication management was associated with more positive outcomes, compared to those who underwent placebo treatment [26]. More recently, a study examining the effects of various treatments for depressed adolescents found that improvement in depressive symptoms (either in the context of medication management alone or in combination with CBT) also led to improvement in terms of comorbid ADHD symptoms, even though those symptoms were not specifically targeted in treatment [27]. These findings underscore the importance of treatment of comorbid depressive symptoms in adolescents with ADHD and suggest that such approaches may in fact lead to amelioration of both disorders.

While there is very limited evidence to support the effectiveness of CBT for those with ADHD alone, a relatively recent study [28] found that adolescents with ADHD and comorbid depression showed greater improvement (compared to those with ADHD alone) following a CBT-based intervention specifically targeting ADHD symptoms. Specific components of this intervention are listed in Table 9.3.

These findings suggest that treatment for teens with both ADHD and depression may be optimized through the thoughtful targeting of prominent symptoms of each disorder. More broadly, there has been some recent attention across the field of child and adolescent psychology around the targeting of general principles of therapeutic change in psychotherapeutic protocols, as opposed to the delivery of focal treatments for specific diagnostic presentations [29]. Such "transdiagnostic" approaches (which include CBT-based interventions targeting diagnostically cross-cutting

Table 9.3 Common components of CBT for ADHD

Common components of CBT for ADHD
Psychoeducation about ADHD
Training in organization and planning skills
Skills aimed at reducing procrastination, bolstering communication skills, and improving anger/frustration management

domains such as emotion regulation, problem-solving, and motivation) hold promise for the treatment of comorbid ADHD and depression, but will require further investigation and study in youths with symptoms of both disorders.

As noted above, adolescents with comorbid depression and ADHD are at elevated risk for problems across various academic and interpersonal domains, and in fact social difficulties (including parent-child and peer relationship problems) in youths with ADHD have been associated with the subsequent development of symptoms of depression [30]. These areas of functioning may thus be important treatment targets as well, beyond treatment aimed at alleviating specific symptoms. Such aims may be included within the broader framework of CBT. As an alternative, interpersonal psychotherapy (IPT) is another approach that is viewed as a well-established intervention for the treatment of adolescent depression, and which may be of particular benefit in circumstances where interpersonal conflict and problematic peer relationships are central characteristics of an adolescent's presentation [31]. In this approach (which has its roots in interpersonal theory of depression), the fluctuating nature of interpersonal relationships during adolescence (such as changing relationships with parents and peers and increasing autonomy) is conceptualized as contributing to the development of depressive symptoms. For those with ADHD, this may be particularly pertinent, given susceptibility toward social functioning problems of various natures [30]. Treatment within the IPT modality aims to decrease depressive symptoms by targeting the interpersonal context in which it unfolds through psychoeducation, interpersonal skill-building, and a supportive therapeutic relationship [31].

With regard to elevated risk for problems in the domain of academic functioning, families are encouraged to be in communication with staff at their children's school in order to discuss potential eligibility for a 504 Plan or Individualized Educational Plan (IEP) through the Individuals with Disabilities Act, in order to support the development of customized school-based supports and accommodations [1, 6]. These may include adjustments or modifications in assignments or tasks (such as allotment of extra time for assignment completion or extra help around breaking down complex assignments and setting up schedules or study habits), consultation with a school-based behavioral health professional (school psychologist, counselor, or social worker) as needed, and engaging with the student in a collaborative relationship, in order that they may play an active role in their own support planning.

Given the high risk for the development of symptoms of depression in adolescents with ADHD, routine screening for depressive and related symptoms in those with ADHD is strongly encouraged [32]. Furthermore, it has been suggested that in

some cases, the adaptation and incorporation of more formalized depression prevention programs within existing ADHD treatment programs for adolescents may be warranted, even in the absence of the emergence of depressive symptoms [33]. Such prevention programs may be particularly beneficial for those known to be at elevated risk for depression, such as through a strong family history of depression or other known risk factors. Application of the cognitive behavioral model in a preventative manner is an area that is undergoing active research and one which holds great promise for a meaningful clinical and public health impact [24].

Medication Management

There are few studies to inform medication treatment recommendations for youth with ADHD and comorbid depression. For ADHD alone, psychostimulants (methylphenidate-based, dextroamphetamine-based medications) are the first-line treatments of choice in most cases with second-line choices being atomoxetine and long-acting alpha-agonists (long-acting formulations of clonidine and guanfacine). In the case of depression, there is evidence supporting the use of selective serotonin reuptake inhibitors (SSRIs) as first-line medication treatments in adolescents. There are two SSRIs that have FDA approval for depression in the pediatric population: fluoxetine (ages 8+) and escitalopram (ages 13+).

A consensus conference was held in 1998 in Texas, and from this algorithms were developed informing the treatment of MDD and comorbid conditions. The Texas Children's Medication Algorithm Project revised their recommendations in 2006 [34] and provided updated recommendations for treatment of ADHD and comorbid depression. The group recommended that in the context of both disorders, but where depressive symptoms are milder, there should be a trial of a psychostimulant for 2 weeks at a sufficient dose. If both depressive and ADHD symptoms improve, the stimulant alone should be continued. If after the stimulant is started, though, the ADHD or depressive symptoms worsen, the stimulant should be discontinued. In the case that ADHD symptoms improve but depressive symptoms do not improve, the addition of an SSRI medication should be considered while continuing the stimulant. If in a patient with ADHD and MDD/dysthymia, the depressive symptoms are the most prominent or more severe (i.e., marked loss of appetite, weight loss, severe sleep disturbance, suicidal intent or plan), starting with antidepressant medication is recommended.

While there are a few reports that stimulants can cause depressive symptoms or that potential side effects of stimulant medication could mimic symptoms of depression [1], there is evidence that treatment for ADHD may reduce likelihood of depression. Stimulant medication used in treatment of ADHD may reduce symptoms of depression in ADHD [35]. It is also possible that depressive symptoms present as a consequence of untreated ADHD. If depression symptoms resolve after stimulant treatment alone, the validity of the depression diagnosis should be reconsidered. In addition, at least one study indicated that in those with ADHD and comorbid

depression, there is an increased risk of treatment resistance to antidepressants (treatment failure in ≥ 2 different antidepressants) and that in those that had regular ADHD treatment there was a lower likelihood of antidepressant resistance [36].

While two medications may be indicated to treat both disorders, it is best not to start with both treatments at the same time; new medications should always be added one at a time.

Increased suicidality (suicidal behavior, suicidal ideation, and suicide attempts) has been reported in children, adolescents, and young adults who are prescribed antidepressants. In the studies documenting this rare risk, the average risk of increased suicidality was 4% (risk of increased suicidality with placebo medication was 2%). In the studies that were pooled that resulted in this data, suicidal ideation was the most common event, and there were no completed suicides among the youth included in the trials (Food and Drug Administration 2004). When antidepressant medication is indicated, it should be used, and there should be close follow-up after these medications are started. The FDA recommends following up weekly during a medication titration due to this rare but potential increase in suicidality linked with starting or titrating doses of antidepressants. It is important to educate parents to look for mood worsening, increased agitation, or suicidal behaviors/thoughts when antidepressants are being initiated or titrated.

Case Revisited

Courtney is displaying symptoms of depression (decreased interest in participating, fatigue, irritability), but some of her symptoms (inattention during classroom instruction, missing homework assignments in several of her classes) are explained by untreated ADHD as well. The first step is for her parents to initiate a dialogue about their observations, seeking Courtney's input and perspective. She may next visit with her primary care provider, where a comprehensive clinical interview helps clarify her current needs. Standardized parent and self-report measures will help gather detailed information, and depending on the level and nature of concern, the pediatrician may recommend further, more in-depth assessment by a behavioral health professional.

Conclusion

The presence of depressive disorders in the context of ADHD in adolescents is common, and often these youth present with more severe symptoms and greater functional impairment. Thorough assessment, including information from multiple

sources, is important to yield accurate diagnosis and prompt treatment initiation. While evidence-based recommendations are available based on preliminary studies, more research is needed to help guide treatment of youth with ADHD and comorbid depression.

Tips

- Adolescents with ADHD should be screened systematically for depression, since the rate of major depressive disorder in youths with ADHD is over five times higher compared to youths without ADHD.
- Try to find quality therapy for adolescents with ADHD and depression. Cognitive behavioral therapy has been found to have a moderate effect size for the treatment of depression in adolescents, to have a positive effect on suicidal ideation, and to facilitate the maintenance of therapeutic gains.

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