NARSAD RESEARCH

Fact Sheet
Adolescent Depressive Disorders

Occurring earlier in life than in past decades, depression in adolescents is common, recurrent, and associated with significant mortality. Often, depressive disorders in adolescents go unrecognized by families and physicians because the symptoms are viewed as normal mood swings typical of a teenage developmental stage. This can have tragic consequences as mood disorders can affect the functioning and adjustment of teenagers, leading to an increased risk for substance abuse and suicidal behavior.

Among adolescents and young adults from 1952 to 1996, a tripling of suicide rates has occurred—with a 14 percent increase in suicide among adolescents aged 15 to 19 years. In 1999, suicide alone accounted for 12 percent of all deaths for 10- to 24-year-olds. These disturbing statistics have prompted the U.S. Surgeon General to recognize suicide as a serious public health problem and develop a National Strategy for Suicide Prevention.

Suicidal thoughts are surprisingly common in high school students as reported in the Youth Risk Behavior Surveillance study:

- 19.3 percent of 9th- to 12th-grade students in the U.S. reported suicidal ideation (thoughts of wanting to kill oneself)
- 8.3 percent reported at least one suicide attempt
- 2.6 percent enacted at least one medically serious suicide attempt within the year of survey.

Many of the adolescents who attempt or commit suicide have depressive disorders. Developing and testing various interventions to prevent suicide in adolescents has been the focus of many studies. Research has shown that early diagnosis and treatment, accurate evaluation of suicidal thinking, and limiting young people's access to lethal agents (including firearms and medications) may hold the greatest suicide prevention. As for predicting which adolescents will actually commit suicide, this has been more difficult to identify.

Adolescent Major Depression

Recognizing depression in teens is more difficult than in adults because adolescents express their symptoms differently. A youth with depression is more likely to exhibit decreased interest in formerly pleasurable activities and irritability rather than low energy, sadness, and increased sleep as is typically seen in adults.

Emerging treatment studies indicate that adolescents with depression respond differently from adults. Depressed adolescents do not show evidence of hypercortisolemia (excessive production of cortisol)

Manic Symptoms in Adolescence

- Severe changes in mood—either extremely irritable or overly silly and elated
- Overly-inflated self-esteem; grandiosity
- Increased energy
- Decreased need for sleep—able to go with very little or no sleep for days without tiring
- Increased talking—talks too much, too fast; changes topics too quickly; cannot be interrupted
- Distractibility—attention moves constantly from one thing to the next
- Hypersexuality—increased sexual thoughts, feelings, or behaviors; use of explicit sexual language
- Increased goal-directed activity or physical agitation
- Disregard of risk—excessive involvement in risky behaviors or activities

Adolescent Depressive Disorders are Common and Potentially Fatal

- Major depression affects approximately 4 - 8 percent of adolescents.
- Within 5 years of the onset of major depression, 70 percent of depressed youths will experience a recurrence.
- Depression in young people often co-occurs with other mental disorders, most often anxiety, disruptive behavior, or substance-abuse disorders.
- Longitudinal follow-up studies estimate that 20 - 25 percent of depressed adolescents will develop a substance-abuse disorder.
- As many as 5 - 10 percent of adolescents will complete suicide within 15 years of their initial episode of major depression.
- Although adolescent depression is twice as common in girls as boys, in post-puberty (ages 15-19), the male suicide rate is 5 times that of the female rate.

as is frequently reported in adults. Also, most depressed adolescents fail to respond to tricyclic antidepressants (TCA). Since there are differences in the mechanism of action of selective serotonin reuptake inhibitors (SSRIs) and TCA medications, researchers hope this may provide valuable insights into the underlying neurobiology of early-onset depression.

Treatment of Depression

Treatment often combines short-term psychotherapy, medication, and targeted interventions involving the home or school environment. As initial treatment for mild to moderate depression, psychotherapy teaches adolescents and their families to cope with interpersonal conflict and the social, familial, academic, and occupational problems that are associated with depression. One study found cognitive-behavioral therapy (CBT) to have a 65 percent remission rate in adolescents with depression and a more rapid response rate than either supportive or family therapy. CBT is based on the premise that depressed patients have cognitive distortions in their views of themselves, the world and the future. Approximately 15-20 CBT sessions are required, first as weekly sessions, but as the symptoms abate, monthly. Continuing psychotherapy is important even after the symptoms have remitted because it can help teens to better understand how their thoughts and behaviors can contribute to a relapse.

Medication as a first-line course of treatment should be reserved for adolescents:

- with severe symptoms that would prevent effective psychotherapy
- unwilling or unable to undergo psychotherapy
- who are psychotic
- who have chronic or recurrent episodes.

Several studies have found selective serotonin reuptake inhibitors (SSRIs) to be safe and effective for the short-term treatment of severe and persistent depression in adolescents. Specifically, fluoxetine (Prozac) and paroxetine (Paxil) have been found to be effective. Except for lower initial doses, the administration of SSRIs in adolescents is similar to that for adult patients with a recommended duration of at least 4 weeks. In the absence of adolescent relapse studies and considering the adult literature, teens with 2 or 3 episodes of major depression are recommended to receive maintenance treatment for at least 1 to 3 years. Teenagers with a diagnosis of both depression and anxiety can be acutely agitated, requiring the prescription of an antianxiety medication, such as diazepam (Valium) or alprazolam (Xanax), rather than waiting for several weeks for an SSRI to relieve symptoms.

There is a pressing need for additional research on the effectiveness of psychosocial and pharmacological treatments for depression in youth. Under the FDA Modernization Act (1997), manufacturers of selected medications already approved for use in adults, but also prescribed to youths, will need to provide studies in the pediatric population. Because of these regulations, several trials of other SSRIs and norepinephrine serotonin reuptake inhibitors (NSRIs) are ongoing. Recruitment of subjects for clinical trials and the lack of an adequate research infrastructure limit the pace of new research in this area. Both industry sponsored and federally funded research has been hampered by difficulties in recruitment. This is clearly not because of a lack of children and adolescents with depression but may reflect differences in access to

care, with many patients being treated in primary care or not treated at all.

Adolescent Bipolar Disorder

Follow-up studies have found that 20 - 40 percent of depressed adolescents develop bipolar disorder within five years after the onset of major depression. These teens are likely to be young at the time of the first depressive episode, have psychotic features in the initial depression, have a family history of bipolar disorder, and develop symptoms of hypomania during treatment with antidepressant drugs. If one parent of an adolescent has bipolar disorder, the adolescent has a 30 percent chance of having the disorder, and if both parents have the disorder, the chance rises to 60 percent.

This disorder can begin very gradually and be unmasked by an antidepressant medication, or it can present very suddenly where a teen under stress becomes manic and agitated, looking almost psychotic. Symptoms of bipolar disorder can be difficult to distinguish from other problems of adolescence. For example, while irritability and aggressiveness can indicate bipolar disorder, they can also be symptoms of depression, conduct disorder, drug abuse, attention deficit hyperactivity disorder (ADHD), or possibly schizophrenia. Since about 30 percent of adolescents with bipolar disorder also have ADHD, limited evidence suggests that some of the symptoms of ADHD may be a forerunner of mania.

Worsening Outcome?

Some researchers believe that bipolar disorder beginning in childhood or early adolescence may be a different, possibly more severe form of the illness than older adolescent- and adult-onset bipolar disorder. When the illness begins before or soon after puberty, it is often characterized by a continuous, rapid-cycling, irritable, and mixed symptom state that may co-occur with disruptive behavior disorders, particularly ADHD or conduct disorder, or may have features of these disorders as initial symptoms. In contrast, later adolescent- or adult-onset bipolar disorder tends to begin suddenly, often with a classic manic episode, and to have a more episodic pattern with relatively stable periods between episodes.

Treatment for Bipolar Disorder

Treatment of adolescents with bipolar disorder is based mainly on experience with adults, because limited data exist on the safety and efficacy of mood stabilizing medications in youth. Treatment usually involves an appropriate dose of mood stabilizing medications, typically lithium and/or valproate (Depakote), which are often very effective for controlling mania and preventing recurrences of manic and depressive episodes. Using antidepressant medication to treat depression in a person who has bipolar disorder may induce manic symptoms if it is taken without a mood stabilizer. In addition, using psychos-

DEPRESSIVE SYMPTOMS IN ADOLESCENCE

- Vague, non-specific physical complaints such as headaches, muscle aches, stomachaches or tiredness
- Absences from school or poor performance in school
- Talk of or efforts to run away from home
- Outbursts of shouting, complaining, unexplained irritability, or crying
- Being bored
- Lack of interest in playing with friends
- Alcohol or substance abuse
- Social isolation, poor communication
- Fear of death
- Extreme sensitivity to rejection or failure
- Increased irritability, anger, or hostility
- Reckless behavior
- Difficulty with relationships

timulant medications to treat ADHD or ADHD-like symptoms in an adolescent with bipolar disorder may worsen manic symptoms.

Caution needs to be applied in treating young female patients with valproate. According to studies conducted in Finland in patients with epilepsy, valproate may increase testosterone levels in teenage girls who begin taking the medication before age 20. Increased testosterone can lead to polycystic ovary syndrome with irregular or absent menses, obesity, and abnormal growth of hair. Therefore, young female patients prescribed valproate should be monitored carefully.

Few studies have been conducted with alternative treatments for adolescents with bipolar disorder, such as neuroleptics; however, a few small open studies and retrospective chart reviews have been conducted. One study reported on 18 adolescents (aged 13 to 18) who were treated with gabapentin following a failure of a mood stabilizer. Eighty-nine percent described a cessation of cycling, whereas 33 percent felt improved mood. In a retrospective chart review, another study reported on 28 bipolar children and adolescents, aged 4 to 17, who were treated with risperidone for an average of 6 months, 82 percent felt improved mania and aggression and 69 percent showed improved psychosis.

Common Characteristics Among Adolescents Who Commit Suicide

- Pessimism about the future, manifested as hopelessness
- Poor self-efficacy (helplessness)
- Poor self-esteem, expressed as worthlessness
- Recklessness
- Impulsivity

NARSAD
RESEARCH

The National Alliance for Research on Schizophrenia and Depression

60 Cutter Mill Road, Suite 404
Great Neck, NY 11021
Fax: (516) 487-6930
1-800-829-8289
www.narsad.org

Call **NARSAD** to receive our quarterly newsletter.