CME

Suicidal Behavior in Children and Adolescents

lthough all suicides are distressing, there is something about a youth's suicide that is particularly disturbing. Youths are seen as full of promise and potential, and an unnecessary death is perceived as an especially tragic waste. Furthermore, because children and adolescents need care from adults, a child's suicide creates a special guilt and anguish among those who provided that care. While many of the principles and approaches toward suicidal youth are similar to working with suicidal adults, there are also some key differences. This article will highlight the main differences between adolescent and adult suicidal behavior.

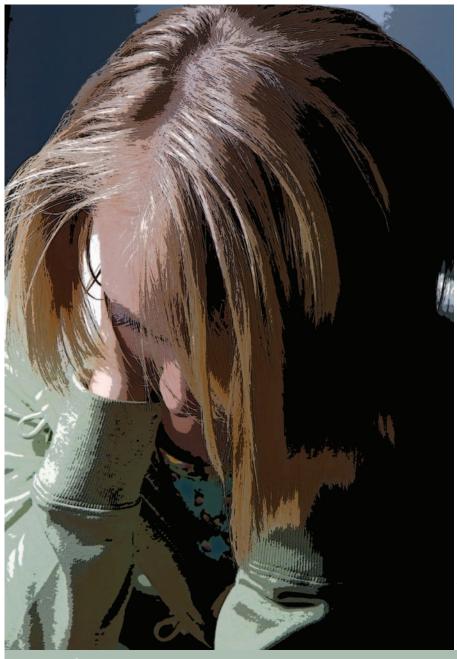
CME E EDUCATIONAL OBJECTIVES

- 1. Describe how the frequency of suicidal ideation in adolescents compares to adults.
- 2. Describe key differences in the assessment of suicidality in adolescents and adults.
- 3. Discuss how the legal status of minority affects the treatment of a suicidal child or adolescent.

Peter Ash, MD, is with the Department of Psychiatry and Behavioral Sciences, Emory University.

Address correspondence to: Peter Ash, Child Psychiatry, 1256 Briarcliff Rd NE, Atlanta, GA 30306, e-mail peter.ash@ emory.edu.

Dr. Ash has disclosed no relevant financial relationships.



Peter Ash, MD

Key Differences between Suicidal Adults and Suicidal Adolescents	
Category	Compared with Adults, for Adolescents
Risk Factors	Suicide accounts for a higher proportion of all deaths
	Suicidal ideation is more common
	Suicide attempts are more common
	Disruptive behavior disorders increase risk
	Contagion effects are more powerful
Diagnostic Differences	Psychotic disorder is much less common
Symptoms	Although suicidal ideation is more common, suicidal
	ideation is more likely to be denied when asked about
	Lethality of means is more commonly misjudged
Treatment	Selective serotonin reuptake inhibitors (SSRIs) require more monitoring
	Family involvement in treatment is more important
Legal Status	Legal consent for treatment needs to be provided by someone other than patient
	Hospitalization over the patient's objection can often be accomplished without resorting to civil commitment
	Patient's responsibility for treatment compliance
	is reduced
Aftermath of Completed Suicide	Full discussion with parents less constrained by
	confidentiality limitations because parents control record release

SUICIDE RATES AMONG ADOLESCENTS

Completed suicide is rare in childhood, but starting at about 13 years, the rate begins to increase. By the end of adolescence, the rate is on a par with rates of suicide in young adults.¹ Although girls have higher rates of suicide attempts, boys have a higher rate of suicide completion, and whites display higher rates than blacks. From 1979 to 2004, suicide rates first rose, then fell — with a disturbing rise in 2004 — but overall there was little change (the rate remained just under 15 per 100,000 people). There is clearly room for improvement in our efforts to prevent adolescent suicide. It is not clear what drives changes in suicide rates. The changes have been hypothesized to be related to changing patterns in prescribing selective serotonin reuptake inhibitors (SSRIs) to this group.² Suicide rates have significant cultural components, and internationally there is considerable variation in rates. For example, Russia has about triple the rate of youth suicide compared to the United States, while Portugal has a rate approximately one-third that of the United States.

In this country, suicide accounts for a higher proportion of all deaths among adolescents than among adults; in fact, it

is the third-leading cause of death among adolescents. Rates of both suicidal ideation and attempts are surprisingly high among adolescents. The Youth Risk Behavior Survey, which received completed questionnaires from 13,953 students in grades 9 to 12, found that 16.9% of adolescents considered suicide, 8.4% attempted suicide, and 2.9% made an attempt that required medical attention.³ Comparing this high rate of suicidal ideation to the rate of completed suicides reveals that for every 2,000 youths who have suicidal ideation, there is only 1 completed suicide. This high ratio implies that in adolescents, the presence of some suicidal ideation is a very weak predictor of who will actually commit suicide (see Table).

SCREENING AND ASSESSMENT

What can be done in terms of prevention? Research has shown that heightened surveillance through peer reports is not very effective. Because so many youths report some suicidal ideation, screening has good sensitivity but very low specificity. Effective screening requires a great deal of resources to follow up with the high numbers who report some suicidal thinking, and resources are rarely available to make this an effective approach.

As with adults, there are multiple risk factors at the individual, family, and social levels. But as with adults, no single constellation of risk factors allows for an accurate prediction for suicide for a particular person. Of the individual factors discussed in the literature, a history of a recent attempt is the most potent predictor, especially in boys. Therefore, asking about suicidal thinking and attempts should always be a component of the initial assessment of an adolescent or depressed child.

Although suicidal ideation is more common among adolescents than adults, ideation is more likely to be denied when asked about in this population. In assess-

PSYCHIATRIC ANNALS 37:10 | OCTOBER 2007

ing the intent following a suicide attempt, Kingsbury suggests assessing four main components: wish to die, preparations, concealment, and communication.⁴

The wish to die component involves examination of the underlying intent of the suicide attempt. What is the person's expectation with regard to dying, and what is the lethality of their chosen means? Adolescents tend to misjudge the lethality of means more often than adults, so it is important to ascertain the youth's thoughts about how lethal he thought his means would be, rather than relying solely on the clinician's medical knowledge about the actual risk of dying from, for example, a particular medication. The preparation for the attempt can give further clues into the individual's intent: the saving up of pills, for example, or saying goodbye to various people can help with assessments. Some people will plan a method of avoiding discovery; this may involve timing of the attempt or selection of an isolated location. The final aspect of intent is communication: some will tell others directly or indirectly of their suicidal thoughts, or write a note, and it is useful to learn what was communicated.

Suicide attempts often are precipitated by stressors such as separation, loss, and incarceration. A 1993 study found that 70% of adolescents attempting suicide had a stressor such as those discussed above, but half of those stressors occurred in the preceding 24 hours.⁵ This reflects the impulsivity of adolescence, but it also highlights the very short window available for intervention between the stressor, which is often unpredictable, and the attempt.

There are also some major differences with regards to individual diagnoses between adolescents and adults, although as with adults, depression is the most common diagnosis. Psychotic disorder is significantly less common among adolescents than among adults, and disruptive behavior disorders in youth increase the risk. Perhaps most importantly, the combination of depression and anxiety (specifically, generalized anxiety disorder) or depression and a disruptive disorder (primarily oppositional-defiant disorder) have been shown to increase the risk of suicidality hundreds of times (O.R. = 468 and 222, respectively).⁶ Furthermore, the overall severity of impairment with these The general approach to treatment involves ameliorating dynamic risk factors, the treatment of the underlying condition, and the individual's hopelessness and cognitive distortions. There are four major steps in treatment: protection of the patient, continuing risk assessment, amelioration of risk factors, and enhancement of protective factors. Youths

There is clearly room for improvement in our efforts to prevent adolescent suicide.

disorders correlates with the degree of risk, indicating the need for complete and accurate diagnoses of these psychiatric disorders among adolescents.

When assessing and diagnosing adolescent suicide risk, family factors are crucial. This side of the equation is more important among adolescents than among adults because adolescents have undergone their entire development interacting with their family. These family (and genetic) factors can also be protective, and this is a critical area for intervention. Furthermore, in managing an adolescent outpatient, the ability of family members to observe and to be protective needs to be assessed. Social factors among adolescents also differ in comparison with adults. Contagion effects are generally more powerful, and suicidal ideation is often communicated to peers.

TREATMENT

Although there is extensive literature on the treatment of adolescent depression, there is only a small amount of research on effective treatment, related in large part to the fact that suicidal youths are often excluded from research studies of depression therapies due to ethical problems. There is a gap between the treatment of depression and treatment of suicide intent.

for whom an outpatient treatment plan does not sufficiently reduce risk need hospitalization. Because parents can usually consent to hospitalization and override an adolescent's wish not to be hospitalized, "refusing" adolescents can usually be hospitalized without resorting to civil commitment. Treatment plans for suicidal youth use a variety of modalities to reduce risk and ameliorate risk factors. A full discussion of treatments for suicidal youth is outside the scope of this paper, but the American Academy of Child and Adolescent Psychiatry (AA-CAP) has developed practice parameters summarizing interventions.7

Pharmacotherapy is among the most important types of treatment of underlying depression. There has been some recent research on SSRIs and suicide. Two studies found a moderate increase in suicidality along with effective lessening of major depressive disorder (MDD).^{8,9} In 2004, the Food and Drug Administration (FDA) mandated the inclusion of a black box warning on all antidepressant medications given to children and adolescents, which included the statement that antidepressants "increased the risk of suicidal thinking and behavior" and that "patients who are started on therapy should be observed closely for clinical worsening, suicidality, or unusual changes in behavior."

Where does pharmacological treatment of suicidal youth stand now? One recent study found that of 41 suicides in New York, only one of 36 tested at autopsy found evidence of treatment with an SSRI.¹⁰ Adults, in contrast, have higher rates of treatment. Research has shown that because of the recent publicity surrounding possible increases in suicidality with these drugs, there has been

LEGAL IMPLICATIONS

The legal status of being a minor affects the treatment of suicidal youth. In most states, adolescents are considered legally incompetent, and parents provide consent to treatment. Hospitalization over a patient's objection can usually be accomplished without resorting to civil commitment, which often simplifies the management of suicidal patients.

In this country, suicide accounts for a higher proportion of all deaths among adolescents than among adults; in fact, it is the third-leading cause of death among adolescents.

a significant decrease in subscribing SS-RIs and that prescribing these drugs to youths has shifted from pediatricians to psychiatric specialists.²

The FDA warning that patients on SSRIs should be "observed closely" is further defined in *Physician Desk Reference* (PDR) entries as generally including at least weekly face-to-face contact with patients or family members during the initial four weeks of treatment.¹¹ Because many clinicians do not routinely see patients weekly in the first month of prescribing an SSRI, such language is problematic and may create liability in the event of an unfortunate outcome.

A suicidal adolescent needs a treatment plan that goes beyond just psychopharmacology. Psychosocial treatment has been shown to be effective for depression, but little research has been done specifically on its effects on suicidality. One study found that multi-systemic therapy was more effective than hospitalization in reducing suicide attempts,12 and another found that dialectical behavior therapy can be effective for inpatients.¹³ Work with the family is important both to affect the patient directly, but also as an important source of monitoring the patient, providing information to the clinician, and directly intervening if a high-risk situation arises acutely.

As with any complex risk assessment situation, if the clinician is unsure of the appropriate course of action, remember Jonas Rappeport's dictum: "When in doubt, shout."¹⁴ Get a second opinion, and have it documented.

There are also legal differences in the aftermath of a completed suicide. Full discussion with the parents as to the treatment course preceding the suicide is less constrained by confidentiality limitations, as parents typically control release of their child's records. In the unfortunate case of a malpractice action, the jury may have greater sympathy for an adolescent victim and his or her relatives than would be the case with an adult. Finally, because adolescents are seen as less legally responsible than adults, an adolescent who committed suicide may be seen as less responsible for complying with treatment than would be the case with an adult.

CONCLUSION

Childhood and adolescence are marked by rapid change and development. Effective interventions hold the promise of helping suicidal youth through a difficult period so that normal development can resume its course. Although assessment and treatment of suicidal youth is a difficult and weighty task, the rewards to the clinician of successfully helping children and adolescents return to normal functioning are high.

REFERENCES

- National Center for Injury Prevention and Control: WISQARS Fatal Injuries: Mortality Reports. 2007. http://webappa.cdc.gov/sasweb/ncipc/mortrate.html. Accessed September 19, 2007.
- Nemeroff CB, Kalali A, Keller MB, et al. Impact of publicity concerning pediatric suicidality data on physician practice patterns in the United States. *Arch Gen Psychiatry*. 2007;64(4):466-472.
- Grunbaum JA, Kann L, Kinchen S, et al. Youth risk behavior surveillance — United States, 2003. MMWR Surveill Summ. 2004;53(2):1-96.
- Kingsbury SJ. Clinical components of suicidal intent in adolescent overdose. JAm Acad Child Adolesc Psychiatry. 1993;32(3):518-520.
- Marttunen MJ, Aro HM, Lonnqvist JK. Precipitant stressors in adolescent suicide. J Am Acad Child Adolesc Psychiatry. 1993;32(6):1178-1183.
- Foley DL, Goldston DB, Costello EJ, Angold A. Proximal psychiatric risk factors for suicidality in youth: the Great Smoky Mountains Study. *Arch Gen Psychiatry*. 2006;63(9):1017-1024.
- American Academy of Child and Adolescent Psychiatry. Practice parameter for the assessment and treatment of children and adolescents with suicidal behavior. J Am Acad Child Adolesc Psychiatry. 2001;40(7 Suppl):24S-51S.
- Hammad TA, Laughren T, Racoosin J. Suicidality in pediatric patients treated with antidepressant drugs. *Arch Gen Psychiatry*. 2006;63(3):332-339.
- Bridge JA, Iyengar S, Salary CB, et al. Clinical response and risk for reported suicidal ideation and suicide attempts in pediatric antidepressant treatment: a meta-analysis of randomized controlled trials. *JAMA*. 2007;297(15):1683-1696.
- Leon AC, Marzuk PM, Tardiff K, et al. Antidepressants and youth suicide in New York City, 1999-2002. J Am Acad Child Adolesc Psychiatry. 2006;45(9):1054-1058.
- 11. 2007 Physicians' Desk Reference (PDR). Montvale, NJ: Thomson PDR; 2007.
- Huey SJ, Henggeler SW, Rowland MD, et al. Multisystemic therapy effects on attempted suicide by youths presenting psychiatric emergencies. J Am Acad Child Adolesc Psychiatry. 2004;43(2):183-190.
- Katz, LY, Cox BJ, Gunasekara S, Miler AL. Feasibility of dialectical behavior therapy for suicidal adolescent inpatients. *J Am Acad Child Adolesc Psychiatry*. 2004;43(3):276-282.
- Rappeport JR. Malpractice prevention. Presented at the Spring Grove State Hospital Center: Catonsville, MD; 1984.

PSYCHIATRIC ANNALS 37:10 | OCTOBER 2007

Copyright of Psychiatric Annals is the property of SLACK Incorporated and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.