Teen suicide: When the troubled die young

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Self-preservation perhaps is the strongest innate drive we possess. For most people, the taking of one's own life seems unthinkable. Such apparent self-destruction seems particularly abhorrent in the adolescent who has an entire life yet to live.

While most adolescents make it through their turbulent teens, statistics compiled by the Centers for Disease Control Division of Injury Epidemiology and Control Center for Environmental Health indicate that the rate of teen suicide rose 40% from 1970 to 1980. The latest 1986 figures from the National Center for Health Statistics (NCHS) indicate that suicide is the third leading cause of death among young persons aged 15 to 24 years. Only accidents and homicides take more lives in this age group. That means an average of one young person commits suicide every 1 hour and 43 minutes.

Four times as many boys as girls actually kill themselves. Yet, girls make five to nine times more attempts than boys. Traditionally, boys have used quicker, more violent methods—firearms, explosives, and strangulation. However, in this age of equality, girls are copying their male counterparts' methods. If this trend continues, experts foresee girls succeeding more frequently in killing themselves, as well.

Although the incidence of white male suicide currently outranks that found in other races, suicide crosses all racial, economic, and religious boundaries.

Why the rise in suicide?

No one factor can account for the upward trend in teen suicide. Part of the problem may lie with inconsistent classifications for causes of death. Often, local authorities have their own guidelines. For

example, one community may require the victim leave a suicide note for the death to be classified as suicide, while another may not.

Underreporting may also be attributed to the social stigma still associated with suicide.

Besides these problems, the changing social climate cannot be ignored. Society has become more complex. Today's teens are being forced to grow up faster than those who passed through adolescence just ten years ago. Pressure to succeed—at home and in school—and the subsequent feeling of failure when they do not meet such expectations may disturb an already precarious balance in their coping mechanism.

Changes on the family scene can complicate teen problems. Two-career families may mean no parent is available when a teen really needs to discuss some difficulties. The divorce rate has risen since *Father Knows Best* first aired on television. This often creates an unstable family atmosphere. Likewise, families moving from place to place away from relatives and friends can make a teen feel all alone with no one to turn to for help. Death of a close family member or friend can also serve as a precipitating factor.

Increased drug and alcohol use and the associated impulsive behavior responsible for irrational, sometimes violent, actions cannot be overlooked, either.

Alone, such social pressures present enough of a challenge, especially when the teen suffers from poor self-esteem. Add to these feelings the normal physiological and hormonal changes taking place within the adolescent body, and the situation becomes potentially tumultuous. Broad mood swings—happy one minute, down the next—are a normal part of adolescence. It's no wonder that adolescents are depressed more frequently than adults.

Depression: Looking for clues

Each of the aforementioned events or life changes can trigger depression in a susceptible teen. As one

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of the leading factors in suicide, depression entails various components. The teenager who suffers from major depression finds no pleasure in any activities, even those he or she may have enjoyed previously. Loss of energy; irritable mood; sleeping too much or not enough; weight gain or loss; fatigue; feelings of worthlessness or excessive guilt; poor concentration; social withdrawal, and recurrent suicidal thoughts are additional manifestations of depression. Headache and stomachache also may be symptoms of depression.

Not all of these symptoms appear at the same time. According to the *Diagnostic and Statistical Manual of Mental Disorders (DSM-III-R)*, the “bible” of the psychiatric profession, major depression occurs when five or more of these symptoms emerge daily for at least two weeks. The change in an adolescent’s behavior should be drastic enough for others to notice.

Other risk factors

Although many suicidal individuals suffer from depression and chemical dependency, other personality disorders—schizophrenia, dementia—can increase the risk of suicide.

Likewise, people who previously attempted suicide are more likely to try again. Children whose parents or other immediate family members have committed suicide are at an increased risk, as well. Although this may suggest a learned or inherited behavior, these theories have not been proven conclusively.

One study, which involved 3,000 teenagers, found adolescents, particularly girls, who had been arrested or assaulted, were likely to attempt suicide within a year of the incident. This same investigation found runaways at risk, too.

Anatomy of a suicide

If a teen happens to fall into one of these risk categories, this does not automatically mean suicide is imminent. As long as coping mechanisms exist, either from within an individual or from outside

forces such as family and friends, the outlook is encouraging.

However, once hopelessness and helplessness ensue, the need to escape from psychological pain pervades the suicidal person’s mind. Only two options exist: either completely solve the problem responsible for this pain, or stop the pain altogether.

A suicidal gesture draws attention to this inability to cope. A teen making a suicidal gesture does not want to die. This adolescent wants someone to recognize his or her pain. Yet, no matter how nonthreatening or manipulative a gesture might seem—taking only six aspirins or slashing wrists with a dull blade—it should *not* be ignored.

Once someone pays attention to such a gesture, the teen generally doesn’t try it again. On the other hand, simply dismissing a gesture could provoke an actual attempted suicide.

Unlike a gesture, an attempt is intended to cause injury or death, because suicide is seen as the only way out of the unbearable predicament. It usually is a rational, planned act. Method, time, and place have been chosen, hours—even months—in advance of the impending suicide.

Once the decision has been made, the potential suicide victim may appear calm. Previous signs of depression no longer exist. Frequently, he or she may give away valued possessions, such as favorite albums, CDs, or books. Unless someone intervenes, this person will attempt suicide repeatedly until successful.

Parental involvement: Looking for trouble

At least two thirds of teenagers who commit suicide tell a close family member, friend, or physician about their plans. Unfortunately, statements such as, “I’m going to kill myself,” or “You won’t have to worry about me much longer” often fall on deaf ears.

Yet, not every suicidal teen verbalizes his intentions. Often, picking up subtle warning signs may be difficult. Nonetheless, parents should be on the lookout for changes in their adolescent’s behavior.

"A parent can tell if a child's grades are dropping or if they're spending more time alone," notes Marla Kushner, DO, a general practitioner in the department of family and adolescent medicine at the Chicago College of Osteopathic Medicine.

If parents suspect something is wrong, a discussion is in order. "The easiest thing to do is just come out and ask, 'How are things going in school?' 'How are things going with your friends?' Just come straight out and ask if they're thinking about suicide. You're

not going to suggest suicide to a person who is not already suicidal. Actually, somebody who is suicidal may look at it as a release," explains Dr. Kushner.

As a concerned, willing listener, parents or friends might best avoid offering advice. Comments such as, "You have it better than most people," only reinforce the suicidal person's guilty feelings. In such a situation, it's best to discuss the matter calmly and seek help. Friends, in particular, should not feel disloyal in seeking assistance for a suicidal friend

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from a family physician, therapist, counselor, or clergy. Crisis centers and intervention hotlines may be beneficial, too.

Treatment

Contrary to popular belief, it's often the primary care physician—not the psychiatrist—who sees the suicidal person first. As more and more general practitioners encounter these patients, they realize the key to successful treatment begins by establishing trust between doctor and patient. "Until a patient can sign a written contract or agree to a verbal contract stating that he is not going to kill himself if left alone, we can't trust him," says Dr. Kushner. Such a pact applies to the outpatient as well as the hospitalized individual. (Hospitalization often is necessary in severe cases and when a patient suffers from a personality disorder, for example.)

Depending on the individual, a psychiatrist may prescribe antidepressant therapy. All patients and their families need to undergo counseling in order to find out what led to the suicidal behavior in the first place.

Those who receive help usually *don't* attempt suicide again. With a renewed sense of hope, the previously suicidal teen can lead a full, happy, and productive life.

References

- The adolescent in despair. *Emergency Medicine*, vol 17, pp 51-66, Sept 30, 1985.
- At the point of no return. By Edwin Shneidman. *Psychology Today*, vol 21, pp 54-58, March 1987.
- Centers for Disease Control: Youth suicide surveillance. US Department of Health and Human Services, Nov 1986.
- Depression in adolescents. By Rosalie Greenberg, Paul C. Holinger, Iris F. Litt, and Robert P. Masland, Jr. *Patient Care*, vol 22, pp 65-81, Dec 15, 1988.
- Drug use, depression, and adolescents. By Neela P. Joshi, and Marcia Scott. *The Pediatric Clinics of North America*, vol 35, pp 1349-1364, Dec 1988.
- Early indicators of self-destruction in childhood and adolescence: A survey of pediatricians and psychiatrists. *Pediatrics*, vol 77, pp 557-568, Apr 1986.
- General practitioners: Detectives of suicide. By Kathleen Spaltro. *The DO*, vol 27, pp 113-119, Apr 1986.
- If someone you know is thinking about suicide, you can help! (flier) Health information services, Merck Sharp & Dohme, West Point, Pa, 1987.
- Spotting the potential suicide. By Paul C. Holinger, Robert E. Litman, and Herbert Waltzer. *Patient Care*, vol 21, pp 62-80, Sept 15, 1987.
- The suicidal patient: The primary care physician's role in evaluation and treatment. By Charles W. Smith, Jr, and Edward T. Bope. *Postgraduate Medicine*, vol 79, pp 195-202, June 1986.
- Suicide in young people. By Nancy H. Allen and Michael L. Peck. The American Association of Suicidology, Denver, 1987.
- Suicide in youth and what you can do about it: A guide for students. By A. Russell Lee and Charlotte P. Ross. The American Association of Suicidology, Denver, 1987.
- Suicide in youth and what you can do about it: A guide for school personnel. By A. Russell Lee and Charlotte P. Ross. The American Association of Suicidology, Denver, 1987.
- Suicide: It doesn't have to happen. By Edwin S. Shneidman and Philip Mandelkorn. The American Association of Suicidology, Denver, 1987.
- Suicide risk: Evaluation and management. By Subhash C. Bhatia, Majeed H. Khan, and Arun Sharma. *American Family Physician*, vol 34, pp 167-174, Sept 1986.
- Teen suicide increases: Risks and causes identified. *American Family Physician*, vol 36, pp 272-275, July 1987.
- Teen suicide and bulimia: Understanding roots can aid in treatment. By Lisa R. Sulgit. *The DO*, vol 29, pp 104-107, Aug 1988.
- US suicide: 1986 official final data. Prepared by J.L. McIntosh, National Center for Health Statistics, Oct 23, 1988.
- What the experts don't tell you about teenage suicide. By Richard F. Formica and Maryann Brinley. *McCall's*, vol 113, pp 82-86, 173, Oct 1985.

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Precautions: General—1. Symptomatic response to nizatidine therapy does not preclude the presence of gastric malignancy.

2. Because nizatidine is excreted primarily by the kidney, dosage should be reduced in patients with moderate to severe renal insufficiency.

3. Pharmacokinetic studies in patients with hepatorenal syndrome have not been done. Part of the dose of nizatidine is metabolized in the liver. In patients with normal renal function and uncomplicated hepatic dysfunction, the disposition of nizatidine is similar to that in normal subjects.

Laboratory Tests—False-positive tests for urobilinogen with Multistix[®] may occur during therapy with nizatidine.

Drug Interactions—No interactions have been observed between Axid and theophylline, chlordiazepoxide, lorazepam, lidocaine, phenytoin, and warfarin. Axid does not inhibit the cytochrome P-450-linked drug-metabolizing enzyme system; therefore, drug interactions mediated by inhibition of hepatic metabolism are not expected to occur. In patients given very high doses (3,900 mg) of aspirin daily, increases in serum salicylate levels were seen when nizatidine, 150 mg b.i.d., was administered concurrently.

Carcinogenesis, Mutagenesis, Impairment of Fertility—A two-year oral carcinogenicity study in rats with doses as high as 500 mg/kg/day (about 80 times the recommended daily therapeutic dose) showed no evidence of a carcinogenic effect. There was a dose-related increase in the density of enterochromaffin-like (ECL) cells in the gastric oxyntic mucosa. In a two-year study in mice, there was no evidence of a carcinogenic effect in male mice; although hyperplastic nodules of the liver were increased in the high dose males compared to placebo. Female mice given the high dose of Axid (2,000 mg/kg/day, about 330 times the human dose) showed marginally statistically significant increases in hepatic carcinoma and hepatic nodular hyperplasia with no numerical increase seen in any of the other dose groups. The rate of hepatic carcinoma in the high dose animals was within the historical control limits seen for the strain of mice used. The female mice were given a dose larger than the maximum tolerated dose, as indicated by excessive (30%) weight decrement

compared to concurrent controls, and evidence of mild liver injury (transaminase elevations). The occurrence of a marginal finding at high dose only in animals given an excessive, and somewhat hepatotoxic dose, with no evidence of a carcinogenic effect in rats, male mice, and female mice (given up to 360 mg/kg/day, about 60 times the human dose), and a negative mutagenicity battery is not considered evidence of a carcinogenic potential for Axid.

Axid was not mutagenic in a battery of tests performed to evaluate its potential genetic toxicity, including bacterial mutation tests, unscheduled DNA synthesis, sister chromatid exchange, and the mouse lymphoma assay.

In a two-generation, perinatal and postnatal, fertility study in rats, doses of nizatidine up to 650 mg/kg/day produced no adverse effects on the reproductive performance of parental animals or their progeny.

Pregnancy—Teratogenic Effects—Pregnancy Category C—Oral reproduction studies in rats at doses up to 300 times the human dose, and in Dutch Belted rabbits at doses up to 55 times the human dose, revealed no evidence of impaired fertility or teratogenic effect; but, at a dose equivalent to 300 times the human dose, treated rabbits had abortions, decreased number of live fetuses, and depressed fetal weights. On intravenous administration to pregnant New Zealand White rabbits, nizatidine at 20 mg/kg produced cardiac enlargement, coarctation of the aortic arch, and cutaneous edema in one fetus and at 50 mg/kg it produced ventricular anomaly, distended abdomen, spina bifida, hydrocephaly, and enlarged heart in one fetus. There are, however, no adequate and well-controlled studies in pregnant women. It is also not known whether nizatidine can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. Nizatidine should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers—Nizatidine is secreted and concentrated in the milk of lactating rats. Pups reared by treated lactating rats had depressed growth rates. Although no studies have been conducted in lactating women, nizatidine is assumed to be secreted in human milk, and caution should be exercised when nizatidine is administered to nursing mothers.

Pediatric Use—Safety and effectiveness in children have not been established. **Use in Elderly Patients**—Ulcer healing rates in elderly patients are similar to those in younger age groups. The incidence rates of adverse events and laboratory test abnormalities are also similar to those seen in other age groups. Age alone may not be an important factor in the disposition of nizatidine. Elderly patients may have reduced renal function.

Adverse Reactions: Clinical trials of nizatidine included almost 5,000 patients given nizatidine in studies of varying durations. Domestic placebo-controlled trials included over 1,900 patients given nizatidine and over 1,300 given placebo. Among the more common adverse events in the domestic placebo-controlled trials, sweating (1% vs 0.2%), urticaria (0.5% vs <0.01%), and somnolence (2.4% vs 1.3%) were significantly more common in the nizatidine group. A variety of less common events was also reported; it was not possible to

determine whether these were caused by nizatidine.

Hepatic—Hepatocellular injury, evidenced by elevated liver enzyme tests (SGOT [AST], SGPT [ALT], or alkaline phosphatase), occurred in some patients possibly or probably related to nizatidine. In some cases, there was marked elevation of SGOT, SGPT enzymes (greater than 500 IU/L), and in a single instance, SGPT was greater than 2,000 IU/L. The overall rate of occurrences of elevated liver enzymes and elevations to three times the upper limit of normal, however, did not significantly differ from the rate of liver enzyme abnormalities in placebo-treated patients. All abnormalities were reversible after discontinuation of Axid.

Cardiovascular—In clinical pharmacology studies, short episodes of asymptomatic ventricular tachycardia occurred in two individuals administered Axid and in three untreated subjects.

Endocrine—Clinical pharmacology studies and controlled clinical trials showed no evidence of antiandrogenic activity due to Axid. Impotence and decreased libido were reported with equal frequency by patients who received Axid and by those given placebo. Rare reports of gynecostasia occurred.

Hematologic—Fatal thrombocytopenia was reported in a patient who was treated with Axid and another H_2 -receptor antagonist. On previous occasions, this patient had experienced thrombocytopenia while taking other drugs.

Integumental—Sweating and urticaria were reported significantly more frequently in nizatidine than in placebo patients. Rash and exfoliative dermatitis were also reported.

Other—Hyperuricemia unassociated with gout or nephrolithiasis was reported.

Overdosage: There is little clinical experience with overdosage of Axid in humans. If overdosage occurs, use of activated charcoal, emesis, and lavage should be considered along with clinical monitoring and supportive therapy. Renal dialysis for four to six hours increased plasma clearance by approximately 84%.

Test animals that received large doses of nizatidine have exhibited cholinergic-type effects, including lacrimation, salivation, emesis, miosis, and diarrhea. Single oral doses of 800 mg/kg in dogs and of 1,200 mg/kg in monkeys were not lethal. Intravenous LD₅₀ values in the rat and mouse were 301 mg/kg and 232 mg/kg respectively. PV 2091 AMP [041288]

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