Age, Depression, Drugs Linked to Suicide

Teenagers should be just as concerned about their elders committing suicide as the other way around, according to recent statistics calculated by psychologist Richard Wetzel of Washington University in St. Louis.

According to Wetzel, suicide rates for all white women, for all black men and women, and for white men under 30 years old appear to be dropping. Though they remain high, rates for all people over 40 have dropped 40 percent since 1933, he says, while rates among teenagers have declined slightly since 1977.

Wetzel, who used figures from the University of California at San Diego (UCSD) and from various medical examiners' offices around the United States, says the people at the highest risk for suicide are white men over 55 years old and between 20 and 35 years old. Other research shows that suicide among the younger group is linked to depression, alcohol abuse and drug abuse.

In the October Archives of General Psychiatry, the UCSD researchers present their analysis of 283 suicide victims from 1981-83. They found:

- 89 percent were 20 years old or older.
- 53 percent of those under 30 were posthumously diagnosed as drug abusers, compared with 17 percent of the general population of that age. These victims tended to abuse several substances at the same time.
- 39 percent of the under-30 suicide victims suffered depression and 12 percent suffered psychosis. This group also showed a higher incidence of both depression and drug and alcohol abuse than seen in the past 30 years.
- Only one-third of suicide victims had received mental health treatment during the last year of life, and only half had ever received treatment at all.

In the same journal, three researchers from the United Medical and Dental Schools and the City University, London, charted trends in English and Welsh suicide victims since 1921. They found that people over 45 in England and Wales are less likely to commit suicide than are their younger counterparts, a trend that began in the 1960s. Preventive measures, the researchers say, may have helped.

These findings highlight the need for preventive action, according to Wetzel, who spoke last week at a conference at Johns Hopkins University in Baltimore. He notes that rates of depression, alcoholism and drug abuse — long considered risk factors for suicide — among people younger than 30 relate directly to rates of suicide in that age group. Historically, he says, depression has been a significant factor in actual and attempted suicides in

this age range. "People in their 20s and 30s are more likely [than people over 40] to have been depressed at some time in their life," he says.

Early identification of people at risk is crucial but still "relatively primitive,"

and, Wetzel says, there are no reliable chemical, biological or psychological tests for suicidal tendencies. Nevertheless, "the important thing," he says, "is to get these people into treatment before they kill themselves." -T. Kleist

The return of rheumatic fever?

Rheumatic fever, a childhood scourge during the first half of this century, may be on the upswing again. In the past 18 months, outbreaks have been reported in Utah, Colorado, Pittsburgh and New Haven, Conn., and researchers are scrambling to understand the nature of the occurrences.

At the recent American Society for Microbiology meeting in New Orleans, Ellen R. Wald of the University of Pittsburgh described 18 cases that have occurred in the last 18 months in the Pittsburgh area, up from a total of 36 there in the previous decade. And at a concurrent meeting on streptococcal disease, other researchers described over 100 cases in Utah, also in the last 18 months, compared with an average of six cases per year there in the previous decade.

Symptoms can include heart inflammation and damage, particularly involving the valves; arthritis; muscle spasm; and rash. An attack of body tissues by antibodies against group A *Streptococcus* bacteria is believed to cause rheumatic fever, though the exact mechanism has yet to be identified. The syndrome, which occasionally is preceded by a strep throat, can be prevented if the infection is treated within nine or 10 days.

While the noncardiac symptoms of rheumatic fever generally go away, the victim is usually left with heart damage ranging from unnoticeable to severe. The American Heart Association recommends long-term — up to lifelong — treatment with penicillin or other antibiotics to prevent subsequent infection and further damage. The association estimates that 2 million people alive today in the United States have had rheumatic fever and thus have at least some residual heart damage.

Rheumatic fever is still a major problem in the Third World, but the incidence in developed countries started to fall even before penicillin was introduced. Though the drop has been ascribed to better medical care and less poverty, resulting in an overall decrease in infectious illness, the exact reasons are not known. The cause of the recent increase is also unknown. Says L. George Veasy of Primary Children's Medical Center in Salt Lake City, who has treated many cases, "We don't have a good explanation for the outbreak."

Researchers are investigating a number of possibilities. In the Utah cases one strain of *Streptococcus* seems to dominate, Veasy says, but there is no hard proof that it's the culprit.

Suzanne Laussucq of the Centers for Disease Control in Atlanta, who has been assisting in the investigation of the Utah outbreak, says that in addition to the predominance of a potent strain there may be a genetic component at work. "So far we've found that family history [of rheumatic fever] seems to be a risk factor," she says.

Clinically, the disease hasn't changed over time. "This is old-fashioned rheumatic fever like we were seeing 30, 40, 50 years ago," says Veasy. But unlike the previous cases, the Utah and Pittsburgh outbreaks are hitting primarily middleclass children rather than underprivileged children, and frequently the syndrome isn't preceded by a sore throat.

Prevention in the past has relied on early treatment of strep throat, but Wald points out that this would have stopped only a minority of the cases in Pittsburgh. "Only 23 percent had a history of sore throat," Wald says.

Because of the rarity of cases in the 1960s and 1970s, states stopped their surveillance programs, says Laussucq. Whether the outbreaks reported are truly isolated is unknown. "Whether it's throughout the United States is in question. It's a matter of concern — potentially it could be quite serious," she says.

Says Edward Kaplan of the University of Minnesota in Minneapolis, who has been studying streptococcal infection for 20 years, "It would be a mistake to say we're being swept by an epidemic. But it's unquestionable we're having a large, significant increase over what we've known." Says Wald, "Acute rheumatic fever may be returning as a common clinical problem." — J. Silberner

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