

## Behavior

Bruce Bower reports from San Francisco at the annual meeting of the American Psychiatric Association

### Drug abuse tied to 'fatal despondency'

Drug abuse may play a far more important role in causing suicide, particularly among young people, than many researchers have assumed, says psychiatrist Charles L. Rich of the State University of New York at Stony Brook.

In an ongoing investigation of 133 consecutive suicides of people under age 30 and 150 consecutive suicides age 30 and over in San Diego (SN:6/18/88, p.390), Rich and his coworkers identified about two-thirds of the cases as substance abusers. Younger suicides most commonly abused marijuana, alcohol, cocaine and amphetamines or combinations of these drugs. Older suicides were less likely to abuse illicit drugs, but just over half were heavy drinkers or alcoholics, a level comparable to that of the younger group.

Substance abuse proved a longstanding problem for most of the people in the sample, Rich points out, ranging from an average of about 11 years for those abusing illicit drugs with or without alcohol to 28 years for "pure" alcoholics.

The most common psychiatric disorder found among substance abusers of all ages was moderate depression. Many of those who did not meet all psychiatric criteria for depression were reported to have had symptoms such as a low mood and thoughts of death, Rich says. The researchers made the psychiatric diagnoses posthumously after interviews with a suicide victim's family, friends, employers and physicians, and checking hospital, school and police records.

It appears drug abuse contributes to a "fatal despondency" that culminates in suicide in many cases, Rich contends. The most commonly abused drugs in the San Diego sample — including the stimulants — can cause depression or worsen a preexisting depression, he says.

### Kids talk about the 'good pill'

Stimulant drugs such as Ritalin can have unintended psychological side effects on hyperactive children and their families, psychiatrist Peter S. Jensen of Eisenhower Army Medical Center in Fort Gordon, Ga., reports in a new study. When medication is the only treatment offered for hyperactivity, youngsters often perceive themselves as "bad" and suffer a loss of self-esteem, he says. In these cases, parents tend to avoid dealing with family conflict and often ignore the emotions underlying a child's behavior.

Jensen and his colleagues administered depression and anxiety questionnaires to 20 children placed on stimulants by pediatricians and who met psychiatric criteria for hyperactivity. The children, average age 9½ years, were also asked to draw a picture of the pill they took, a picture of themselves taking the pill and a picture of their families. The drawings were used to prompt discussions of what each child thought about the medication and its purpose.

Jensen's team also obtained interviews and questionnaire responses from both parents of each child.

Stimulant medication is seen as a "magic bullet" by most children and their parents, the study found. If a youngster's behavior does not improve, parents assume the medication dose should be increased. They also found children often disavowed any responsibility for their behavior and claimed they needed a "good pill" to control themselves.

Distressing family events, such as divorce, usually preceded hyperactive behavior, Jensen says. In addition, children and parents reported considerable anxiety and depression that were not addressed openly, but which fueled youngsters' hyperactive symptoms, he asserts.

Medication may help ward off obvious symptoms of hyperactivity, Jensen contends, but careful attention must be paid to the family situation (SN:6/18/88, p.399) and the meanings parents and children attach to stimulant treatment.

## Biomedicine

Kathy A. Fackelmann reports from Washington, D.C., at the Digestive Disease Week meeting

### Prairie dogs and gallstone formation

Fish oil added to a diet laden with cholesterol can protect prairie dogs from cholesterol gallstones, according to new research. The report suggests a mechanism by which cholesterol gallstones develop and may lead to preventive measures for people at risk of forming such gallstones.

Epidemiologists find people who eat a lot of fish — such as the Greenland Eskimos — have much lower rates of both cholesterol-caused heart disease and cholesterol gallstones when compared to Americans. Thomas H. Magnuson at the Johns Hopkins University School of Medicine in Baltimore and others suggest the omega-3 fatty acids in fish oil may block a cascade of events that trigger the precipitation of cholesterol in bile, a waste product produced by the liver and stored in the gallbladder.

To test the theory, Magnuson and his colleagues fed 16 prairie dogs high-cholesterol diets for 14 days. Eight of the group got a fish oil supplement rich in omega-3 fatty acids. At the end of the study period, the researchers removed and examined all 16 gallbladders. The prairie dogs fed fish oil showed no evidence of cholesterol crystals or gallstones. The eight prairie dogs fed a high-cholesterol diet without fish oil had cholesterol gallstones, Magnuson reported.

Since most humans have bile saturated with liquid cholesterol, scientists have long puzzled over what causes cholesterol to precipitate out of solution, eventually forming stone-like particles. Magnuson's research hints that fish oil fatty acids may inhibit gallstone formation by blocking production of prostaglandin, a hormone-like substance that spurs the gallbladder to release certain proteins believed to cause liquid cholesterol to precipitate. More research needs to be done to identify these proteins, Magnuson says.

Researchers should conduct trials with human subjects to find out if fish oil prevents cholesterol gallstones, Magnuson adds. Gallstones can lodge in the bile duct causing intense pain and requiring surgery in some cases.

### Weight loss builds a healthy liver

Overweight Americans who apply for life insurance may get a nasty surprise when medical tests suggest they have liver disease: the insurer rejects their application and the doctor often recommends a raft of unnecessary and expensive medical procedures trying to get at the root of the problem, says researcher Melissa Palmer of the Mount Sinai Medical Center in New York City.

Palmer's research suggests no underlying liver disease may exist other than that caused by too much body fat. She says the fat causes the liver to malfunction and recommends patients lose weight.

Palmer and colleagues studied 39 patients who weighed at least 11 percent above their ideal body weight and had evidence of liver problems. The researchers screened the patients carefully, making sure they had no other problems — such as alcohol abuse — that can cause liver disease. These 39 were then put on a diet and told to exercise regularly.

The researchers followed the group for an average of a year and a half. They found 17 patients who lost more than 10 percent of their body weight had no physical symptoms of liver disease at the end of the study. Thirteen of the 17 had liver function tests that had returned to normal. People less successful at dieting showed less impressive results. Of the 18 patients who lost less than 10 percent of their body weight, seven continued to have symptoms of liver abnormalities and only seven of the 18 had normal liver tests at the end of the study period. Four patients who gained weight during the "diet" continued to have abnormal liver tests, and three still complained of symptoms linked to a malfunctioning liver, Palmer noted.