

BEHAVIOR

Joel Greenberg reports from Atlanta at the annual meeting of the American Psychiatric Association

The whos and hows of drug deaths

Despite the accumulating knowledge about the effects of psychoactive drugs, there has been little nationwide documentation of the actual incidence of and circumstances surrounding drug-related deaths. Now the National Institute of Drug Abuse and the University of California at Irvine report on analyses of more than 3,000 psychoactive drug-involved deaths from 1972 to 1975 in nine major urban areas: Chicago, Cleveland, Dallas, Los Angeles, Miami, New York, Philadelphia, San Francisco and Washington, D.C.

While the major aim of the survey is to develop a comprehensive, uniform method of reporting, the investigators did collect some interesting statistics, including:

- Narcotics were most commonly responsible for the deaths.
- In about half the cases, there was visible evidence of drug ingestion—with needle or track marks being the most common findings.
- Suicide was implicated in about one-third of the deaths, and homicide in about one-tenth. The highest prevalence of suicide, 57 percent of its drug deaths, was in Miami.
- The mean age of accidental death for all cities was 30, and barbiturate victims were slightly older than narcotic victims. Men outnumbered women as victims in every city, but women were more frequently the victims of analgesics and sedative-related deaths.
- Deaths of whites outnumbered those of blacks in all the surveyed cities, except for New York and Washington.
- Thirteen percent of the victims had received treatment for drug overdose or use prior to their deaths.

Anticonvulsives for manic-depressives

Sometimes drug side effects may not be totally negative, and researchers have seen indications that carbamazepine—a drug used to treat epilepsy—may help manic-depressive personalities. In a double-blind study of 10 diagnosed manic-depressive patients, National Institute of Mental Health researchers, headed by Robert M. Post, found that in seven of the 10, the drug “showed acute or prophylactic therapeutic effects,” even in some who failed previously to respond to lithium. “This is the first study in man reporting alterations in norepinephrine metabolism with carbamazepine,” say the investigators. They call for further exploration of the apparent effect.

The anatomy of a Moonie

Along with most other religious cult-type organizations in the United States, the Rev. Sun Myung Moon’s Unification Church stirs up immediate worship, hostility or distrust among many people. In an effort to determine just who becomes a “Moonie” and what becomes of him or her, researchers from Albert Einstein College of Medicine, New York University School of Medicine and the New York State Psychiatric Institute have surveyed 237 American-born members.

The “impartial study,” undertaken in agreement with the church’s administrative leadership, measured the members’ neurotic distress, general well being and intensity of religious commitment before and after their “conversion.”

The researchers report that “the average convert was apparently in emotional distress prior to joining”—about four of 10 felt they had had “serious emotional problems” in the past; 30 percent had sought prior professional help and 6 percent had required hospitalization. And even though their neurotic distress scores dropped considerably after conversion, their “current emotional well-being ... was lower than that for the matched non-convert comparison group,” they report.

BIOMEDICINE

A penis prosthesis

To most people, an inflatable penis sounds like a pedestrian item one might buy on New York City’s 42nd Street or on Copenhagen’s Østergade, but to impotent men, the inflatable penis is something miraculous indeed: In some cases it can reinstate their sex lives.

A hydraulically inflatable penis has been surgically implanted in about 6,000 American men during the past three to four years, said William L. Furlow of the Mayo Clinic in Rochester, Minn., this week at the annual meeting of the American Urological Association in Washington. The men who have the device suffer impotence because of physical causes, but also in a few instances for psychological reasons.

The surgery was performed at the Mayo Clinic and at other medical centers. A study conducted at the Mayo Clinic on 175 consecutive patients receiving a penis prosthesis shows that it works well for 96 percent of them, that it is well-received by the patients and their sexual partners, that it usually does not affect ejaculation, and that it preserves orgasmic pleasure, provided such sensation was possible before the onset of impotence.

Chilling newborns before surgery

A congenital heart defect usually fatal in the first year of life can be operated on successfully soon after birth if the patient’s body temperature is lowered so that blood circulation can be safely stopped.

Kevin Turley and Paul A. Ebert, surgeons at the University of California in San Francisco, reported at the recent meeting of the American Association for Thoracic Surgery in New Orleans that they have used the technique—deep hypothermia with circulatory arrest—on 54 patients during the past three years with a 93 percent survival rate.

First a prospective patient’s body is packed with ice. Blood is then run from the body through a heart-lung machine, where the blood temperature is lowered to below 18°C (64°F). At this lower temperature, the infant’s blood flow can be stopped completely for half an hour with little risk of brain damage. Tubes from the heart-lung machine can then be removed from the heart, leaving it more accessible for surgery than would normally be the case.

The surgeons then correct transposition of the great arteries, an abnormality where the lung artery and aorta arise from the heart incorrectly. Normally, blood circulates from the heart through the lung artery to the lungs, where it is infused with oxygen. The oxygen-rich blood then returns to the heart, which pumps it to the body through the aorta. In this congenital abnormality, blood that receives oxygen from the lungs is not pumped correctly to the body, a condition that must be righted if an infant is to survive.

Virus implicated in colon cancer

For the first time, a virus has been implicated as a cause of colon cancer, a major cause of cancer in developed countries. E-S. Huang and J. K. Roche of Duke University Medical Center report in the May 6 LANCET that they have detected genetic material (DNA) from cytomegalovirus, a kind of herpes virus, in cancerous colon tissue taken from four out of seven patients, but that the genetic material was absent in healthy colon tissue taken from the same patients and also from subjects without colon cancer.

“These findings,” the researchers conclude, “imply there is a strong association between human cytomegalovirus and carcinoma of the colon.” Molecular biology experiments, they believe, may now provide evidence that the viral DNA integrates itself into the colon cells, transforming them into cancer cells.