

# behavioral sciences

## Dialogue on death

The contemplation of death may not be pleasant but Dr. Robert S. Morison, professor of science and society at Cornell University, feels that it is necessary. He states in the Aug. 20 *SCIENCE* that the traditional view of death (a clearly defined event that puts a sharp end to life) may "confuse our handling of various important practical matters."

"More and more patients," he explains, "are subject to long, continued intervention; antibodies, intravenous feeding, artificial respiration and even artificially induced heartbeats sustain an increasing fictional existence." This may not be the best thing for the patient, his relatives, the doctor or society. It is expensive, it diverts scarce medical resources from younger people and it is a "strain on a family that may have to live for years in close association with a mute, but apparently living, corpse," he says. And, "parts of the dying body may acquire values greater than the whole. A heart, a kidney, someday even a lung or liver, can mean all of life for some much younger, more potentially vigorous and happy donee." For these reasons Dr. Morison believes that it is time to reevaluate thinking on the subject of death. And take the "responsibility of deciding to act in such a way as to hasten the declining trajectories of some lives, while doing our best to slow down the decline of others."

In the same issue of *SCIENCE* Dr. Leon R. Kass, executive vice president of the Life Sciences and Social Policy Committee of the National Academy of Sciences, reviews Dr. Morison's article. Dr. Kass says that, "We need to recover both an attitude that is more accepting of death and a greater concern for the human needs of the dying patient. But we should not contaminate these concerns with the interests of relatives, potential transplant victims, or society. To do so would be both wrong and dangerous."

## Freezing for the future

Personal immortality is partially achieved through procreation. Now this act can be taken one more step into the future. Two human sperm banks are due to open for business in New York City in a few weeks. For an initial fee of \$55 to \$80 a man can have his sperm collected and stored for one year. After that the storage fees will be about \$15 per year. The sperm, collected by masturbation and frozen at 321 degrees below zero F. in liquid nitrogen, can be kept indefinitely and used for procreation of a child decades later—even if in the meantime the man has had a vasectomy.

The procedure is not new. Last year 5.5 million cattle were sired this way, and the first child conceived with frozen sperm is a healthy 17-year-old boy. The first two commercial human sperm banks have been operating in Minneapolis and St. Paul for the past year.

## Mothers as therapists

In many instances, mothers of emotionally disturbed children interact better with their children than do trained therapists. For this reason, psychologists at the child development center of the Fuller Theological Seminary in Pasadena, Calif., are teaching mothers of such children to be therapists.

In one form of the program, four children are organized as a play group. They are joined by one of the mothers on a weekly rotation basis. A staff member, observing from behind a one-way mirror, instructs the mother via a radio receiver in her ear what to tell the children in order to stimulate the proper behavior. The mothers reward this behavior with brass tokens that the children later cash in for toys or candy.

Some 95 percent of the children show marked improvement as a result of the therapy. And because the mother participates in the program, she is able to understand it and supports it. "I've discovered that there's nothing that I know that I cannot teach a parent to handle," says Dr. Paul Clement, a clinical psychologist who is director of the center.

## Replacing Jaffe in Illinois

Dr. Edward S. Senay has been appointed director of the Illinois drug abuse program. He replaces Dr. Jerome H. Jaffe, the President's newly appointed consultant on narcotics and dangerous drugs (SN: 6/26/71, p. 433). Dr. Senay is associate professor of psychiatry at the Pritzker School of Medicine at the University of Chicago and will remain on active faculty status.

Insights into Dr. Senay's approach to the drug problem were revealed last month when he addressed a medical workshop for emergency treatment of drug abusers. He believes that LSD does not cause mental illness. Rather, he says, some mentally ill persons use LSD. He also believes that heroin addicts going through withdrawal should be given an active role ("clean the room, make the bed"). Jail settings, he says, foster passivity and can result in severe withdrawal symptoms. In the proper setting these symptoms can be greatly reduced and in some cases may be no worse than a "case of the flu."

## Dangers of silicone breast injections

Physical deformities and deficiencies can be psychologically disturbing to some persons. Certain cosmetic-surgical procedures have therefore been developed to help these people cope. One such procedure is female breast enlargement by liquid silicone injection. It was made popular about four years ago by a topless go-go dancer in California. But now this procedure has been labeled dangerous by the American Medical Association and illegal by the Food and Drug Administration.

A Houston woman died after such injections and the autopsy revealed that silicone had entered the bloodstream and lodged in the lungs. An unlicensed practitioner was charged with murder in the case. The FDA reports that four such deaths have resulted from silicone being deposited in the brain or lungs. "Massive abscesses, necessitating surgical removal of the breast, have also followed such injections," says the deputy director of the FDA's bureau of drugs, Dr. Marian J. Finkel.

Reports from physicians called upon to treat the complications that follow these injections have reached such a volume this summer that the AMA has issued a warning. Dr. William R. Barclay stated that "the injection of silicone fluid to increase the size of the female breast is an unapproved surgical technique and is dangerous."