

behavioral sciences

PSYCHIATRY

Normal bereavement not severe

The typical symptoms of bereavement are apparently not severe from a psychiatric point of view. Only three symptoms occur in the majority of people—depressed mood, sleep disruption and crying—according to a St. Louis study of the relatives of 30 deceased individuals.

Other symptoms—problems with concentration, loss of interest in the outside world, lack of hunger with or without weight loss—occurred frequently, but in less than half the relatives interviewed. Guilt was not common, nor was preoccupation with the lost one's image.

The bereavement period seems to last about six to ten weeks after death. About 81 percent of the 40 relatives dated their improvement from that time.

The researchers, Drs. Paul Clayton, Lynn Desmarais and George Winokur of the Washington University School of Medicine, could find no striking differences in symptoms by sex, age, or relationship to the deceased.

They did find short-lived anxiety attacks in about a third of the subjects, attacks described as shortness of breath, palpitation, weakness, apprehension and fear of death.

Aside from guilt, the uncommon reactions included suicidal thoughts, depersonalization, multiple physical symptoms and loss of interest in work.

MENTAL ILLNESS

Tranquilizer nullified by home

The effects of a powerful tranquilizer used in treating schizophrenics can be completely nullified by a home atmosphere full of conflict.

Tranquilizers are usually first administered to mental patients in hospitals, so the home effect has not been obvious. But an experiment at the State University of New York Downstate Medical Center reveals that chlorpromazine is no better than a sugar pill in curbing a patient's aggression, if he lives in a home full of yelling and shouting.

The drug, however, is highly effective on aggressive patients living in relatively tranquil homes.

The team tested 54 men and 72 women, all schizophrenics. They were scored on level of aggression and their families on level of conflict. In low-conflict families, the tranquilizer was about three times as effective as a placebo. In high-conflict homes, there was no difference even when the drug dose was increased.

The researchers, led by Dr. Melvin Cohen, believe that family members provoke the patient into violence despite his medication because nonaggression seems abnormal to them.

PSYCHOLOGY

Psychopaths deficient responders

The psychopath, with his peculiar absence of anxiety and guilt, seems to be physically unresponsive to the environment as compared to nonpsychopathic prisoners.

A Canadian study of the two prisoner groups suggests some dysfunction of the autonomic nervous system in

psychopaths. Their physical responses, including heart rate, to a variety of stimuli indicates that the psychopath is operating at a lowered level of arousal and with decreased attention to the environment.

It has been shown recently (SN: 6/29, p. 618) that a decrease in heart rate is accompanied by increased brain response. In other words, the brain becomes attentive when the cardiac system slows down. Compared to other inmates of the British Columbia penitentiary, the psychopaths showed small heart deceleration. Psychopaths were also deficient in autonomic variability, and were less easily conditioned to respond to pain.

The evidence collected by Dr. Robert D. Hare at the University of British Columbia on 21 psychopaths supports contentions that these lack some of the physical correlates of anxiety. The psychopath thus would be less likely to learn through punishment and his relative immunity to stimulation suggests an inordinate need for thrills.

Dr. Hare's analysis is contained in a monograph supplement to the *JOURNAL OF ABNORMAL PSYCHOLOGY*.

ARCHAEOLOGY

Mexicans discover Mayan road

Archaeologists in the Yucatan have uncovered a pre-Columbian road some 42 meters wide, about the width of a four-lane highway.

The road fragment, a kilometer and a half long, was probably part of a network linking pre-Columbian cities of the Mayan empire, according to Víctor Segovia Pinto, director of the project.

Segovia believes the level road is one of several transverse arteries in the area and that it linked two hills in the Izamal area.

Segovia expects to continue exploration work, hoping ultimately to chart the roads linking Maya cities, known to have been well built, graded and filled.

Spaniards who conquered the Yucatan in the 16th century were reportedly amazed by the size and extent of Maya roads, which permitted travel and commerce over a wide area, extending even into Central America.

Current excavations are being supported by the Mexican Institute of Anthropology and History.

BRAIN RESEARCH

Malnutrition stunts cell growth

New direct evidence that severe undernourishment in the first months of life stunts brain growth comes from Cornell University.

In analyzing the brains of babies who had died of malnutrition during their first year of life, Dr. Myron Winick found a gross reduction in the number of brain cells. Three of the five cases studied showed a total brain cell content that was 60 percent below normal. There was also a direct relationship between head size and number of brain cells during the early infant period.

Brain damage such as this is not considered reversible. The working cells or neurons grow to their full number just before and after birth. Dr. Winick believes the critical growth period ends at six months of age.