

Alcohol & depression—chicken & egg

Do alcoholics drink because they're depressed, or are they depressed because they drink? The question is one that psychiatrists—and alcoholics themselves—have had trouble answering. Now, a one-year study of 193 male alcoholic inpatients at the Brentwood Veterans Administration Medical Center in Los Angeles appears to have shed some light on the problem.

Utilizing the Beck Depression Inventory, psychiatrists David A. Gorelick, James R. Mintz and Alina McKenna evaluated patients in the VA's 4-6 week substance abuse treatment program. They found that on admission 57 percent of the patients had inventory scores indicating at least a moderate level of depression. But after one week of alcoholism treatment, that figure dropped to 27 percent and after four weeks to just 15 percent.

"An important clinical implication of this study is that regardless of diagnostic label about three-fourths of male alcoholics who have depressive symptoms at admission to inpatient alcoholism treatment will have their symptoms resolved within four weeks without specific antidepressant treatment," report the researchers, all affiliated with the University of California at Los Angeles.

The psychiatrists suggest that unnecessary treatment may be avoided by waiting until one month after beginning anti-alcoholism therapy and then administering antidepressive therapy to those who are primarily depressed.

Brain abnormalities in child patients

In recent years, researchers have reported that persons diagnosed as chronic schizophrenics tend to have abnormally large ventricles in certain areas of the brain (SN: 7/14/79, p. 26). These observations have become possible with the advent of computerized tomography, or CT scans, as a way of looking into the brain without actually entering it. Whether or not enlarged ventricles are necessarily an indication of schizophrenia, however, is debatable, as has been demonstrated in the trial of John W. Hinckley Jr., who is accused of shooting President Reagan.

Whatever their diagnostic validity, CT scans have nevertheless correlated enlarged ventricles with schizophrenia in adults. Now, researchers at George Washington University Medical Center in Washington, D.C., and the National Institute of Mental Health report "evidence that child psychiatric patients may have a higher prevalence of abnormally large lateral ventricles." David Reiss of George Washington reports that the team studied 20 child psychiatric patients and compared them with 20 matched control child patients from a neurology service.

The findings indicate that children found to have such structural brain abnormalities be closely followed, the researchers say, suggesting that CT scans might be useful in predicting certain forms of schizophrenia.

Drinking's effect on sleep

It is well known that drinking can affect a person's sleep patterns. Researchers now report, though, that the sleep patterns of chronic alcoholics appear to be affected even after they have stopped drinking. In a study of 26 alcoholics sober for at least one month, Scott Snyder of the Portsmouth (Va.) Psychiatric Center and Ismet Karacan of Houston found that total sleep time was "significantly reduced" in alcoholics. They also found that once the lights are turned out, it takes the "sober alcoholic" significantly longer to fall asleep. "A possible reason for these findings," they say, "is that alcohol may induce more chronic neuropathologic changes in selected areas of the central nervous system which mediate the initiation and maintenance of sleep."

Missing mania?

Manic depression—a disorder characterized by drastic mood swings—is thought to be much less common than other serious mood disorders. Most estimates put the ratio of regular "unipolar" depression to manic-depression at 10 to 1. But according to research conducted over the past six years by Janice A. Egeland, a medical sociologist from the University of Miami, the two major depressive disorders may be about equal in incidence. Egeland conducted her research among the Pennsylvania Amish, an isolated religious community that, Egeland says, provides a unique human laboratory for the study of mental illness. The Amish, she explains, have strict cultural prohibitions against certain behaviors—such as drinking, criminality, desertion and suicide—which in mainstream American culture may become the primary diagnosis for many who are actually manic-depressives. In Amish culture, people cannot deal with their mania by drinking or misbehaving, so that the mania itself is difficult to miss. If manic-depression is commonly misdiagnosed, Egeland says, it means that many patients who could be successfully treated with drugs are going untreated.

Sons of alcoholics

The children of alcoholics may be biologically predisposed toward alcoholism, according to new data from a longitudinal study. According to psychiatrist Jan Volavka of the Manhattan Psychiatric Center in New York, children born to alcoholics between 1959 and 1961 are already showing important neurophysiological differences from normal controls, even though none of the children—all sons—has become an alcoholic. Based on electroencephalographic study of the subjects and controls of the same age and social class, Volavka concludes that the sons of alcoholics are significantly more sensitive to the effects of alcohol and that such sensitivity may be a genetic marker of vulnerability for alcoholism. Although the children of alcoholics did not differ on EEG measures before having a drink, their central nervous system response following a single drink was significantly blunted. It is possible, Volavka suggests, that alcoholics drink in order to reduce brain activity. The subjects will be followed through 1990 to see if they do in fact become alcoholics.

Depressed lymphocytes

The association between melancholy and a variety of physical disorders has been known for at least 2,000 years, and in modern times medical scientists have suspected a link between the neuropathology of depression and a defect in the immune system. Specifically, researchers have suspected that cortisol, which depressives are known to secrete in excess, is to blame for impairing the body's natural defenses. Recent research indicates that the general theory holds true but that the dysfunction is too complicated to be blamed on any single hormone. According to psychiatrist Ziad Kronfol of the University of Michigan Medical Center, the body has two immune responses—a quick response to the invasion by foreign antigens and a slower response, which depends on division of lymphocyte cells. An investigation of this cellular response to simulated invasion has revealed significantly lower lymphocyte counts in depressed patients compared to both normal controls and patients with other psychiatric disorders, Kronfol reports, suggesting that depressives do indeed have some defect in slow immune response. But there was no significant link between this defective response and cortisol level. The lymphocyte cell, Kronfol explains, is covered with receptors for a variety of hormones and neurotransmitters, and it is likely that the actions of several substances are implicated in delayed immune response.