

# BEHAVIOR

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

## Running away from depression

Think about it. Have you ever met a depressed jogger? Researchers at the University of Wisconsin asked themselves the same question, and decided to test "running therapy" as a treatment for depressed outpatients at the University clinic.

Twenty-eight patients — 15 females and 13 males — between the ages of 18 and 30 were randomly assigned to either 10 sessions of psychotherapy, time-unlimited psychotherapy or running treatment. None of the subjects was taking antidepressant medication. Bi-weekly measures of depression were taken during the 10-week period, and were repeated three times during a one-year follow up.

A running leader, who had no training in psychotherapy, led the jogging three times a week for 30 to 45 minutes each time. No discussion of depression was permitted during the running sessions.

"Results clearly indicate that running reduced symptoms of depression in the group of eight subjects assigned to that treatment," says John H. Griest of the Wisconsin team. "The improvement with running was at least as great as that obtained with time-limiting psychotherapy and greater than that achieved with time-unlimited psychotherapy."

Follow up at one year showed that most of the patients treated with running became regular runners and "remain symptom-free," Griest says. "In a disorder (neurotic-reactive depression) where different psychotherapies have been shown to be equally and only minimally effective, development of another treatment which is at least as effective and substantially less costly to provide seems worthwhile," he says.

"Running emphasizes what individuals can do to treat their own illness and has beneficial physical side effects in contrast to available drug treatments for depression," Griest concludes.

## The female REM erection

Men have been found to have periodic erections during the rapid eye movement (REM) stage of sleep. Now, Gene G. Abel and his colleagues at the Memphis Mental Health Institute report that women appear to undergo a corresponding response that is displayed by changes in their vaginal blood flow.

Eight female subjects showed marked increase in pulse pressure and decrease in relative blood volume measurements from vaginal tissue measured during REM. "These results confirm that similarities do exist between the sexual responses of men and women ... during REM sleep," say the researchers. The findings may have implications in diagnosing sexual dysfunction in females, they say, since lack of REM erections has been associated with impotence in males.

## What happens to MBD victims?

While behavioral researchers are learning progressively more about childhood afflictions, relatively little is known about what happens to such youngsters in later years. Now, a 12-year follow up of minimal brain dysfunction (MBD) victims indicates that most such youngsters are subject to a variety of disturbances in their late teenage years.

In a study of 73 MBD victims, Dorsi H. Milman of the Downstate Medical Center in Brooklyn, N.Y., reports that at follow up just 6 percent were free of psychiatrically disabling symptoms and functioning normally. Eighty percent had personality disorders and 14 percent were classified as borderline psychotics.

Personality traits consisted of passive-aggressive (40 percent), inadequate (49 percent), schizoid (44 percent), paranoid (15 percent) and impulse disorder (16 percent). In addition, 14 percent manifested antisocial behavior, 34 percent anxiety, 67

percent learning disabilities and 58 percent retained clinical evidence of minor neurological impairment, according to Milman. Still, 84 percent had graduated from high school, and of the 27 percent who went on to college, 12 percent were still attending or had graduated.

## Hysterectomies and emotional problems

A hysterectomy can take an emotional toll on a woman, even a year after having the operation, according to a study at the Psychotherapy Evaluation and Study Center in San Francisco. Researchers Nancy B. Kaltreider, Anne Wallace and Mardi J. Horowitz studied 40 women, aged 18 to 40, who had successful operations with no indications of the presence of cancer.

The psychiatrists found that 43 percent had mild emotional reactions, 18 percent had serious post-operation emotional difficulties and 39 percent were able to adjust well. One year after surgery 29 percent were still having psychological problems related to the hysterectomy.

Such problems, suggest the researchers, are most likely related to their self-image, rather than to issues such as the fear of cancer or the surgery procedure itself. Reactions of anxiety, depression and concerns about the body were common. Fears about loss of femininity and grieving over the lost opportunity to have more children were more severe in some women than in others. Some unrealistically feared becoming masculine.

Generally, the women who had the most problems were those who had few family supports, who had previous trouble with their families or who saw child bearing as their way of "being valuable," report the researchers. Women who did most favorably were those who worked or were active outside the home and who found relief in not worrying about unwanted pregnancies.

## Depression in your sleep

Depression may be more accurately diagnosed while its victims are asleep than when they are awake, according to the results of a study performed at the National Institute of Mental Health, George Washington University and Mahelona Memorial Hospital in Kapaa, Kauai.

By measuring EEG sleep data, investigators found they were able to distinguish between patterns of depressed persons, insomniacs and "normal" subjects. In a two-part experiment, results showed that those who were depressed slept for a significantly shorter period of time, took longer to fall asleep, awoke earlier and more often and moved more rapidly into REM (rapid eye movement) sleep than did normal subjects. Compared with those prone to insomnia, the depressed moved more quickly into REM but also tended to awaken earlier.

In the first part of the study, 83 percent of all 115 subjects were correctly classified by analysis of a dozen sleep variables, reports J. Christian Gillin of NIMH. Among the depressed group, 73 percent were correctly diagnosed. In the second part, 83 percent of the depressed were correctly identified through the sleep technique.

"The results suggest that normal, depressed and insomniac patients may be correctly 'diagnosed' solely on the basis of EEG sleep data," Gillin says. The sleep of primarily depressed patients, he adds, "is better characterized by a combination of abnormal states rather than by one pathogenic abnormality."

Gillin suggests the results "may reflect some underlying biochemical changes relating to depression," and speculates that such mechanisms may involve the choline system in the brain.