

Depressive aftermath for new mothers

About one in 10 middle-class, first-time mothers experiences a full-blown depression within six weeks of giving birth, according to a new survey. The postpartum depression eases considerably after about six months, but nearly half of these women continue to show isolated symptoms of a depressed mood — such as prolonged periods of tearfulness or feelings of hopelessness — for at least another six months, says study director Jeffrey F. Cohn of the University of Pittsburgh.

He and Susan B. Campbell conducted telephone interviews with nearly 1,000 women who had given birth six weeks earlier at a Pittsburgh hospital. Depressed women reported numerous symptoms lasting at least two consecutive weeks, including overwhelming sadness and loss of interest in most activities.

Cohn and Campbell then observed 68 mother/infant pairs at two, four, six and 12 months after birth. In the phone interviews, they had identified 27 of the women as severely depressed, 10 as suffering from a milder depressed mood and 31 as free of depressive symptoms. Some depressed mothers were emotionally volatile with their babies during the first six months, Cohn notes. These infants were often withdrawn and did not look directly at their mothers. Other depressed mothers were emotionally disengaged from their babies, who often cried or otherwise sought maternal responses.

Ongoing studies of low-income women in Miami, many of them adolescents, indicate that as many as eight out of 10 remain depressed for a full year after giving birth, reports Tiffany Field of the University of Miami School of Medicine. While the Pittsburgh team used strict criteria for severe depression, Field's group relies on a standard self-report inventory that may identify only a milder form of depression.

By three months of age, Field says, infants of depressed mothers develop their own brand of "depressed" behavior, characterized by a lack of smiling and a tendency to turn the head away from the mother and other adults. These babies become more upset when they look at their mother's unresponsive face than when they see her leave the room, Field adds.

Children raised by chronically depressed or manic-depressive mothers often develop serious behavioral and emotional problems as they enter adolescence, maintains Marian Radke-Yarrow of the National Institute of Mental Health in Bethesda, Md. For the past 11 years, Radke-Yarrow has directed a study of 37 families with healthy parents and 63 families with depressed or manic-depressive mothers — in some cases, with depressed fathers as well. Each family has two children. On the bright side, she reports that a few children of depressed mothers aggressively demanded maternal attention throughout childhood and entered adolescence in good emotional shape.

Subliminal deceptions

Audio cassettes with subliminal messages — purportedly producing everything from quick weight loss to peace of mind — haul in \$50 million annually. But two new studies suggest the tapes do not work as advertised and in some cases may not even contain subliminal suggestions.

Anthony G. Greenwald of the University of Washington in Seattle and his colleagues studied 237 volunteers who listened to commercially available subliminal tapes aimed at improving either memory or self-esteem. Messages lurked behind audible sounds of ocean waves. The researchers reversed labels on half of the cassettes so that the memory-oriented tapes carried self-esteem labels and vice versa. The remaining cassettes carried accurate labels. Each volunteer completed a series of memory and self-esteem tests before and after using a subliminal tape for one month.

People who listened to memory tapes showed no more memory improvement than did those who listened to self-

esteem tapes; people who used self-esteem tapes reported no more improvement in self-esteem than did volunteers in the memory group. Nevertheless, those who used self-esteem tapes labeled as memory boosters contended that only their memories had improved, while those who used memory tapes labeled as self-esteem enhancers said that only their self-esteem had increased.

At the end of the study, all participants scored higher on both memory and self-esteem tests, regardless of which tape they had heard or how it was labeled. These improvements may have been stimulated by the memory and self-esteem tests administered at the study's outset, Greenwald asserts.

"Placebo" effects critically influence customer satisfaction with subliminal tapes, since many of the mass-marketed cassettes apparently contain no subliminal message, contends Philip M. Merikle of the University of Waterloo in Ontario. Merikle conducted an acoustic analysis of four subliminal tapes purchased from four different companies. In searching the background sounds for unique energy patterns previously associated with speech, he found no evidence of embedded words or phrases in any of the tapes.

In another test, he asked 24 volunteers to listen to a subliminal tape and a "placebo" tape with no embedded message. Both were supplied by a commercial vendor. Even after 300 trials, participants could not reliably distinguish the "real" tape from the placebo. This, he says, suggests the subliminal tape offered no unconsciously perceived message.

Doubt cast on biology of giftedness

Several years ago, a study linked extreme academic giftedness in 12- and 13-year-olds to two biological traits: left-handedness and allergies. The researchers suggested that fetal overexposure or sensitivity to the male hormone testosterone might foster these biological traits while contributing to the much higher incidence of mathematical and verbal precocity in boys compared with girls (SN: 12/6/86, p.357).

But another study now reveals that gifted 12-year-olds show no more tendency toward left-handedness and allergies than their nongifted but academically successful peers. Jennifer Wiley and David Goldstein of Duke University in Durham, N.C., studied 96 gifted seventh-graders (69 boys and 27 girls) who scored at least 700 on the mathematics section of the Scholastic Aptitude Test (SAT) or at least 630 on the verbal section. They compared these youngsters with two age-matched groups that scored much lower on the SAT (540 or less on each section) but scored high on school achievement tests. One comparison group consisted of 96 randomly selected students, the other of 96 students whose gender distribution matched that of the gifted group.

Ten percent of the students in each group were left-handed. Among boys only, the rate of left-handedness was about 16 percent in each group. Surveys have suggested that 15 percent of children and teenagers in the general population are left-handed, although persistent lefties represent only about 7 percent of adults, Wiley and Goldstein say.

One-third of both the gifted and comparison students had allergies or asthma. The implication of this finding remains unclear, since studies have not clearly documented the overall population rate of allergies, the scientists point out.

As to why gifted boys seem to outnumber gifted girls, Wiley and Goldstein maintain that boys perform better on time-limited tests such as the SAT. They point to a study by other researchers indicating that academically successful girls do as well as boys on untimed SATs. Girls' time-dependent test performance likely results from as-yet-unspecified family and school influences, Wiley and Goldstein maintain.