# Mother's Depression Affects Child's Mental State

BY MARY ANN MOON

Contributing Writer

hen a mother's depression remits, her child's clinical state also improves, and children of mothers who remain depressed are likely to deteriorate, reported Myrna M. Weissman, Ph.D., and her associates in the pediatric portion of the Sequenced Treatment Alternative to Relieve Depression study.

Maternal depression is one of the most consistent risk factors for childhood anxiety, depression, and disruptive behavior disorders. However, the researchers said, to their knowledge, this is the first published study documenting prospectively the relationship between the remission of a mother's depression and a child's clinical state.

"These findings are intriguing because they suggest that an environmental influence ... had a measurable impact on the child's psychopathology," the investigators noted.

The Sequenced Treatment Alternative to Relieve Depression (STAR\*D) study is an ongoing multicenter clinical trial comparing the effectiveness and acceptability of different treatments "for a broadly representative group of outpatients with nonpsychotic major depressive disorder."

In the ancillary pediatric study, Dr. Weissman and her associates assessed 114 mother-child pairs. This report details their findings at baseline and at the first of several planned follow-up evaluations (JAMA 2006;295:1389-98).

All the mothers were initially treated with citalopram (Celexa). Those who did not respond or did not tolerate the antidepressant went on to be randomly assigned to subsequent steps in treatment, said Dr. Weissman, of Columbia University and the New York State Psychiatric Institute, New York, and her associates.

Many of the children, aged 7-17 years, were acutely symptomatic at baseline. "Over a third had a current psychiatric disorder including anxiety (16%), depressive (10%), or disruptive behavior disorders (22%); almost half had a past psychiatric disorder. These high rates are consistent with findings from numerous studies of children with depressed parents," the investigators said.

The maternal remission rate at 3 months was 33%. At that time, children of the 34 mothers who remitted showed an 11% decline in rates of those diagnoses, from 35% (12 of 34 children) at baseline to 24% (8 of 34). In contrast, there was an 8% increase in diagnoses among

children of mothers with continuing depression, from 35% (25 of 71 children) to 43% (30 of 71 children) during that interval.

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There were 68 children who had no psychiatric disorder at baseline. All of those in whom maternal depression remitted remained free of psychiatric disorders at the 3-month follow-up. In contrast, 17% (8 of 46) of the children of mothers who remained depressed developed an onset or a relapse of psychiatric disorders by the 3-month follow-up.

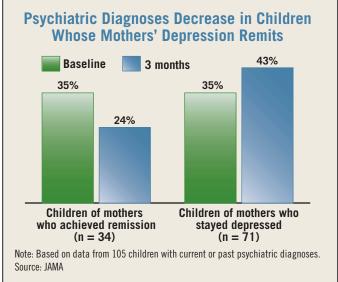
The change in rates of child diagnoses was inversely related to the magnitude of the mother's response to treatment. An improvement of at least 50% was necessary before any improvement could be discerned in the children.

After that threshold was reached, greater maternal improvements had a direct linear association with decreases in child diagnoses. Conversely, children of mothers who responded at a rate of less than 50% showed an increase in psychiatric diagnoses at 3 months.

It is important to note that although many of the children in this study had a current or past psychiatric disorder, they showed improvement in a relatively short time (3 months)—even though most of them were not receiving direct treatment—simply because their mothers improved.

"Even more interesting" was the finding of a possible preventive effect of maternal improvement: None of the children of remitting mothers had any onset or recurrence of psychiatric symptoms, the researchers noted.

These results suggest that "a reduction in stress associated with maternal remission may reverse the long-standing symptoms in children who are likely to be genetically vulnerable," they added.



## CLINICAL

### Paxil Fails to Improve Children's MDD

Paroxetine was no more effective than a placebo in reducing the symptoms of major depressive disorder in a population that, for the first time, included patients younger than 12 years, reported Dr. Graham J. Emslie of the University of Texas, Dallas, and his colleagues.

Overall, the average change from baseline on the Children's Depression Rating Scale–Revised (CDRS-R) was –22.58 points in patients who took paroxetine (Paxil) and –23.38 in a placebo group.

The randomized, double-blind, multicenter study of the effectiveness of paroxetine included an intent-to-treat population of 203 children aged 7-17 years who met the DSM-IV diagnostic criteria for major depressive disorder (J. Am. Acad. Child Adolesc. Psychiatry 2006;45:709-19).

The patients received either 10-50 mg/kg paroxetine daily or placebo for 8 weeks. The average age at diagnosis was 10 years, and about half of the patients in each group had experienced at least one prior major depressive disorder episode.

The dropout rate in the paroxetine group was significantly higher among children aged 7-11 years, compared with the placebo group (39% vs. 13%), which suggests a lower tolerance for the drug among younger children compared with adolescents. The overall dropout rate was not significantly different between the paroxetine and placebo groups.

Possible reasons for paroxetine's lack of efficacy include a lower average daily dosage compared with a previous adolescent-only study (20.4 mg/kg vs. 28 mg/kg)

## CAPSULES

and a lower adherence rate in the treatment group compared with the placebo group, the researchers said. The incidence of adverse events was similar and quite low in both groups, notably the incidence of suicidal behavior or suicidal ideation, which was 1.92% in the paroxetine group and 0.98% in the placebo group.

Paroxetine has not been approved by the Food and Drug Administration for use by either children or adolescents. The study was sponsored by GlaxoSmithKline, manufacturer of Paxil; Dr. Emslie has served as a paid consultant for the company.

#### **Predicting Recurrent Abdominal Pain**

When a child presents with recurrent abdominal pain, parents' anxiety may be a factor, reported Dr. Paul G. Ramchandani of the University of Oxford (U.K.) and his

Recurrent abdominal pain (RAP)—defined as pain five or more times in the same year—was reported in nearly 12% of 8,272 children born between April 1, 1991, and December 31, 1992, as part of a prospective study. Data on predictive variables were collected when the children were 6-8 months old, and parents completed a survey when the child was almost 7 years old (J. Am. Acad. Child Adolesc. Psychiatry 2006;45:729-36).

Two maternal factors—high anxiety and somatic symptom scores—significantly predicted RAP in the children and were reported by mothers in 24% and 17% of RAP cases, respectively. Fathers' anxiety was significantly associated with RAP in 19% of cases, and the prevalence of RAP

was greater when both parents were anxious (22%) than when only one parent was anxious (15%) or when neither parent was anxious (11%). No association appeared between a child's RAP and parental depression or parental stomach ulcers, and there was no significant association between RAP and early gastrointestinal illness or hospitalization in the children.

The study is the first known to present prospective data on the predisposing factors for RAP, but it was limited by the fact that all measures of pain in the children were completed by the parents, and anxious parents may be more inclined to overreport their children's symptoms, the investigators noted.

#### **Family Stress High in ADHD**

The results of a large national survey indicate that families of children with attention-deficit hyperactivity disorder show very high levels of stress, compared with families of children with other special health care needs, according to a poster presented by Dr. Ruth E. Stein at the annual meeting of the Pediatric Academic Societies.

By using data from the National Study of Children's Health, Dr. Stein and Ellen J. Silver, Ph.D., of the Albert Einstein College of Medicine, Bronx, N.Y., extracted responses from the parents of 65,613 children between the ages of 6 and 17. Of that total, 3,706 reported a diagnosis of ADHD, 10,248 children were classified as having special care needs other than ADHD, and the rest were healthy.

After adjusting for poverty level, race, family structure, age, and gender of the child, families of children with ADHD had significantly worse results on all 12 of

the variables examined, compared with healthy children and compared with other children with special health care needs (CSHCN).

For example, 41% of the families with an ADHD child said they were coping very well with the day-to-day demands of parenthood, compared with 50% of the CSHCN families and 57% of the families with healthy children. That comes to an adjusted odds ratio of 0.69 for ADHD, compared with CSHCN and 0.53, compared with families with healthy children.

Families with an ADHD child are more than three times as likely as CSHCN families and almost six times as likely as families with healthy children to say that in the past month they sometimes, usually, or always felt that their child is harder to care for the most children of his or her age.

Families with an ADHD child were 2.5 times as likely as CSHCN families and 3.3 times as likely as families with healthy children to say that in the past month they sometimes, usually, or always felt that the child does things that really bother them.

And families with an ADHD child were 1.8 times as likely as CSHCN families and 3.2 times as likely as families with healthy children to say that they are very concerned about the child's depression and anxiety.

The investigators wrote that their study suggests that "the impact of ADHD may be far greater than is generally appreciated. It also suggests a need for further exploration of the factors that may contribute to this pattern and of ways to alleviate parental and child stress associated with attention-deficit hyperactivity disorder."

-Heidi Splete with staff reports