

## Depressed Mothers, Depressed Children

"I cannot bear a mother's tears."

—Virgil, *Aeneid*, IX, 289

**A**s neuropsychiatric basic science research has grown increasingly sophisticated, the pendulum has been swinging toward nature and away from nurture. This shift risks the neglect of psychiatry's old home base, the dynamics of the nuclear family. Three excellent articles in this issue indicate, however, that nurture plays a crucial role for mothers with major depressive disorder and the effect of their depression on their children.

### Depression in the Family

Mothers matter to their children—more so, evidently, than fathers (1)—and for more than their genes. When a mother's mental health suffers, so does her child's. Depression

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clearly runs in families, but disentangling the strands of genes and child rearing has been difficult. Now a large, elegant study by Tully and colleagues (1), using adoption to parse genetic and environmental influences, finds strong support for the importance of the latter. Comparing 568 mostly Asian adopted adolescents, 416 mostly white nonadopted adolescents, and their white Minnesotan parents, the researchers found that having a depressed mother increased the risk of major depression and other disorders in adopted adolescents. In the authors' summation, "risk conferred by depressed mothers has a significant

environmental component." Although genetic and environmental influences can certainly interact—and the study hints that this occurred in the nonadoptive families—the environmental impact of a depressed mother per se meaningfully influenced children.

These empirical data support clinical understanding. Having children, while a blessing and a miracle for many, also constitutes a potential burden for parents, and often particularly for the mother. Women of childbearing age face the highest demographic risk for major depression (2). A woman vulnerable to major depression, who may feel inadequate in conducting her own life, may experience the stresses of child care as overwhelming. Children entail enormous emotional and physical demands in addition to changes in body habitus, sleep, effects on marriage and career, and other quotidian disruptions. It is hardly surprising that many mothers become depressed.

Nor is it surprising that the children of depressed mothers struggle. A growing literature describes the difficulties depressed mothers have in interacting with their children (e.g., reference 3). When mothers with major depression have difficulty fulfilling their roles, their children may suffer. As Tully et al. note, adolescence is a developmental period wherein risk for depression rises. Their study bolsters the evidence that maternal, more than paternal, depression meaningfully affects children, and through home life, not just heritability.

Good research like this makes you wonder why it hadn't been done before. The longitudinal study from which these data come should yield additional important information about familial interactions and psychopathology in the future.

## Treating the Family

If maternal illness begets illness, successful treatment of depressed mothers has widespread benefit. In a previous study, Weissman and colleagues (4) reported that treating mothers with major depression to remission in the first 3 months of the Sequenced Treatment Alternatives to Relieve Depression (STAR\*D) study reduced psychopathology in their children. In this issue, the follow-up report by Pilowsky and colleagues (5), describing 123 mother-child pairs, demonstrates that these gains continued over the course of a year of follow-up, albeit leveling off as many mothers remitted. Children of mothers who remitted from major depression reported significantly decreased psychopathology (especially of “internalizing,” depressive and anxiety symptoms) and improved functioning, whereas children whose mothers did not remit showed no such change. This held true whether mothers regained euthymia in the first 3 months or the latter 9 months of the study period. The reverse relationship was not significant; that is, change in children’s psychopathology did not mediate subsequent maternal depressive status.

Although most of the STAR\*D mothers improved, the mothers who did not remit carried markers of higher risk: more severe baseline depression scores, lower income, and greater likelihood of single parent status—suggesting fewer social supports. Their children also fared worse, actually developing more symptoms over the year.

While pharmacotherapy was the principal intervention in the STAR\*D trial, one might argue for the particular benefits of psychotherapy in addressing family conflicts surrounding major depression. For this domain, interpersonal psychotherapy is made to order, focusing as it does on treating major depression through resolving family relationships in role disputes and transitions and on building social support (6).

In the smallest (N=47) but not least innovative of the three papers, Swartz and colleagues treated depressed mothers of children who presented for psychiatric treatment (7). Their randomized controlled trial compared 9 weeks of interpersonal psychotherapy to treatment as usual. In fact, the study really compared brief interpersonal psychotherapy plus treatment as usual versus treatment as usual, inasmuch as interpersonal psychotherapy patients were permitted ongoing outside treatment aside from individual psychotherapy. Maternal interpersonal psychotherapy was delivered simultaneously with, and in the same location as, the children’s treatment visits. Subjects were reassessed 3 and 9 months after entering treatment. Randomization did not entirely succeed: although depressive severity did not differ significantly at baseline between the two groups, the treatment-as-usual group was more likely to have a current comorbid anxiety disorder. In too many studies, treatment as usual is ill-defined. Here, the authors report the frequency of treatment-as-usual treatments but no measure of the adequacy of antidepressant treatment.

Not surprisingly, mothers with major depression improved significantly more in interpersonal psychotherapy than in treatment as usual. Congruent with the STAR\*D-Child findings, by the 9-month follow-up, their children’s symptoms had differentially improved as well (7). The timing of improvement again suggests that relieving mothers’ depressive burden ameliorated their children’s mental health. Future comparative trials of the effects on children of psychotherapy and pharmacotherapy for depressed mothers might provide interesting results. It seems evident, however, that any route to depressive remission in the mother is likely to benefit the child, and indeed the whole family. The cost of treating depressed mothers may thus yield incalculable benefits in alleviating or even preventing children’s psychopathology. Indeed, we do not yet know the extent to which treating mothers can prevent more global child pathology. One of the rare studies to measure family costs demonstrated the cost-effectiveness of interpersonal psychotherapy for chronic depression through lowering medical and social service costs for the entire family (8), probably through improving maternal mental health.

Should we be doing more? Sick mothers deserve sympathy, psychoeducation, and access to effective treatment. In the United Kingdom, nurses make routine home visits to check on mothers of newborns, an intervention that in itself may reduce postpartum depression (e.g., reference 9). This approach could be extended to a broader duration of motherhood. The STAR\*D-Child authors recommend screening and treating depressed mothers of children who present for psychiatric treatment, essentially endorsing the Swartz et al. model. Perhaps when mothers get an annual pap smear, or when they bring children to a pediatrician's office, they should fill out a depression screen. This might become a normative feature of healthy maternal care, akin to prenatal vitamins. The rationale: depression hurts both mothers and their children, and once depression is detected, treatment can help.

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JOHN C. MARKOWITZ, M.D.

*Address correspondence and reprint requests to Dr. Markowitz, New York State Psychiatric Institute, 1051 Riverside Drive, Unit 129, New York, NY 10032; jcm42@columbia.edu (e-mail). Editorial accepted for publication June 2008 (doi: 10.1176/appi.ajp.2008.08060861).*

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