Depression in women: the family context and risk for recurrence. *The Economics of Neuroscience*. 2004; 6(1):41.46

Depression in Women: The Family Context and Risk for Recurrence

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Abstract

Is there something about the lives of depressed women that contribute to a vicious cycle of stress and depression? Examination of the interpersonal lives of depressed women reveals several characteristics that portend recurrent depression and intergenerational transmission of depression. From a large community sample of families in which the mothers had varying histories of depressive disorders (or no depression), 4 sources of stress are illustrated: marriage to men with psychopathology, children with disorders and impaired functioning, marital distress and relatively problematic relationships with children, and high levels of stressful life events to which these sources have contributed. These stressful circumstances were then shown to predict current depressive episodes (recurrence) and symptomatology. Women appear to select themselves into highly stressful environments that contribute to a cycle of stress and depression, and require treatments that target these circumstances and interpersonal vulnerabilities.

Introduction

Depression in women is a well-known major public health problem because of the high rates of lifetime depressive disorders and accompanying disability, and the virtually universal finding that depression rates in women greatly exceed those in men)[1,2] Recently documented evidence that depression is especially likely to occur in young women in their childbearing years" further adds to concern about the disruptive effects of depressive disorders on the lives of affected individuals and their families. This article will focus on yet another reason for concern about depression in women: it might be self-perpetuating because of the contexts in which many women who experience depressive disorders live. The marital and family circumstances of depressed women are problematic. Moreover, from the perspective of an interpersonal approach to depression,[5,6] such contexts could arise in part from interpersonal vulnerabilities that contribute to risk for depression. That is, young women at risk for depression might "create" or select themselves into environments that are highly stressful, hence, more likely to promote further depression. Moreover, their family environments might perpetuate an intergenerational cycle of depression by their influence on the vulnerabilities of their children.

The purpose of this paper is to illustrate these points with data from a large community sample of depressed and never-depressed women and their families, including 15-year-old children. Five issues about the interpersonal lives of depressed women will be discussed:

1) high rates of disorder in the children;
2) high rates of psychopathology in spouses;
3) elevated levels of marital and parental discord and dysfunction; and
4) stress generation.

The fifth point concerns the consequences of all four of these phenomena: women's interpersonal lives predict depressive symptoms and recurrence.

Illustrations of Interpersonal Impairments and Dysfunctional Contexts Among Depressed Women

Design and Methods

Illustrative data come from an ongoing longitudinal investigation of families, drawn from a birth-cohort study of more than 7,000 families in Brisbane, Australia, originally designed to study children's health and development.[7] When the children were 15 years of age, Hammen et al[8] identified women for possible inclusion in the present study who had varying levels and frequencies of self-reported depression scores (or no depression) up to their child when he/she was 5 years of age, on the assumption that they would represent varying seventies and durations of depressive disorders over the lifetimes of their children. Nine hundred ninety-one families were targeted for inclusion, and the final sample included 816 mothers and their 15-year-old children who could be located and gave consent, including 414 boys, 402 girls, and 522 fathers.

Participants were administered diagnostic interviews to assess current and lifetime disorders,[9] interviews to assess functioning and chronic stress in pertinent roles and episodic negative life events in the prior year, plus a variety of questionnaires measuring symptoms, quality of family and social life, and attitudes and cognitions[8,10.]

The sample consisted of 458 never- depressed women and 358 women with a current or past major depressive episode (MDE) or dysthymic disorder during the child's life. One hundred sixty-four of the women had at least one period of dysthymic disorder, and 271 had at least one MDE (34% had two or more MDEs). Four women had bipolar disorder and were excluded from analyses.

Children's Disorders

It is well established in clinical samples that children of depressed women have higher rates of depressive and other disorders[11-13] and that those disorders persist or recur over time.[14,15] Community samples of women with diagnosed depressive syndromes have been studied less often, but represent an informative population because of the generalizability to a wider range of families than more severely ill clinical samples. However, most community samples included only mildly depressed mothers whose symptoms were assessed by self-report questionnaires, but whose depression durations and significance are unknown. Also, such studies have most commonly studied very young children and infants.[12,16,17]

These community studies have generally reported relative deficits in cognitive performance in infants and young children of depressed mothers,[18] as well as an array of dysfurictions in socioemotjonal and behavioral regulation and insecure attachment.[18-20] The Australia study represents one of the few offspring studies based on community samples of depressed women with school-age children that included diagnostic evaluation. The upper part of Table I shows that the children of depressed women had twice the rate of depression by 15 years of age as children of never-depressed women, as well as significantly higher rates of other disorders; rates in the offspring were similar to those reported by Beardslee et al[21] in a health management organization sample, with an average of 18 years of age.

Moreover, the children of depressed women in the Australian sample functioned relatively poorer in their major roles, As shown in Figure 1, the youth of depressed mothers had significantly worse social functioning at 15 years of age than children of

never-depressed mothers. Only in academic functioning (not shown)—grades and scholarship— were there no differences in the groups.

Table 1. DIAGNOSTIC STATUS OF CHILDREN AND HUSBANDS OF DEPRESSED AND NONDEPRESSED WOMEN

	Depressed Mother* (n=246)	Nondepressed Mother (n=566)
Child depressed†	0.21	0.10
Child (nondepressive disorder)	0.26	0.15
Father (any disorder)‡	0.50	0.40

*Refers to maternal depression in child's first 10 years of age, to illustrate the point that maternal depression is antecedent to depressive disorders of children.
†Major depressive disorder or dysthmic disorder
‡Includes biological or current step-fathers, n=522
All X^2 values $P<.01$
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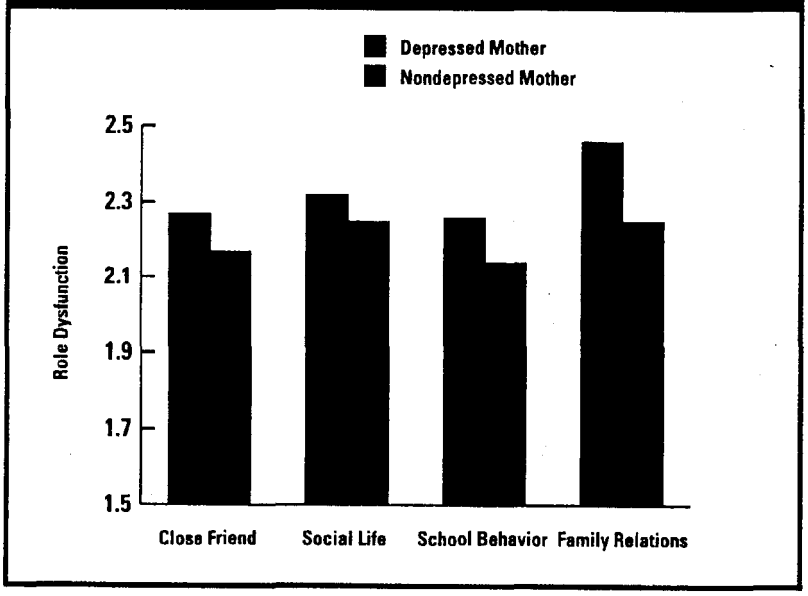
Figure 1. ROLE DYSFUNCTION IN ADOLESCENT CHILDREN OF DEPRESSED AND NONDEPRESSED MOTHERS



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Nonrandom Mating

It has been observed that individuals with mood disorders marry spouses with elevated rates of mood or other disorders.[22-24] While fathers' disorders certainly can increase the genetic risk to children for psychiatric disorders, children might also "inherit" dysfunctional environments. It is likely that marriage of depressed women to men with psychiatric disorders exposes children to increased marital difficulties and stressful circumstances and life events.

The Australia data illustrate two points. First, the lower row of Table 1 illustrates that, in general, the depressed community women were significantly more likely to have husbands with depression or any (lifetime) diagnosable disorder, based on direct Structured Clinical Interviews of *Diagnostic and Statistical Manual of Mental Disorders*, fourth edition.[25] The second point about the possible correlates of nonrandom mating is illustrated in Figure 2, which shows that paternal and maternal depression independently, but not additively, predicted youth depressive disorders.

Note, however, that in the case of paternal substance abuse, the co-occurrence of maternal depression and paternal substance abuse had a potent effect on increasing the risk for youth depression.[10]

Marital and Parental Functioning Among Depressed Women

Marital Functioning

Numerous studies have documented an association between depression and marital dissatisfaction, disruption, and divorce.[5,26,27] Moreover, marital conflict and criticism may prolong depression and cause relapses.[18,29] Marital problems may be specific to depression, rather than generalized to all forms of psychopathology, and relational difficulties could be specific to intimate relationships, rather than general for all interpersonal relationships, as shown in data from the National Comorbidity Study.[30] Similar specificity to marital discord among depressed youths was reported by Gotlib et al[31] from the Oregon Adolescent Depression Study.

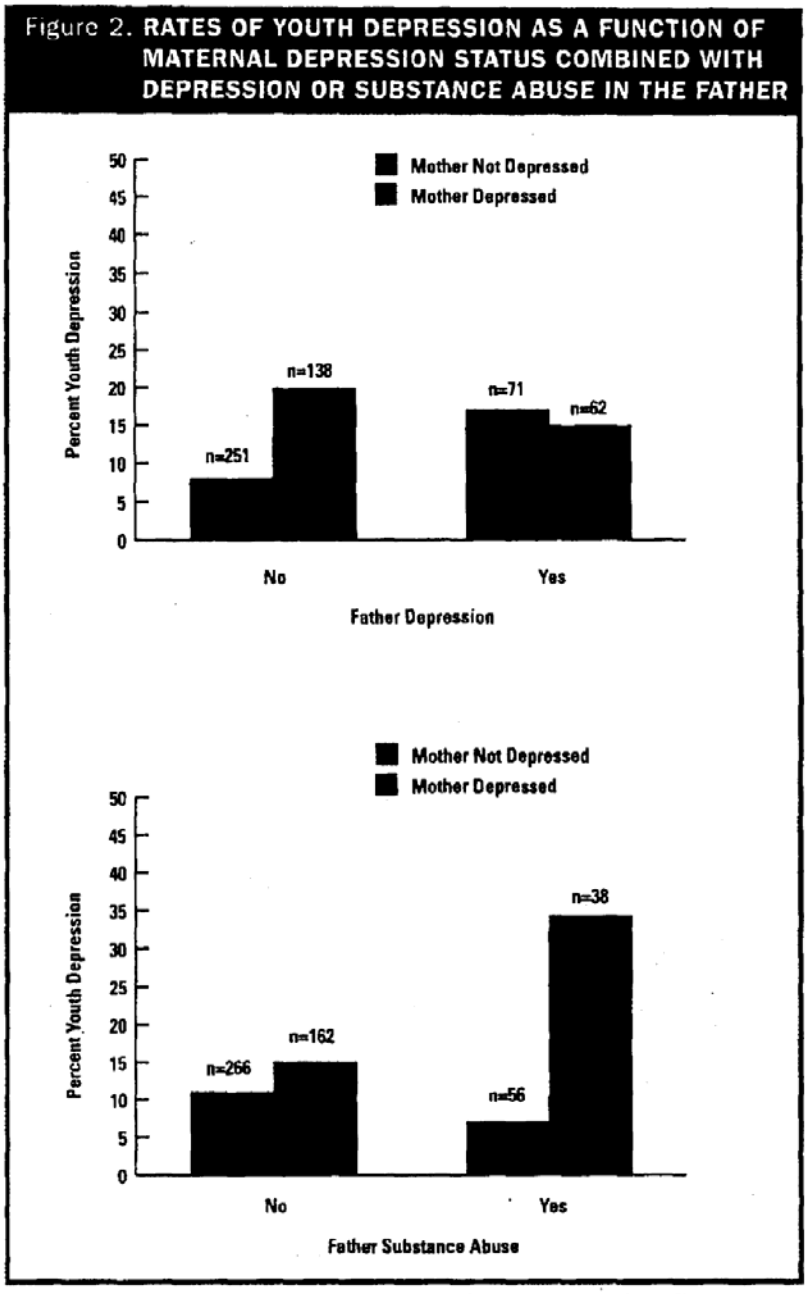
One pathway linking depression and marital disruption might be early entry into marriage.[31,32] Forthofer et al[32] predicted that early marriages are more likely to end in divorce and be associated with adversities such as economic burden, child care challenges, lower educational attainment, and marital discord. Thus, young depressed women appear to be at specific risk for marrying early, marital dissatisfaction, and related adversities.

The Australia study examined the important issue of whether marital discord is a consequence of being in a depressive episode, or represents a more stable and enduring process.[26,27] We compared the functioning of never-depressed women with those who were formerly (but not currently) depressed and those with current diagnoses of MDE or dysthymic disorder.[25] As predicted, there were not only clear differences between currently and never-depressed women, but, compared to never-depressed, the formerly depressed women—and their husbands—reported less current marital satisfaction and more coercive behaviors by the other during arguments. Women were asked if they had been physically injured, needed medical attention, or called the police following a marital dispute with their husband or boyfriend in the past 12 months. Currently depressed women said yes to one or more of these questions at a rate of 7.7%, compared with 5.1% among formerly depressed women, and 2.4% among never-depressed women.

Parent-Child Functioning

There has been considerable research documenting the relatively negative quality of depressed women interacting with their infants, toddlers, and school-age children[33]—although far less data are available on older children, Goodman et al[34] hypothesized that negative or disengaged maternal interactions could discourage youngsters' acquisition of important interpersonal skills and problem-solving capabilities, leaving children with poor coping skills and dysfunctional cognitions about themselves and others, eventually contributing to depressive reactions or impaired social functioning. In the Australia study, the quality of the relationship between the child and parents was evaluated in several ways: interviews with the child, with the mother, and questionnaires completed by the two. Figure 1 indicates that the variable "family relations" (which included mother, father, and siblings) was significantly worse for the children of depressed women. A more central question again, however, concerns whether the difficulties are stable. As predicted, interviewer ratings (not shown)

indicated significantly worse quality of current relationships in the families of formerly depressed compared to never-depressed women.



Reprinted with permission by the American Psychological Association. Brennan PA, Hammen C, Katz AR, LaBrocque RM. Maternal depression, paternal psychopathology, and adolescent diagnostic outcomes. *J. Consult Clin Psychol.* 2002, 70:1075-1085.

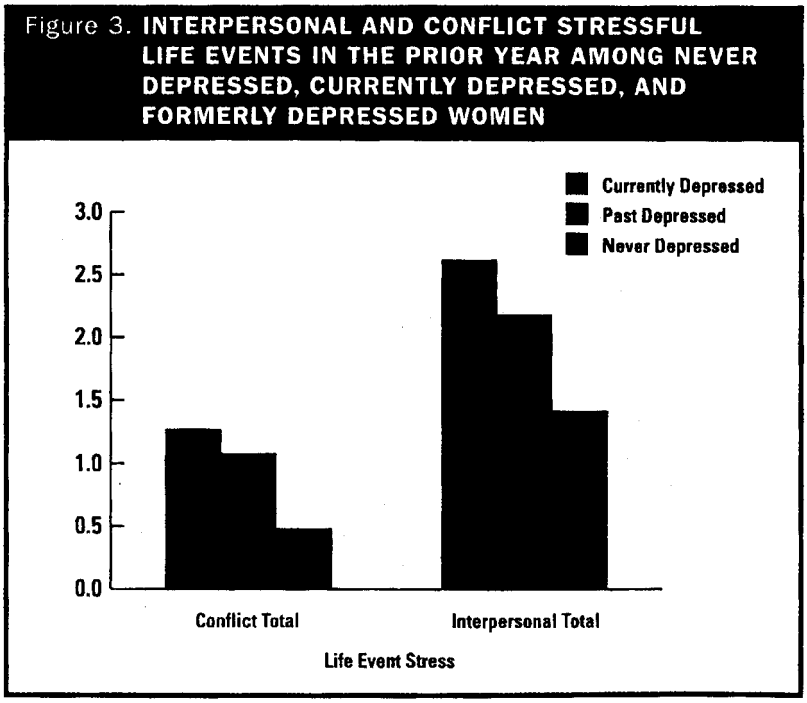
Stress Generation

There has been increasing interest in the effect of depressed individuals on occurrence of stressful life events. Hammen[23] observed that women with unipolar depression experienced more negative life events over time than comparison groups of women with bipolar disorder, chronic medical illness, or no disorder. While the women with depression histories did not differ in occurrence of "fateful" life events outside their control, they had particular elevations in events to which they had contributed at least in part, that is, "dependent" events, Specifically, women with histories of unipolar depression were especially likely to have elevated rates of interpersonal negative events—and especially interpersonal conflict events—than all other groups. It was

notable that the majority of the events occurred outside of depressive episodes, suggesting that the depression itself was not the cause of interpersonal stressors, and implying that something about the women's characteristics and their current lives contributed to the occurrence of stressors.[35]

In the Australia study, we tested two aspects of the stress-generation hypothesis: whether women with depression histories have more interpersonal and conflict events ("dependent" events), and whether stress generation is independent of current depressive episodes. Figure 3 presents rates of total stress, aggregated across events in the past 12 months, for interpersonal stress and its subcategory, conflict stress. Overall, there were significant differences among the groups on both conflict events and interpersonal events. In both cases, women with current or past depression did not differ from each other, but both differed from never-depressed women. Thus, both hypotheses were supported, suggesting that depressive disorders in women were associated with elevated rates of negative events to which they had contributed—even in periods when not depressed.

Figure 3. **INTERPERSONAL AND CONFLICT STRESSFUL LIFE EVENTS IN THE PRIOR YEAR AMONG NEVER DEPRESSED, CURRENTLY DEPRESSED, AND FORMERLY DEPRESSED WOMEN**



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Recurrence of Depression

The problematic interpersonal context in which women's lives can be embedded could put them at risk for recurrences of depression in a vicious cycle of debility, stress, and depression. Marriage to men with disorders, raising children with disorders and impaired functioning, experiencing ongoing distress in relationships with the partner and child, and facing stressful life events are conditions likely to contribute to the stresses and strains that produce further depressive episodes and symptomatology. To test this hypothesis, two regression analyses were conducted on women who were currently married or involved in an intimate relationship: a logistic regression to examine the predictors of current depressive diagnosis (MDE or dysthymic disorder), and a hierarchical multiple regression to predict current level of depressive symptomatology.

Controlling for prior depression (number of months depressed during the child's first 10 years of age), each analysis evaluated the effects uf interviewer-rated mother-child relationship quality, interviewer-rated intimate relationship quality, mother's self-reported marital satisfaction, and total objective stress for events in the prior year. The logistic regression analyses predicted diagnosis of current depression (n=59) among the 681 women who were in intimate relationships and had complete data available. Table 2 summarizes the results and indicates that the overall model was significant, and all variables contributed to diagnosis of depression except for episodic stress, which did nor remain significant when all other variables were entered. Hierarchical multiple regression analysis was also conducted to predict the current Beck Depression Inventory score for women, since even subclinical symptoms can be debilitating. As shown in Table 2, all the variables were significant predictors of depressive symptomatology, although stressful life events—after all other variables were controlled—were only marginally significant.

Table 2. PREDICTION OF DEPRESSION RECURRENCE AND SYMPTOMS AS A FUNCTION OF FAMILY STRESS VARIABLES

Variable	Odds Ratio (Confidence Interval)		
Logistic regression to predict a woman's current MDE or dysthymic disorder			
Prior depression (duration)	1.02 (1.01–1.03)*		
Quality of marital relationship†	1.78 (1.07–2.96)*		
Quality of relationship with child†	2.20 (1.32–3.68)*		
Marital satisfaction‡	0.92 (0.85–0.99)*		
Total life event stress	1.04 (0.97–1.11)		
Variable/Step	**R^2 Change**	**β**	**t**
Hierarchical multiple regression to predict a woman's current BDI score			
1. Prior depression (duration)	0.059§	0.13	3.91§
2. Quality of relationship with child†		0.16	4.53§
Marital satisfaction‡		–0.31	6.66§
Quality of marital relationship†	0.218§	0.13	2.71§
3. Total life event stress	0.003	0.06	1.62+

*=P<.05. Overall model X^2 (df=5)=110.4, P<.0001
†=Higher is worse quality.
‡=Lower is less satisfaction.
§=P<.001 +P<.10
Overall F (5,674)=52.43, P<.0001, R=0.53
MDE=major depressive edisode; BDI=Beck Depression Inventory.
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Taken together, these results indicate that depressive symptoms and diagnoses are significantly related to the interpersonal environment in which women live, even controlling for clinical histories of prior depression. While it is unsurprising that stressful conditions predict depression, what is especially notable is the extent to which the stressful context is itself predictable, portending a vicious cycle of recurring or continuing depression.

Conclusions

Women with depressive disorders appear to be at risk for selection into highly stressful interpersonal environments. Their children have diagnosable disorders and functional impairments and often have conflicted relationships with their mothers. Their husbands have histories of depression and other disorders that might contribute

to elevated levels of marital discord and distress. They have relatively high rates of episodic stressful life events with interpersonal content. These patterns might be due in part to the effects of depressive symptoms, but are also likely to reflect vulnerabilities existing prior to depression that are enduring, possibly reflecting both genetically based and acquired interpersonal liabilities. Unfortunately, such patterns of social stress increase the likelihood of further depression in a vicious cycle.
Are, these patterns specific to women? As yet there are insufficient data on men's depressive experiences to answer the question, but it is likely that interpersonal difficulties associated with depression affect both genders. However, since women more likely serve as major parental caretakers, and might also place more importance on intimate relationships with others,[36] it may be speculated that the interpersonal context of depression might play a greater role in women's depression than in men's.
An important implication of the present perspective is the need for early and vigorous effort to treat depressive disorders and interpersonal vulnerability in women. Depression should be viewed as an intergenerational process, and one in which prevention of recurrence is an important goal. Women experience of being caught up in problematic relationships would appear to require therapeutic interventions, such as interpersonal psychotherapy or cognitive-behavioral therapy, which are designed to target dysfunctional social beliefs and problem-solving behaviors. Other family members might also need treatment for their problems and contributions to the vicious cycle of stress and depression. +

Acknowledgements*: The cooperation of Patricia Brennan of Emory University, and Professor Joke Najman of the University of Queensland are appreciated, and special thanks to project coordinators, Robyne LeBrocque and Cheri Dalton Comber, and the clinical interviewers. The study was supported by NTMH R01MH52239 awarded to Pamela Brennan and Constance Hammen.*

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