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Comparison of Postpartum and Nonpostpartum Depression: Clinical Presentation, Psychiatric History, and Psychosocial Functioning

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This study compared a sample of postpartum women diagnosed with depression with a nonpostpartum depressed group and 2 nondepressed control groups. Women's depressive episodes were compared to determine whether differences existed in symptomatology, previous history, or course. Results indicate that postpartum depression tends to be relatively mild. Both depressed groups had high rates of positive psychiatric history and were equally likely to have recovered at a 6-month follow-up. Groups were also compared on psychosocial variables known to covary with depression: interpersonal relations, stress, and coping. A series of multivariate analyses of covariance showed few differences between the depressed groups that were not attributable to symptom severity, although postpartum depressed women did report better marital relations than did the nonpostpartum depressed women. These findings suggest that there is little to distinguish postpartum from nonpostpartum depression beyond differences in symptom severity.

Postpartum depression is not recognized as an official diagnosis by either the American Psychiatric Association (*Diagnostic and Statistical Manual of Mental Disorders,* 3rd edition, revised [DSM-III-R]; 1987) or the World Health Organization (*International Classification of Disorders,* 9th revision [ICD-9]; 1978). Nosologists assume that episodes of depression after childbirth do not differ qualitatively from those occurring at other times. However, both in research and in practice, a tradition exists to consider depression that occurs after childbirth a distinct diagnosis. This distinction has had consequences for both the study and treatment of postpartum depression. The general depression and postpartum depression literatures have proceeded independently, with the result that research on postpartum depression has often lagged behind. The distinction between postpartum and nonpostpartum depression is particularly apparent in the area of treatment. A recent review of the treatment literature revealed that there are no controlled studies of the efficacy of either antidepressants or cognitive therapy in the treatment of postpartum depression (Whiffen & Blain, in press). Although many explanations of this finding are viable, it seems likely that postpartum depression is rarely treated (Cox, Connor, & Kendell, 1982; Pitt, 1968), perhaps because of assumptions made about its etiology, severity, and course.

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Four lines of argument have been advanced to support the position that postpartum depression is qualitatively different from nonpostpartum depression. First, depression is believed to be more common postpartum than at other times. Whiffen (1992) recently reviewed the evidence regarding prevalence by comparing the findings on postpartum depression with the results of epidemiological studies. She concluded that the risk of depression, particularly minor depression, does appear to be elevated in the postpartum period, which may be consistent with a distinct diagnosis. Second, if postpartum depression is distinct, then it should be related etiologically to some variable, particularly one specific to childbirth, that is not present in the development of nonpostpartum depression. Only one previous study has compared a sample of postpartum depressed women who were not hospitalized in a psychiatric facility with a sample of nonpostpartum depressed women (O'Hara, Schlechte, Lewis, & Varner, 1991; O'Hara, Zekoski, Philipps, & Wright, 1990). These authors examined etiology in both groups and concluded that similar factors were implicated in the onset of depressive episodes. It is interesting to note that hormonal factors did not play an etiological role in the development of postpartum depression (O'Hara et al., 1991).

The empirical evidence regarding the remaining two factors thought to distinguish postpartum depression is more fragmentary. The third hypothesized distinction, following from Pitt (1968), is that postpartum depression has a different clinical presentation than nonpostpartum depression. Pitt observed that postpartum depression is milder than the depression typically seen in psychiatric patients. He also observed that postpartum depressed women do not present such classic symptoms as suicidal ideation and early morning awakening (terminal insomnia). Finally, he noted that postpartum depressed women report higher-than-usual levels of anxiety and irritability.

Pitt's observation that postpartum depression is comparatively mild has received empirical support. Four studies of

postpartum depression have used the Research Diagnostic Criteria (RDC; Spitzer, Endicott, & Robins, 1978) to diagnose major and minor depression in community samples of childbearing women (Kumar & Robson, 1984; O'Hara, Neunaber, & Zekoski, 1984; O'Hara et al., 1990; Whiffen, 1988b). As the name implies, an episode of minor depression is less pervasive and/or less severe than an episode of major depression. Only two associated symptoms of depression are required to meet criteria for this diagnosis, compared with four symptoms for a diagnosis of major depression. In addition, symptoms are listed as associated features of minor depression that are not considered to be associated features of major depression, such as dependency. Thus, the criteria for minor depression are less exclusive than are the criteria for major depression. Of the four studies that used the RDC, three found more women to meet criteria for minor than for major depression (Kumar & Robson, 1984; O'Hara et al., 1990; Whiffen, 1988b). Further support comes from studies that reported average Beck Depression Inventory (BDI; Beck, Ward, Mendelson, Mock, & Erbaugh, 1961) scores for subjects meeting diagnostic criteria for depression (O'Hara et al., 1984; Whiffen, 1988a). It is of interest that many diagnosed depressed women obtained BDI scores below the traditional cutoff for mild depression.

If postpartum depression is milder, then one might also expect postpartum episodes to remit more quickly than nonpostpartum episodes. Few studies have examined the course of postpartum depression. In two studies, the women were assessed at regular intervals throughout the first year. Kumar and Robson (1984) conducted diagnostic interviews at 3, 6, and 12 months postpartum. They reported that half of the subjects who had been depressed at 3 months postpartum were still depressed at 6 months but that none were considered cases at 12 months postpartum. Bridge, Little, Hayworth, Dewhurst, and Priest (1985) described a similar pattern when using a self-report instrument. Of the women found to be seriously depressed at 6 weeks postpartum using the recommended cutoff score, 22% were still seriously depressed at 6 months postpartum, and 11% remained depressed throughout the 12-month period studied. Comparable data for a community sample of depressed individuals indicate that approximately 25% of individuals meeting criteria for major depression will be depressed 1 year later (Sargeant, Bruce, Florio, & Weissman, 1990). This suggests that postpartum depression is less persistent than is typical of depression in community samples. However, because many postpartum depressed women meet criteria for minor rather than major depression, direct comparison with the study of Sargeant et al. is difficult.

No study has yet compared symptom severity levels in a sample of postpartum depressed women with those obtained in a sample of nonpostpartum depressed women. In addition, no empirical evidence is available to assess Pitt's (1968) observation that postpartum depressed women present with different symptoms than do nonpostpartum depressed women. Finally, little information exists about the course of postpartum depression compared with that observed in a sample of nonpostpartum depressed women. Thus, the first goal of this study was to compare symptoms, symptom severity levels, and diagnostic status at 6-month follow-up in postpartum and nonpostpartum depressed women.

The final factor thought to distinguish postpartum depression is psychiatric history. Many professionals believe that postpartum depression occurs precipitously after childbirth among women who have previously been emotionally stable (e.g., Kumar & Robson, 1984). In fact, the construct *postpartum depression* is of limited value if episodes only occur among women who are vulnerable to depression at other times (Welner, 1982; Whiffen, 1992). If postpartum depression only occurs among vulnerable women, then the elevated rates observed postpartum are probably due to the high levels of stress that accompany childbirth and not to any unique biological or psychosocial variables associated with childbirth. The evidence indicates that women are more likely to become depressed postpartum if they have previously had emotional problems (O'Hara et al., 1984, 1991; Paykel, Emms, Fletcher, & Rassaby, 1980; Tod, 1964; Watson, Elliott, Rugg, & Brough, 1984). The second goal of this study was to compare psychiatric history variables in postpartum depressed women with those observed in a sample of nonpostpartum depressed women.

Finally, depression is known to be associated with an array of interpersonal, stress, and coping variables. For instance, research has consistently demonstrated that depressed individuals report impaired relations with their spouses and children (Gotlib & Whiffen, 1991). They also tend to feel that they were rejected during childhood by their parents (e.g., Parker, 1979). Furthermore, depression is associated with negative life stress (e.g., Brown & Harris, 1978) and with the use of specific coping strategies such as escape–avoidance (Coyne, Aldwin, & Lazarus, 1981). Many of these variables have also been associated concurrently with postpartum depression (e.g., Gotlib, Whiffen, Wallace, & Mount, 1991; Whiffen, 1988b). However, in these studies, postpartum depressed women were compared only with samples of nondepressed postpartum women. Thus, the final goal of this research was to compare the psychosocial functioning of postpartum depressed women with that of a sample of nonpostpartum depressed women. Evidence that the two groups of depressed women show different patterns in their psychosocial functioning might suggest that postpartum depression is qualitatively unique.

If postpartum depression is a distinct diagnosis, then consideration of its clinical presentation, association with previous psychiatric problems, and impact on psychosocial functioning should provide support for the view that it is qualitatively different from nonpostpartum depression. In our study, we assessed the construct validity of the diagnosis "postpartum depression" by comparing these variables in a sample of postpartum depressed women and in a community sample of nonpostpartum depressed women.

Method

Subjects and Procedure

Childbearing Subjects

The childbearing subjects were obtained as part of a prospective study of depression occurring during pregnancy and postpartum (Got-

lib, Whiffen, Mount, Milne, & Cordy, 1989; Gotlib et al., 1991). The subjects were recruited during pregnancy through the obstetrics department of a large, urban hospital and from the private practices of family physicians. Women were approached by a research assistant when they arrived for their first prenatal appointment. Those women who agreed to participate were given a questionnaire packet to complete at home. Subjects who returned the prepartum packet were mailed additional packets at 1 and at 6 months postpartum. Approximately 900 women agreed to be in the study.

At all three assessments, the questionnaire packet included the self-report measure of depression, the BDI. Subjects scoring higher than 9 on the BDI at any of the assessments were interviewed for depressive symptomatology, using the Schedule for Affective Disorders and Schizophrenia (SADS; Endicott & Spitzer, 1978) and were diagnosed according to the RDC. This procedure yielded 74 cases of major or minor depression at 1 month postpartum, which represents approximately 7% of the total sample (cf. Gotlib et al., 1989, for a full discussion of depression prevalence in this sample). Three additional postpartum cases were identified through diagnostic assessment of a sample of women whose postpartum scores on the BDI were not elevated (see later), for a total of 77 postpartum depressed women. Follow-up information is available for 57 of the postpartum depressed subjects (74%): 33 of these women (58%) scored greater than 9 on the 6-month BDI and were again interviewed for depression, and 24 (42%) scored less than or equal to 9 on the BDI at 6 months postpartum.

The diagnostic interview was also administered to a random sample of 34 postpartum women whose scores on the 1-month postpartum BDI were less than or equal to 9. Three of these women met diagnostic criteria and were classified as postpartum depressed. The remaining 31 subjects constituted the nondepressed postpartum controls in this study. Follow-up information is available for 24 of these women (77%): All but one scored less than or equal to 9 on the BDI at follow-up.

Nonchildbearing Subjects

The nonchildbearing subjects were solicited through a newspaper advertisement asking for the participation of women with children in a study of "women and stress." The ad stated that participants with both high and low levels of stress in their lives were needed for the research. To be included in the nonchildbearing groups, subjects had to be between the ages of 18 and 40 years and had to have at least one child between the ages of 1 and 18 years living at home with them. Pregnant women and women who had had a baby within the previous 12 months were excluded. Ninety-eight women who responded to the ad met the initial inclusion criteria and were administered the SADS. Depressed women who were in treatment at the time of the SADS interview were excluded from the depressed group because postpartum depression is rarely treated (Cox et al., 1982; Pitt, 1968). Thus, we attempted to maximize the comparability of the postpartum and nonpostpartum depressed women by excluding depressed women who were in treatment. In addition, currently nondepressed women were excluded if they reported a previous depressive episode for which they had sought treatment. Thus, our selection procedure identified 32 women who met criteria for an RDC major or minor depression and who were not currently being treated, and 18 never-depressed controls.

Following the diagnostic interview, which was administered over the telephone, a questionnaire packet was mailed to subjects. They returned the questionnaires in a stamped envelope addressed to the principal investigator. Subjects were contacted again 6 months after their original interview and were asked to participate in a second diagnostic assessment. Thirty of the nonpostpartum depressed women (94%) and 14 of the never-depressed controls (78%) completed both the initial and the follow-up assessments.

Measures

Depressive Symptomatology

Beck Depression Inventory (BDI). The BDI (Beck et al., 1961) was used as the self-report measure of the severity of depressive symptoms. In both psychiatric and student samples, the BDI has shown high convergent validity with psychiatric ratings of depression severity (Beck, Steer, & Garbin, 1988; Gotlib & Cane, 1989). Most important for the purposes of the present study, the sensitivity of the BDI (i.e., the ability of the BDI to detect episodes of depression when present) is generally high (Oliver & Simmons, 1984).

Schedule for Affective Disorders and Schizophrenia (SADS). A shortened version of the SADS (Endicott & Spitzer, 1978) was administered to obtain clinical ratings of current depressive symptoms. The 22 scales included in this version were sufficient to yield RDC diagnoses of major and minor depressive disorder. The SADS was administered by a clinical psychologist or clinical psychology intern who had received training in the use of the instrument. A random sample of 35 interviews was audiotaped and rated independently by a second trained rater. Overall, the interrater agreement on the presence of diagnosable episode of either major or minor depression (i.e., not depressed vs. depressed) was 89%, yielding a kappa of .78.

Psychiatric History

The questions on psychiatric history were appended to the SADS interview. Subjects were first asked if they had ever sought help with an emotional problem. If the answer was affirmative, they were asked to provide details about whom they had consulted, their diagnosis, whether medication was prescribed, and how long the treatment had lasted. In addition, subjects were asked to report if they were currently in treatment and how many times in the past they had sought help with emotional problems.

Interpersonal Measures

Dyadic Adjustment Scale (DAS). The DAS (Spanier, 1976) was used to assess satisfaction with the marital relationship. The DAS is a frequently used measure of marital adjustment that assesses such aspects as communication, affection, similarity of values, and global satisfaction. Several investigations have demonstrated that it is a psychometrically reliable and valid measure that discriminates happily from unhappily married and divorced couples (Spanier, 1976; Whiffen & Gotlib, 1989).

Provision of Social Resources Scale (PSR). Perceived social support was measured by the PSR (Turner, Frankel, & Levin, 1983). This instrument measures the extent to which the respondent feels valued by and integrated into a social network. The PSR has demonstrated acceptable psychometric properties (Turner et al., 1983). Indeed, a modification of the PSR has been used successfully to differentiate parents with a history of child abuse or neglect from normal control parents (Avison, Turner, & Noh, 1986).

Parental Bonding Instrument (PBI). Subjects' perceptions of the quality of parenting they received during childhood was measured by using the PBI (Parker, Tupling, & Brown, 1979). This instrument is a psychometrically sound, 25-item self-report scale from which two subscales are derived separately for the mother and father: caring and overprotectiveness. The literature indicates that these perceptions are stable over a 3-year period (Gotlib, Mount, Cordy, & Whiffen, 1988) and that they correspond closely with parental self-reports (Parker, 1981).

Stress and Coping Measures

Perceived Stress Scale (PSS). The PSS (Cohen, Kamarck, & Mermelstein, 1983), a global measure of perceived life stress, measures the degree to which individuals experience their lives as unpredictable, uncontrollable, and overwhelming. Thus, the PSS does not assess the stress associated with specific events or situations but, rather, cognitions and emotions relating to general stress levels. Scores on the PSS have been correlated with reports of both depressive and physical symptomatology (Cohen et al., 1983; Gotlib & Whiffen, 1989).

Ways of Coping Checklist (WCC). Coping style was assessed by having subjects describe the most stressful event they had experienced during the preceding month and complete the revised version of the WCC with regard to this event (Folkman & Lazarus, 1985). The items on the WCC encompass a broad range of behavioral and cognitive strategies that people use to manage the impact of a stressful event. Eight subscales have been empirically derived from the items: confrontation, distancing, self-control, seeking social support, accepting responsibility, escape–avoidance, planful problem solving, and positive reappraisal (Folkman, Lazarus, Dunkel-Schetter, DeLongis, & Gruen, 1986). The WCC has been used previously to assess the coping styles of depressed community residents (Coyne et al., 1981) and has demonstrated acceptable psychometric properties (Folkman & Lazarus, 1985).

In addition, the event described on the WCC facesheet was assigned a weighting to reflect its stressfulness. These weights were derived by Horowitz, Schaefer, Hiroto, Wilner, and Levin (1977) for use with the long form of their Life Event Questionnaire. In their study, the weights were assigned by a sample of psychiatrists and were calibrated for the length of time since the occurrence of the event. In our study, ratings were assigned by undergraduate research assistants who used only the one-month weights. A subset of 95 descriptions was coded by two raters. The correlation between the scores they assigned was .83.

Results

Demographic Characteristics of the Childbearing and Nonchildbearing Groups

In Table 1 we present the means and standard deviations on the demographic variables for the four groups. A multivariate analysis of variance (MANOVA) conducted to determine whether the groups differed in age, years of education, and number of children was significant, $F(9, 447) = 7.10$, $p < .01$. Inspection of the univariate F tests indicated that this was due to group differences in age and years of education, with $F(3, 149) = 17.29$, $p < .01$, and $F(3, 149) = 3.19$, $p < .05$, respectively. Post hoc comparisons using the Newman-Keuls test demonstrated that the women in the two nonchildbearing groups were older than the women in the two childbearing groups. In addition, the women in the never-depressed group had more years of education than did the women in the two depressed groups.

Among those women who were working, there were no group differences in occupational status ($F < 1$). The occupational status of the average working woman in the sample was equivalent to that of a dental hygienist or a retail sales supervisor (Blishen & McRoberts, 1976). In addition, the groups did not differ in the proportion of women who were working outside the home, $\chi^2(3, N = 158) = 1.48$, $p > .05$. Approximately two thirds of the sample was employed outside of the home. However, marital status did differ as a function of group, $\chi^2(3, N = 158) = 35.05$, $p < .01$. Forty-one percent of the women in the nonpostpartum depressed group were separated or divorced, compared with 11% or less in the remaining three groups.

Data Analysis

Our data analytic strategy was, first, to assess differences among the four groups of women by using one-way analyses of covariance (ANCOVA) or MANCOVAs followed by post hoc Newman-Keuls tests. The covariates were age, education, and marital status. These analyses established how the four groups were ordered on the measured variables. As anticipated, the four groups differed significantly on all of the dependent variables. The group means and standard deviations are reported in Tables 1, 2, and 3. However, these results will not be discussed in detail because, first, they replicate several previous studies and, second, they were not the major focus of this study. In general, these analyses produced a consistent pattern of results whereby the two depressed groups showed greater impairment than the postpartum control group. This pattern was obtained with the following variables: number of episodes of help seeking for emotional problems, parental caring and overprotectiveness, social support, marital adjustment, objective stress level, and use of responsibility taking as a coping strategy. The two depressed groups showed greater impairment than both of the control groups on three variables: depressive symptomatology, perceived stress level, and the use of escape–avoidance as a coping strategy.

The focus of this study was the comparison of postpartum with nonpostpartum depression. Thus, we compared the two depressed groups with one-way ANCOVAs or MANCOVAs, followed by post hoc discriminant analyses to determine which variables best discriminated the groups. In the discriminant analyses, the variables were entered stepwise. A variable was considered a significant discriminator if it correlated at least .30 with the discriminant function. Because the two depressed groups differed in age and marital status, these demographic variables were entered as covariates in both the ANCOVAs and MANCOVAs and the discriminant function analyses that compared the groups.

Depressive Symptomatology

Means and standard deviations obtained by women in the four groups on the BDI are presented in Table 1. A one-way ANCOVA conducted on the BDI scores of the two depressed groups was significant, $F(1, 97) = 18.06$, $p < .01$. The nonpostpartum depressed group reported higher levels of depression. The average BDI score reported by the nonpostpartum depressed women was in the moderate range of severity, and the average score for the postpartum depressed group was in the mild range. The number of women diagnosed with major and minor depression, however, was not significantly different in the two depressed groups, $\chi^2(1, N = 109) = 2.88$, $p > .05$. Seventy percent of the postpartum depressed women met criteria for minor but not major depression compared with 53% in the nonpostpartum depressed group (see Table 1).

The percentage of subjects reporting at least mild levels of

Table 1
Demographic Characteristics and Depressive Symptomatology

	Childbearing				Nonchildbearing			
	Depressed (n = 77)		Not depressed (n = 31)		Depressed (n = 32)		Not depressed (n = 18)	
Measure	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Age (years)	28.3_a	4.7	28.4_a	3.8	33.8_b	5.8	35.1_b	3.8
No. of children	1.8	0.8	1.7	1.0	1.6	0.8	2.2	0.9
Years of education	14.1_a	2.4	14.8	2.2	13.9_a	2.3	15.7_b	2.2
Occupational status[a]	46.6	12.7	51.0	13.3	49.4	12.9	46.1	15.6
% housewives	38		29		28		39	
% married or equivalent	96		100		59		89	
BDI score[b]	14.7_b	5.3	4.5_c	2.5	21.7_a	9.4	5.6_c	4.5
% with major depression	30		0		47		0	
% depressed at follow-up	44		4		47		7	

Note. BDI = Beck Depression Inventory. Different subscripts within rows denote significantly different means.
[a] Occupational status was coded by using the Blishen and McRoberts (1976) scale for Canadian occupations. [b] For the four-group analysis of covariance, $F(3, 130) = 50.1$, $p < .01$.

each SADS symptom is listed in Table 4. First, we were interested in comparing the types of symptoms commonly reported by the two depressed groups. The most frequently reported symptoms in the postpartum depressed group were depressed mood (96%), fatigue (87%), irritability (86%), and feelings of inadequacy (70%). These symptoms were also commonly reported by the nonpostpartum depressed women: depressed mood (97%), irritability (97%), feelings of inadequacy (84%), and fatigue (84%). Thus, postpartum and nonpostpartum depression do not seem to differ in the types of symptoms most commonly reported.

The MANCOVA comparing the SADS symptom ratings in the two depressed groups, however, was significant, $F(20, 85) = 2.90$, $p < .01$. The discriminant function analysis produced one significant function, $\chi^2(13, N = 109) = 93.13$, $p < .01$, with a canonical correlation of .78. Once demographic differences between the groups were taken into account, the nonpostpartum depressed women were characterized by higher levels of anxiety (.38), insomnia (.35), somatic concerns (.31), and psychomotor agitation (.31). This function, which included age and marital status, correctly classified 95% of the postpartum and 81% of the nonpostpartum depressed women.

To summarize, the most commonly reported symptoms in the two depressed groups were similar. However, the overall severity level was milder among the postpartum depressed women. In particular, the nonpostpartum depressed women reported higher levels of symptoms associated with anxiety, including feelings of anxiety, psychomotor agitation, and insomnia. They were also more preoccupied with somatic complaints than were the postpartum depressed women.

Recovery at Six-Month Follow-Up

The percentage of subjects in each of the four groups who were depressed at the follow-up assessment is reported in Table 1. The reader will recall that the childbearing subjects were screened with a BDI at follow-up. If their scores on the BDI exceeded 9, they were interviewed with the SADS. Women whose scores fell below the BDI cutoff and those whose SADS assessment showed that they were not depressed were classified as *not depressed* for the purpose of this analysis. All of the subjects in the nonchildbearing groups were assessed with the SADS.

One subject in each of the two control groups became depressed in the 6 months following the initial assessment. Comparison of the women in the two depressed groups demonstrated that there was not a significant difference in the rates of diagnosable depression at follow-up, $\chi^2(1, N = 109) < 1$. Forty-four percent of the postpartum depressed women and 47% of the nonpostpartum depressed women were still depressed at follow-up.

Psychiatric History

The percentage of subjects responding positively to the questions on psychiatric history is reported in Table 2 for the four groups. A one-way ANCOVA was conducted on the number of episodes of help seeking reported by the women in the two depressed groups. The covariate, age, was significant, $F(1, 97) = 17.30$, $p < .01$, but the main effect for group was not, $F(1, 97) = 2.34$, $p > .05$. Although the nonpostpartum depressed women had sought help more frequently, this difference was apparently

Table 2
Psychiatric History

Measure	Childbearing		Nonchildbearing	
	Depressed (n = 77)	Not depressed (n = 31)	Depressed (n = 32)	Not depressed (n = 18)
History of treatment[a]	60	3	84	28
Previous treatment for depression[a]	31	0	76	0
Previous treatment for suicide attempt[a]	3	0	14	0
Antidepressants prescribed[a]	13	0	38	0
Currently in treatment[a]	8	0	0	6
Type of treatment received[b]				
Inpatient	6	0	7	0
Outpatient	67	100	85	75
Physician	25	0	7	25
No. of previous episodes of help seeking	0.61	0.03	1.22	0.24
Duration of treatment (months)	5.9	1.0	10.3	5.5

[a] Expressed as percentages. [b] Expressed as percentages, calculated as proportions of those seeking treatment only.

due to their being older than the postpartum depressed women.

A series of chi-square analyses was conducted comparing the two depressed groups on the psychiatric history variables. Overall, the women in the nonpostpartum depressed group were more likely to report that they had sought treatment for previous emotional difficulties, $\chi^2(1, N = 109) = 6.12$, $p < .05$. In addition, they were more likely to have sought treatment for depression, $\chi^2(1, N = 109) = 16.50$, $p < .01$, or a suicide attempt, $\chi^2(1, N = 109) = 4.31$, $p < .05$, and were more likely to have been prescribed antidepressants, $\chi^2(1, N = 109) = 7.58$, $p < .01$. However, when we examined only those women in both groups who had previously sought treatment, differences were not apparent. The groups did not differ in the type of treatment setting in which they had sought help, $\chi^2(1, N = 61) = 3.66$, $p > .05$, or in the duration of treatment for previous difficulties, $t(59) = 1.73$, $p > .05$.

To summarize, women in both of the depressed groups had high rates of having sought treatment compared with the postpartum control group, whose rate was close to zero. However, the nonpostpartum depressed women had more often been treated specifically for depression. Age differences between the two groups of depressed women also may account for some of the observed differences in psychiatric history.

Perceptions of Interpersonal Relations

In Table 3 we report the means and standard deviations obtained by the four groups of women on the interpersonal variables. The interpersonal relations of the two depressed groups were compared with a MANCOVA conducted on the social support and parent bonding variables. The DAS could not be included in this MANCOVA because many of the women in the nonpostpartum depressed group were separated or divorced, and they were either unable to complete the measure or they completed it with reference to a partner with whom they were not co-habiting. Age and marital status were entered as covariates in this MANCOVA. Scores on the BDI were also entered as a covariate because the BDI correlated significantly with each of the dependent variables (rs = .27 to .52, ps < .01). Once demographic and symptom severity differences between the two depressed groups were taken into account, the groups did not differ significantly in their perceptions of social support and parent bonding, $F(5, 90) = 2.28$, $p > .05$.

A one-way ANCOVA, with age and BDI scores as the covariates, was conducted on the DAS scores obtained by the two groups of depressed women. This analysis revealed that even when BDI scores were controlled, there was a significant difference between the women's satisfaction with their intimate relationships, $F(1, 98) = 14.28$, $p < .01$. Comparison with the norms provided by Spanier (1976) indicates that the mean for the postpartum depressed group is just above the cutoff for recommending marital therapy, whereas the average score in the nonpostpartum depressed group is nearing the range for divorcing couples. The absence of a significant intimate other, as well as the poor marital adjustment reported by those women in the nonpostpartum depressed group who did have a partner, represents an important difference in the interpersonal relations of the two groups of depressed women.

Stress and Coping

Means and standard deviations obtained by the four groups on the stress and coping measures are also reported in Table 3.

Table 3
Means and Standard Deviations on the Interpersonal, Stress, and Coping Measures

	Childbearing				Nonchildbearing			
	Depressed (n = 77)		Not depressed (n = 31)		Depressed (n = 32)		Not depressed (n = 18)	
Measure	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Interpersonal								
PSR	38.1	12.4	30.2	6.0	50.3	11.6	33.7	8.2
PBI								
Mother care	22.8	9.7	29.6	7.5	19.2	8.7	25.8	9.8
Father care	19.9	8.9	25.6	7.4	14.7	9.2	21.2	11.5
Mother over-protective	15.4	7.6	10.5	5.9	18.6	9.4	12.9	8.2
Father over-protective	13.8	8.1	10.4	6.6	17.0	9.5	10.4	6.6
DAS	102.9	16.2	121.9	12.1	77.0	24.7	110.2	21.3
Stress and coping								
PSS	32.1	7.9	17.3	6.6	36.4	7.2	23.0	7.5
Stress	55.0	6.4	54.2	7.2	53.2	15.3	42.4	20.9
WCC								
Confrontation	5.1	2.8	4.6	4.1	6.2	3.2	6.1	2.7
Distancing	4.6	3.3	4.1	2.8	5.4	2.8	3.6	2.6
Control	7.2	3.5	5.8	4.6	8.2	2.4	6.1	3.0
Seeks support	7.5	3.9	5.8	4.0	6.7	4.0	7.6	4.5
Takes responsibility	3.4	2.7	2.2	2.3	4.7	2.9	3.8	1.9
Escape–avoidance	7.0	4.0	3.5	3.7	9.8	4.3	3.9	3.4
Problem solving	6.7	2.8	6.4	3.9	6.7	3.6	8.1	4.2
Reappraisal	7.0	4.0	4.5	3.9	6.7	3.8	6.4	4.3

Note. PSR = Provision of Social Resources; PBI = Parent Bonding Instrument; DAS = Dyadic Adjustment Scale; PSS = Perceived Stress Scale; Stress = rating of WCC Stressor; WCC = Ways of Coping Checklist.

The two depressed groups were compared with a MANCOVA, with age, marital status, and BDI scores as covariates. Once again, the BDI correlated with several of the stress and coping measures (rs = .15 to .75, $ps < .05$). This analysis was significant, $F(10, 83) = 2.41$, $p < .05$. The post hoc discriminant analysis produced one significant function, $\chi^2(8, N = 109) = 75.04$, $p < .01$, with a canonical correlation of .75. Once the covariates were taken into account, however, none of the stress and coping variables contributed significantly to the discriminant function. Thus, the two depressed groups did not differ on the stress and coping variables beyond what can be accounted for by differences in demographics and depression severity.

Discussion

There were three major objectives of this research. First, we compared the clinical features of postpartum depression with those of nonpostpartum depression by examining symptom severity levels, presenting symptoms, and episode course. Second, we compared psychiatric history in the two groups of women. Finally, we were interested in determining whether postpartum and nonpostpartum depression are differentially associated with impairments in psychosocial functioning. These three areas of evidence were examined to determine whether there is an empirical basis for distinguishing postpartum from nonpostpartum depression.

Some aspects of postpartum depression are consistent with the view that it is a distinct diagnosis. First, there is solid evidence that the typical episode of postpartum depression is mild. The average BDI score obtained by the postpartum depressed women placed their symptoms in the mild range of severity. In addition, 70% of the postpartum depressed women met criteria for minor but not major depression according to the RDC. These findings are consistent with those reported in previous studies of postpartum depression (O'Hara et al., 1984; Whiffen, 1988a). Second, the presenting symptoms of postpartum and nonpostpartum depressed women were different. Although the most commonly reported symptoms were the same in the two groups, the postpartum depressed women reported lower levels of anxiety, agitation, insomnia, and somatic symptoms. This pattern suggests that, compared with the nonpostpartum depressed women, the postpartum depressed women experienced less anxiety, both psychological and somatized. This stands in contrast to Pitt (1968), who reported that postpartum depression was characterized by higher-than-usual levels of anxiety. Our results suggest that postpartum depressed women are less likely to present the kind of mixed symptom picture that is typical of depressed outpatients.

Despite these differences, however, episodes of postpartum and nonpostpartum depression remitted at comparable rates over a 6-month period. The finding that just under half of the postpartum depressed women were still depressed at an assess-

Table 4
Percentage of Women Reporting at Least Mild Levels of Each SADS Symptom

Symptom	Childbearing		Nonchildbearing	
	Depressed (n = 77)	Not depressed (n = 31)	Depressed (n = 32)	Not depressed (n = 18)
Insomnia	33	7	72	6
Increased sleep	10	19	9	6
Fatigue	87	65	84	22
Depressed mood	96	3	97	0
Guilt	56	23	62	6
Inadequacy	70	29	84	0
Pessimism	48	10	81	6
Suicidal	5	0	19	0
Somatic anxiety	58	19	84	11
Psychic anxiety	36	7	72	28
Somatic concerns	16	13	44	0
Indecisive	38	3	53	11
Decreased concentration	52	16	75	6
Anhedonia	39	7	53	0
Irritability	86	36	97	22
Dependency	49	10	72	0
Agitation	42	7	75	0
Retardation	34	13	31	0
Decreased appetite	44	13	28	0
Increased appetite	20	26	28	0

Note. SADS = Schedule for Affective Disorders and Schizophrenia (Endicott & Spitzer, 1978).

ment 6 months later is consistent with results reported by Kumar and Robson (1984) with a much smaller sample. In addition, postpartum and nonpostpartum depression were not associated with markedly different patterns of psychosocial functioning. Once demographic and symptom severity differences were taken into account, the postpartum depressed women were distinguished only by their better marital relations.

Considered collectively, the evidence obtained in this study suggests that the primary difference between postpartum and nonpostpartum depressed women is that postpartum depressed women are less depressed. It is probably not useful to conceptualize postpartum depression as a separate diagnosis if symptom severity is the only basis for the distinction. Thus, the evidence from the variables examined here does not support the position that postpartum depression is a distinct diagnosis. Nevertheless, other variables might be examined to evaluate the validity of the diagnosis, including family psychiatric history, treatment response, and biological variables; researchers might consider these variables in future investigations.

Consistent with previous studies, we found that 60% of the women who developed postpartum depression had previously sought treatment for emotional problems (Paykel et al., 1980; Tod, 1964). In contrast, only one of the childbearing women who did not become depressed had previously sought treatment. Thus, women with a history of help seeking for any kind of emotional problem may be at risk for developing depression after the birth of a child. Because the average childbearing age coincides with the median age of onset for a first depressive episode (Burke, Burke, Regier, & Rae, 1990), depression after childbirth may be the first identifiable episode of depression in an adult woman's life. Moreover, there is some evidence that women who experience postpartum depression are at elevated risk for subsequent episodes (Philipps & O'Hara, 1991). Thus, it may be valuable to target women who become depressed after childbirth for primary intervention, both to resolve the current episode and to prevent the development of subsequent episodes.

If postpartum and nonpostpartum depression do not differ meaningfully, then standard treatments for depression may be effective with postpartum depressed women. Indeed, our results suggest guidelines for treatment. It appears that most episodes of postpartum depression involve symptoms at the level of an adjustment disorder. Although milder, these episodes do not remit more quickly than do episodes of nonpostpartum depression. Thus, clinicians should not be deceived by the mildness of the symptoms and conclude that the episode does not require treatment. Rather, if we conceptualize most cases of postpartum depression specifically as an adjustment disorder, then the treatment goals become more clearly focused. Recently delivered women need to adjust to difficulties in the maternal role and/or in the relationship with their husband or partner. Intervention efforts focused on these two aspects of the postpartum woman's life should be most efficacious in treating the depressive symptoms.

This hypothesis is underscored by the findings regarding the marital relations of the postpartum depressed women. The average marital satisfaction score of the postpartum depressed group indicated that these couples were close to needing intervention for marital problems. Other research indicates that marital distress covaries strongly with depression; indeed, some investigators have argued that marital distress may be

implicated in both the etiology and the maintenance of depressive episodes (cf. Gotlib & Hooley, 1988). Thus, interventions focused on repairing the marital relationship may be particularly efficacious in the treatment of postpartum depressed women. In addition, reinforcing the marital relationship at this critical juncture may help to counteract both the recurrence of depression and co-occurring marital breakdown in the subsequent years.

In closing, we should comment on two specific limitations of this study. First, the childbearing and nonchildbearing subjects were obtained with different procedures. Whereas the childbearing women were solicited through their contact with physicians, the nonchildbearing women were solicited through newspaper advertisements. It is difficult to know exactly how this difference affected the results of this study. The issue would have been more problematic, of course, had group differences been found, in which case differences might have been attributable to the selection procedure. In the absence of major differences between the two groups of depressed women, however, we can be more confident that they were reasonably comparable. Second, we assessed the validity of the postpartum depression diagnosis by examining a set of specific variables related to symptoms and psychosocial functioning. Other variables, such as treatment response, family history, and biological functioning, need to be compared in postpartum depressed and nondepressed women before a definite conclusion can be reached regarding the validity of this diagnosis.

To summarize, comparison of the symptoms, psychiatric history, and psychosocial functioning of postpartum and nonpostpartum depressed women suggests that there is little to distinguish postpartum depression. It is probably not useful to conceptualize postpartum depression as a distinct diagnosis on the basis of comparatively mild symptomatology alone. Discarding this distinction is particularly likely to benefit the treatment of postpartum depression. At the present time, postpartum depression tends not to be routinely treated. Our results suggest that there are good reasons to target postpartum depressed women for intervention and that standard treatments for depression, particularly those focused on marital relations, should be efficacious in relieving depressive symptoms.

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