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Marital Support and Recovery from Depression

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A prospective study of 47 married women who met RDC for major depressive disorder investigated the relationship between the social support provided by the husbands and the post-hospital symptom course of the women. Separate taped semistructured interviews were held with the patient and husband at the time of admission. Six months later, symptom course was rated using the LIFE psychiatric status schedule. Only 51% of the sample recovered in the six months. Few demographic or clinical factors were related to symptom course. Recovery was predicted by the depressed woman's ratings of the current marital relationship and by the husband's rating of the pre-morbid relationship but not by the husband's level of expressed criticism or his ratings of the current relationship.

The relationship between social support and symptoms has been the focus of a considerable number of studies attempting to understand the social aetiology of psychiatric disorder (Ilfeld, 1977; Mueller, 1980; Henderson *et al*, 1981; Billings & Moos, 1982*a*). Evidence suggests that social support not only buffers the effects of stress but also has a direct positive effect on health. It is, thus, a potentially crucial target for both prevention and treatment efforts.

Our interest in investigating the influence of social support on the post-hospital outcome of depressed women originated in some unanticipated findings from a previous large follow-up study of discharged patients (Goering *et al*, 1984). In that study of 505 subjects discharged from four treatment settings, a subgroup of 87 women with non-psychotic affective disorder discharged mostly from general-hospital settings had an unexpectedly poor outcome with regard to readmissions, symptoms and social adjustment (Goering *et al*, 1983*b*). The only characteristic which differentiated those who were readmitted was a lack of social support, defined in this instance as living alone, having no one to count on or having fewer than two visits a month with anyone outside of family. A lack of social support was also the only factor which characterised those with high symptoms and poor social adjustment.

These findings suggested that the presence or absence of social support might have a strong influence on the post-hospital course of depressed women. But the findings were inconclusive since the design and method of the study (intended to investigate discharge planning and service use) had many of the limitations which characterise other social support research (Leavy, 1983): social support was defined in a fairly gross and unstandardised manner; adequacy of social support was determined exclusively by self-report; and the measurement of the relationship between social support and outcome was cross-sectional.

The current study was designed to investigate more carefully the association between the post-hospital outcome of married, depressed women and the adequacy of social support provided by their husbands. The marital relationship was chosen as the focus of study because previous research has repeatedly found the lack of an intimate and confiding relationship with a spouse implicated in the aetiology of depression (Brown & Harris, 1978; Roy, 1978; Costello, 1982). Because the marriages of the depressed are often troubled (Bullock *et al*, 1972; Hinchcliffe *et al*, 1978; Hames & Waring, 1980; Keitner, 1990), this population provides an opportunity to investigate varying degrees of adequacy of social support by what Henderson *et al* (1981) call a 'principal attachment figure'. Selecting married subjects provided the additional advantage of allowing us to use the spouse as a data source. This was considered essential because of recurring questions as to whether self-reports by depressed subjects of the adequacy of social support was distorted by their illness or reflective of their personality rather than indicators of their real, current interpersonal environment.

Because illness onset, rather than illness course, has been the focus of most research on social support and psychiatric disorder, there are few previous studies of the influence of marital support at admission on the post-hospital course of depression (Keitner *et al*, 1990). Notable exceptions are the studies by Vaughn & Leff (1976*a*) and Hooley *et al* (1986), both of which used the methodology developed by Brown & Rutter (1966) and found that the level of expressed criticism by the spouse at the time of admission was a predictor of symptomatic

relapse for depressed in-patients. Although multiple studies have replicated the findings that the expressed emotion of a key relative at the time of admission predicts post-hospital course for schizophrenics, there are fewer studies of expressed emotion and the post-hospital course of depression.

Hypothesis

The present, prospective, study of the post-hospital course of depressed women includes the use of the Camberwell Family Interview and ratings of expressed emotion to test the hypothesis that the quality of marital support will predict the post-hospital symptom outcome of depressed women.

Quality of marital support is the adequacy of the emotional support (affection, sympathy, acceptance and esteem) provided by the husband. It is one aspect of marital adjustment, a broader concept which usually includes decision-making, problem-solving, power-sharing, etc. Quality of marital support is operationalised as levels of expressed criticism and assessments of the pre-morbid and current relationship obtained through separate interviews with the patient and spouse at the time of admission.

Symptom outcome is the post-hospital course of depressive symptoms, operationalised as recovery, i.e. the absence of specified levels of criterion symptoms for eight weeks during the six-month period after discharge.

Method

A sample of 47 subjects was obtained from the in-patient units of seven hospitals in Metropolitan Toronto by review of sequential admissions during a six-month period. Those eligible for inclusion in the sample were women patients between 18 and 65 years of age who met the Research Diagnostic Criteria (RDC; Spitzer *et al*, 1978) for major depressive disorder, had fewer than four previous admissions (an initial criterion of first admissions only was modified due to insufficient numbers of available subjects), were married or in a common-law relationship, resided with their spouse within the Metropolitan Toronto area, and spoke English. Those who were currently hypomanic or psychotic and those with a previous diagnosis of schizophrenia, schizo-affective disorder, alcoholism, sociopathic personality or organic brain disease were excluded.

Eligibility was established by a chart review and a screening interview, conducted within one week of admission. Fifty-seven candidates approached. Eight (13%) meeting the study criteria refused consent to participate. Two subjects were lost during the follow-up phase: one couple had moved, the other refused to continue in the study. The attrition group ($n = 10$) differed from those who participated in educational status only: six members (75%) of the attrition group had some university-level education in comparison to 20% of those in the study sample ($P \leqslant 0.01$).

Table 1
Demographic characteristics

	Depressed women ($n = 47$)
Age: years	
22-35	15 (32%)
36-44	18 (38%)
45-63	14 (30%)
Hollingshead Index of Socioeconomic Class:	
II	4 (9%)
III	10 (21%)
IV	23 (49%)
V	10 (21%)
Employed prior to admission	20 (43%)
Born in Canada	33 (70%)
First marriage	33 (70%)
Years married:	
1-7	14 (30%)
8-16	15 (32%)
17-42	18 (38%)
Number of children:	
none	5 (10%)
1-2	28 (60%)
more than 2	14 (30%)

The demographic characteristics of the subjects are shown in Table 1. The women were typically middle-aged, with secondary education and a clerical or skilled occupation, currently unemployed, and in their first marriage, with one or two children. The spouses as a group were somewhat older, had more education, and had higher occupational status and rate of employment than their wives.

The clinical characteristics of the sample are shown in Table 2. Most subjects had been voluntarily admitted for the first time, were severely depressed, and had major functional impairments in several areas of their lives during the week prior to admission. Thirty-three subjects (70%) manifested the constellation of vegetative symptoms designated as endogenous by RDC, and none were psychotic (i.e. there was no evidence of delusions, hallucinations or stupor). Age of onset and duration of episode varied. Most subjects had a first-degree relative with a history of affective disorder. In addition to the six subjects fitting the RDC subtype of secondary depression, there were five who met RDC for intermittent depressive disorder and another three who met the criteria for labile personality.

Procedure

Within two weeks of admission, 45 patients and 42 spouses were interviewed separately to assess their marital relationship. Two patients were not well enough and five spouses refused to be interviewed. The 90-minute tape-recorded interviews were usually conducted on the hospital ward with the woman, and either at home or at place of business with the husband.

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Table 2
Clinical characteristics

	Depressed women ($n=47$)
Hospital admissions:	
1	28 (60%)
2	9 (19%)
3–4	10 (21%)
Voluntary admission	42 (89%)
Duration of episode:	
less than 3 months	10 (21%)
3 months to 1 year	18 (38%)
more than 1 year	19 (41%)
Duration of hospital stay:	
1 or 2 weeks	21 (45%)
3–6 weeks	19 (40%)
6–9 weeks	7 (15%)
RDC subtype of major depressive disorder:	
non-bipolar	44 (94%)
bipolar	3 (6%)
endogenous	33 (70%)
non-endogenous	14 (30%)
primary	41 (87%)
secondary	6 (13%)
Severity of depression by extracted Hamilton score	
12–17	3 (6%)
18–24	7 (13%)
over 25	37 (81%)
Severity of depression by Global Assessment Scale	
30–40	22 (45%)
41–50	25 (51%)
51–60	2 (4%)
Age of onset:	
16–29	16 (34%)
30–39	14 (30%)
40–53	17 (36%)
Family history of affective illness	27 (57%)

Six months after this initial interview, two separate interviews were conducted to obtain a detailed description of the course of the depressive illness.

Research Diagnostic Criteria for major depressive disorder include the following: (a) one or more distinct periods of dysphoric mood or pervasive loss of interest or pleasure of at least two weeks' duration; (b) having five or more symptoms such as appetite changes, sleep disturbance, loss of energy, psychomotor changes, guilt, loss of pleasure or interest in usual activities, impaired concentration or decision-making, or suicidal thoughts or actions; (c) having sought or been referred for help or being functionally impaired; and (d) having none of the symptoms or signs which suggest that schizophrenia is present. In order to assess the subjects' meeting these criteria and to determine RDC depressive subtypes, trained clinicians reviewed the patients' charts and conducted interviews using the Schedule for Affective Disorders Part I (Endicott & Spitzer, 1978).

Two measures of the severity of the depression, an extracted Hamilton Depression Score (Endicott *et al*, 1981) and a rating on the Global Assessment Scale (Endicott *et al*, 1977) were obtained through the screening interview.

The LIFE weekly psychiatric-status scale was used in the follow-up interviews with the patient (using the spouse as informant when necessary) to obtain a week by week description of symptom course (Shapiro & Keller, 1979). This scale, linked to Research Diagnostic Criteria, was developed for the National Institute of Mental Health (NIMH) Collaborative Study of the Psychobiology of Depression, a longitudinal study of 1000 patients in five centres (Katz *et al*, 1979).

Definitions of recovery vary widely and it is difficult to make comparisons across studies when quantitative levels of improvement or general clinical impressions are used. This study employed the same standardised approach as the NIMH collaborative study, e.g. assessment of recovery and relapse using specific diagnostic criteria, and longitudinal rather than cross-sectional descriptions of symptoms (Keller & Shapiro, 1981). Patients were considered recovered if, for at least eight consecutive weeks, they showed either none of the symptoms of major depressive disorder at the defined criterion level or one or two of the symptoms in a mild degree. Because the definition of recovery is more stringent than in many studies in its requirements of eight weeks without symptoms for an episode to be considered over, another level of recovery, sustained partial remission, was also employed. Patients who had a rating of 3 or below on the LIFE psychiatric-status ratings for eight consecutive weeks (i.e. had no more than moderate symptomatology) were considered as partially recovered. Relapse required that recovered subjects return to manifesting the symptoms fulfilling the RDC during the follow-up period.

The level of expressed criticism by the spouse was assessed with the abbreviated Camberwell Family Interview (Vaughn & Leff, 1976*b*). This semi-structured interview provided a detailed account of the circumstances in the home during the three months preceding admission, enquired particularly about the impact of the illness on aspects of family life such as irritability, quarrelling, participation in household tasks, joint leisure activities, frequency of sexual intercourse, etc. Questions about events and activities were used as a standard stimulus to elicit positive and negative feelings, and ratings of satisfaction and dissatisfaction were made for various subscales. A Five Minute Free Speech Sample developed by Wynn and Gift was included in this interview (Snyder & Liberman, 1981).

Ratings of critical comments were made on the basis of the tone as well as the content of taped remarks. Prior to the onset of data collection, the principal investigator completed a one-week training course and rated 40 hours of taped interviews to establish acceptable levels of reliability with the standardised method. A rating of the number of critical comments and dissatisfaction with various aspects of the spouse's behaviour was made for each partner.

Overall assessments of the quality of the relationship, currently and prior to the illness episode, were also completed for each interview using a scale described by Quinton *et al* (1976).

Results

The average numbers of critical comments made during the complete interviews were similar for the group of depressed women ($\chi^2 = 6.1$, s.d. = 0.69) and their husbands ($\chi^2 = 5.4$, s.d. = 0.77). Following Vaughn & Leff (1976*a*), we used a threshold of two or more critical comments per interview to define a high-criticism group: 24 of the spouses (57%) and 36 of the depressed women (80%) were above the threshold. When the same threshold was applied to the five-minute speech sample, ten (23%) of the spouses and 14 (31%) of the depressed women had high scores.

The *overall assessment* of the quality of the marriage using the Quinton *et al* rating was similar for the groups of women and their husbands, and tended to be higher prior to illness. For the pre-morbid relationship, 29 (66%) of the men and 28 (55%) of the women described a relationship that was rated as 'good average' or better. For the current marital relationship, only 18 (41%) of the men and 16 (34%) of the women described a relationship that could be rated as such.

The *dissatisfaction subscales* derived from the Camberwell Family Interview provided more information about the negative aspects of the current relationship. The subscale with the highest dissatisfaction score was communication, for both the depressed women and their husbands. Leisure time and sex were also major areas of dissatisfaction for both groups. The partner's employment status was a greater source of dissatisfaction for the women than for the men. The partner's relationship to children was a greater source of dissatisfaction for the men than for the women.

On the basis of the NIMH definition, only 24 subjects (51%) recovered from the depressive episode within the six-month follow-up period. The criterion for partial recovery was met by 30 subjects (75%). Many never had a period free from depressive symptoms, and of those who did recover, most did so late in the follow-up period. One recovered subject subsequently relapsed. Given these results it was not possible to use relapse as symptom outcome in further analyses.

Relationship of marital variables and recovery

How the various measures of the quality of the marital relationship related to recovery is shown in Table 3. (For each variable a 2×2 table was constructed. The ϕ statistic was computed as a measure of the strength of the association, and a level of probability of 0.05 taken as the minimum criterion for significance.)

Using a *criticism level* of 2+ for both the total interview and the five-minute speech sample, there was no difference in recovery rate between the women whose spouses expressed high levels of criticism and those whose spouses expressed low levels. The relationship between recovery and the level of expressed criticism by the spouse was also tested using various criticism thresholds above 2 and using the total number of critical comments, but no relationship was found. Neither was there a relationship between critical comments by the spouse and partial recovery. However, there was a consistent relationship between recovery and the level of criticism expressed by the depressed women. For both the five-minute speech sample and the total interview, those women who made two or more critical comments about their spouse were less likely to recover than those who did not: only 21% of those who expressed high levels of criticism in five minutes of free speech recovered, compared with 61% of those in the low-criticism group. The relationship between the women's level of expressed criticism in the total interview and recovery was also found when other criticism thresholds were used.

Table 3
Relationship to recovery of various ratings of the marriages of depressed women

Type of rating	Correlations to recovery (ϕ correlation coefficient) Data from spouses ($n = 42$)	Data from patients ($n = 45$)
High criticism levels (2+ critical comments)		
5-minute speech sample	NS	0.37**
total interview	NS	0.29*
Poor overall assessment:		
pre-morbid relationship	0.33*	NS
current relationship	NS	0.29*
Dissatisfaction subscales:		
communication	NS	0.39**
relationship to children	NS	0.36*
affection	NS	0.29*

* $P \leqslant 0.05$, ** $P \leqslant 0.001$.

The relationship between the *overall assessment* of the marriage and recovery was tested by dichotomising the subjects into high and low groups for each of the four measures (spouse pre-morbid, spouse current, woman pre-morbid, woman current). For the spouses the overall assessment of the *pre-morbid* relationship predicted recovery; for the depressed women the overall assessment of the *current* relationship predicted recovery. For both groups the relationship was in the expected direction (i.e. those with the better marriage ratings were more likely to recover).

For each of the *dissatisfaction subscales*, subjects were dichotomised into high and low groups, and rates of recovery were compared. For none of the eight subscales was there a relationship between the spouse's dissatisfaction and his wife's recovery, but for three subscales there was a relationship between the woman's dissatisfaction and her recovery: those women who had high levels of dissatisfaction with the amount or quality of their spouse's communication, affection or relationship to the children were less likely to recover.

The differences reported above in the relationship to recovery of the ratings of interviews with the depressed women and with the spouses might have been due to differences in the sample sizes of the two groups. In order to test this possibility, we repeated the analyses with the 40 couples for whom we have matched data and the same pattern was found (i.e. several ratings from the woman's interview predicted recovery while with one exception those from the spouse interview did not).

Other clinical or demographic predictors of recovery

A comparison of the rates of recovery was made for each of the classifications reported in Tables 1 and 2. None of the demographic or clinical characteristics were related to outcome, except for recent marriage, non-Canadian birthplace and the presence of endogenous symptoms (as defined by the RDC), all of which predicted recovery. When a stepwise regression procedure was used to remove the effect of recent marriage, non-Canadian birthplace and endogenous symptoms on recovery, the additional independent contribution of the marital support variables remained significant.

The effect of number of years married on recovery was conditioned by the quality of marital support. Within the group of subjects with supportive marriages (using the pre-morbid rating from the husband interview) recovery of four of the five subjects who had been married seven years or less (80%) was not significantly different from recovery of seven of the eleven subjects who had been married longer (64%). In contrast, within the group with unsupportive marriages, five of the eight subjects married seven years or less (63%) recovered, compared with three of the 18 married longer (17%) (Fisher's exact probability <0.05).

Discussion

The finding that only half of the subjects in this study had recovered in six months indicates that the post-hospital course of depressed women continues to be a problem worthy of study and concern. The low rates of recovery are consistent with those of other studies of major depressive disorder which suggest that the short-term prognosis for this disorder is not as positive as was once thought (Shapiro & Keller, 1981; Keller *et al* 1982; Bronisch *et al*, 1985). This treatment problem is complicated by the fact that there are few, if any, clinical or demographic characteristics which show consistent relationships to outcome and could be used as prognostic indicators.

In this study, the strongest predictor of post-hospital symptom course is the depressed woman's perception of the quality of the support she receives from her spouse. Her overall rating of the current relationship, her level of criticism toward her spouse and her satisfaction with his communication, affection, and relationship to their children are all related to recovery. Hooley & Phil (1990) also report that the patient's subjective perception of marital satisfaction is strongly associated with post-hospital symptom course. They found that the patient's perception of spouse's criticism explained more of the variance in relapse rates than did the more objective ratings based on the Camberwell Family Interview.

The question of whether the depressed patient's perceptions are an accurate description of the marital relationship or a reflection of illness or personality factors cannot be answered conclusively. Within this sample, severity of depression, predominantly angry mood, and the women's ratings of marital support were not correlated. Neither did severity of depression or predominant mood predict symptom course. These findings suggest that perception of marital support has an effect that is not solely determined by illness factors. It is also pertinent that the husband's rating of the pre-morbid marriage did predict recovery, and there were generally high levels of agreement between overall marital ratings based on the patient and spouse interviews ($r=0.72$ for pre-morbid, $r=0.64$ for current). These results, and those of another study of marital intimacy in depressed in-patients and their spouses (Waring & Patton, 1984), support the conclusion that patients' perceptions are, for the most part, accurate appraisals of marital support.

In this study there was no relationship between expressed criticism by the spouse of a depressed patient at the time of admission and post-hospital symptom course. There are several possible explanations for the inconsistency between this finding and those of Vaughn & Leff (1976*a*) and Hooley *et al* (1986) which are related to differences in method and sample characteristics. In both previous studies the dependent variable was defined as relapse in the nine months following discharge. In this study the rate of recovery in the six months following discharge was so slow and limited that it was impossible to use relapse as an outcome variable. Differences in symptom course may be related to more severe illness in our sample, which is characterised by endogenous symptoms and high rates of functional impairment. Patients who are more severely depressed may be less sensitive to the level of criticism at the time of admission. It may also require a longer follow-up period to observe an influence on relapse rather than recovery.

Another possible explanation of the difference between our results and those of Vaughn & Leff (1976*a*) is that criticism by the spouse of a depressed woman may have a community-specific meaning which differs in the two populations. Even though the *amount* of criticism expressed in our sample is quite similar to that in the British study, there are some indications that the *nature* of the phenomenon differs. Leff & Vaughn (1985) report that only 30% of all the critical comments were directed at symptom-related behaviour, the remaining ones having to do with long-standing personality traits. Only 50% of the spouses in that study reported a good pre-morbid marriage, and there was a strong relationship between the quality of the pre-morbid marriage and the amount and nature of the criticism

expressed. Spouses who reported a poor pre-morbid relationship were more likely to express criticism and were primarily critical of personality traits. In contrast, in our sample of spouses, 66% reported a good pre-morbid relationship, one half of the critical comments were of symptom behaviour, and the relationship between the quality of the pre-morbid relationship and the number and type of criticisms was weaker.

It is possible that Canadian spouses in our sample express criticisms of symptoms more freely than those in the British sample, and thus criticisms are not as valid a measure of the quality of the ongoing relationship. This interpretation is supported by the finding that the rating of the pre-morbid relationship based on the husband's account predicts recovery whereas expressed criticism does not. The husband's level of criticism at the time of admission may be a response to his wife's acute depressive illness rather than a valid indication of the ongoing marital relationship. His description of the current relationship may be distorted, in either a positive or a negative direction, because of his reactions to the symptoms and circumstances associated with hospital admission. This could also explain why his overall assessment of the current relationship does not predict outcome. The expression of both criticism and dissatisfaction may be due to temporary frustrations rather than being a true reflection of an absence of support.

The findings of our study do not confirm a relationship between expressed criticism at the time of admission and recovery in a severely depressed sample, but they are generally consonant with a number of studies which suggest that the ongoing quality of family relationships influences symptom course (Waring & Patton, 1984; Billings & Moos, 1985*b*; Keitner *et al*, 1990). In this sample it was particularly those subjects who had been married longer than seven years and had unsupportive marriages who were unlikely to recover. This finding seems to describe a phenomenon which others have found associated with chronic depression (Rounsaville *et al*, 1979). Akiskal *et al* (1981) use the term 'marital deadlock' to describe the impaired communication which occurred in almost all of the married chronically depressed patients they studied. Using a psychosocial conceptual framework, prolonged marital difficulties can represent both an additional life stressor and a depletion of social resources (Mitchell & Moos, 1984). The combination of chronic strain and low levels of support may be more detrimental to the course of depression than the occurrence of dramatic, discrete life events (Goering *et al*, 1983*a*).

Although there is obviously a need for further study of the influence of marital support on the post-hospital course of depressed women (especially the interaction between personality traits and social support), our findings have clinical implications which are intriguing. It appears that the depressed woman's perception of marital support may be a better prognostic indicator of symptom course than the clinical characteristics of her depressive illness. It also appears that marital assessment and treatment are critical interventions for depressed women (Friedman, 1975; Corney, 1987).

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