Psychosocial Interventions for Bipolar Disorder

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Patients with bipolar disorder are prone to recurrences even when they are maintained on lithium or anticonvulsant regimens. The authors argue that the outpatient treatment of bipolar disorder should involve both somatic and psychosocial components. Psychosocial interventions can enhance patients' adherence to medications, ability to cope with environmental stress triggers, and social-occupational functioning. Family and marital psychoeducational interventions and individual interpersonal and social rhythm therapy have received the most empirical support in experimental trials. These interventions, when combined with medications, appear effective in improving symptomatic functioning during maintenance treatment. A beginning literature also supports the utility of individual cognitive-behavioral and psychoeducational approaches, particularly in enhancing medication adherence. Identifying the optimal format for psychosocial treatments and elucidating their mechanisms of action are topics for further study.
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Doc, I need to spend time talking with you, because taking the medicine makes me feel like I am sitting in a padded seat instead of on a metal bench, but inside it is the same old ride.

—R.H.

Although it is widely acknowledged that bipolar disorders have a biological diathesis with a large genetic component, it also is widely recognized that cognitive, behavioral, and external stressors are frequently involved in the activation of the biological dysregulation. Focused clinical research on biological factors associated with bipolar disorders has led to the identification of medications that successfully ameliorate bipolar symptoms. There is little doubt that lithium and anticonvulsants are efficacious treatments for bipolar disorders. The majority of patients can now experience some level of mood stabilization with the continued use of these medications. It is important to note, however, that adjunctive psychosocial interventions enhance and make more enduring the effects of somatic interventions. Ironically, although patients can now benefit to a greater extent from psychosocial interventions because of drug-induced mood stabilization, adjunctive psychosocial treatments are utilized less frequently than they were before the introduction of lithium.[1]

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Psychosocial interventions have not been integrated with somatic interventions on a widespread basis for 2 major reasons. First, many traditional psychodynamic therapies have maintained that somatic and psychotherapeutic interventions are incompatible because the effects of the medication "mask" the underlying psychological problem. Thus, psychosocial treatments have been infrequently utilized in conjunction with mood-stabilizing medications. However, more contemporary models of psychotherapy—such as interpersonal psychotherapy (IPT), cognitive-behavioral therapy (CBT), and family-focused therapy (FFT)—maintain that medications and psychotherapy not only are compatible but also may, in fact, be synergistic.[2,3] Second, because patients function so much better while taking medications at the appropriate dosage levels, many therapists have concluded that adjunctive psychosocial interventions are not important. Certainly, the pressures of managed care have further contributed to the decreased use of what may be perceived as nonessential interventions, even when both the quality of life and the long-term financial savings may be greater with the combination of medication and psychosocial interventions.

It is quite unfortunate that as we have learned more about the pathophysiology and genetic underpinnings of bipolar disorders, therapeutic interventions have focused almost entirely on medical interventions, with only minor attention given to psychosocial interventions. In 1989, the National Institute of Mental Health consensus conference on bipolar disorders concluded that "perhaps the most underdeveloped area in the treatment of bipolar disorder is the use of adjunct psychosocial therapies."[4] This statement is probably as accurate now as it was then.

Fortunately, a handful of clinical investigators have continued to evaluate the effects of employing psychosocial interventions in conjunction with pharmacotherapy, and

progress has been made over the last decade.[2,3] On the basis of these investigations, we argue that the most efficacious, effective, and lasting treatments for bipolar disorder include both somatic and psychosocial components. We outline the reasons why it is important to integrate psychosocial with somatic treatments and then describe those treatments for which at least some empirical support exists.

REASONS FOR COMBINING PSYCHOSOCIAL AND SOMATIC TREATMENTS

It is important to combine psychosocial interventions with medications for several reasons. As Miklowitz and Frank[3] have noted, there appears to be a ceiling on the effectiveness of standard medication regimens for bipolar disorder when the drugs are administered alone. Only about 60% of bipolar patients respond to lithium or anticonvulsants alone.[5–7] Furthermore, only about 40% of patients "survive" (remain well without an illness recurrence) over 2- to 3-year periods even when maintained on standard dosages.[8–10] The 2- to 3-year survival rate increases to only about 60% at high dosages, which produce greater side effects and increase the probability of withdrawal from maintenance therapy.[10] These statistics as well as quality of life and cost of care can be improved on by integrating psychosocial treatments with these widely used drug regimens.

As adjunctive treatment to pharmacotherapy, psychosocial interventions have been designed to increase adherence to medical regimens, decrease relapse/recurrence rates and rehospitalization, and improve the quality of life of patients and their families. Such treatments also may enhance the social and occupational functioning of patients, as well as enhance patients' capacities to manage stressors in the social-occupational milieu. Individual CBT, IPT, and FFT can help to decrease denial of the disorder and encourage acceptance of its permanence and impact on patients' lives. By developing coping skills for both manic and depressive episodes, the patient may lessen the functional impairment associated with the disorder. Marital and family therapy in particular can serve to facilitate the protective effects of familial support.

The primary components of a multifaceted psychosocial treatment program include psychoeducation, attention to medication adherence, individual therapy, and marital and family therapy. These components may be employed independently or combined in the appropriate clinical fashion for each patient. Discussions of each of these psychosocial interventions follow.

PSYCHOEDUCATION AND MEDICATION ADHERENCE

It is less-than-ideal clinical practice for patients to be diagnosed with bipolar disorder and started on a course of medication without receiving much education about the nature of the disorder or about the prescribed medication. Yet, bipolar patients frequently complain about the lack of information they receive.[11] A few studies demonstrate the positive impact of fairly minimal psychoeducation regarding the disorder and its treatment. Educational programs appear to increase both the patients' satisfaction with treatment and medication compliance.[12,13] Perry and colleagues[14] showed that an individually administered psychoeducation program of 7 to 12 sessions, oriented toward recognizing the early symptoms of manic relapse, was superior to routine care in delaying manic relapses and improving social-occupational functioning among 69 episodic bipolar patients.

It is important to demonstrate that psychoeducational programs substantially increase medication adherence, because nearly one half of successfully treated lithium patients do not adhere to their prescribed medication regimen.[11] Beyond the possibility of relapse/recurrence associated with noncompliance, there is the likelihood of discontinuation-induced refractoriness to further lithium treatment as well as a possible "kindling" effect associated with repeated episodes of the disorder.[15] These latter findings underscore the importance of successful medication compliance and the reduced relapse associated with such compliance. Within this context, a brief psychoeducational program to accompany treatment with medications seems likely to enhance compliance and thereby positively affect the quality of medical practice.

In addition to the education-focused programs previously noted, one study of an individual psychotherapeutic intervention[16] focused on medication adherence and compliance. In this study, individual psychotherapy (CBT) was evaluated as an adjunctive treatment to maintain lithium treatment. One half of 28 newly lithium-treated outpatients were randomly assigned to receive lithium alone; the other 14 patients received lithium and a medication compliance program based on CBT principles. The program was designed to modify specific behaviors and cognitive patterns hypothesized to interfere with medication compliance. Therapy consisted of 6 weekly 1-hour individual therapy sessions. At posttreatment and at 6-month follow-up, patients in the CBT group had significantly better lithium adherence than the lithium-alone patients. During the 6-month follow-up, the CBT group had fewer hospitalizations (2 vs. 8) and significantly fewer mood disorder episodes precipitated by medication nonadherence. Further examination of this compliance-based intervention is clearly warranted.

Summary

Although there are only a handful of small studies, the data that do exist support the significance of including psychoeducation and brief, individual CBT for enhancing medication compliance and achieving superior clinical

outcomes. Unfortunately, none of these studies includes long-term follow-up, so additional studies are needed before strong conclusions can be drawn about the sustained effects of such adjunctive programs.

INDIVIDUAL PSYCHOTHERAPY: INTERPERSONAL AND SOCIAL RHYTHM THERAPY

Although both CBT and IPT have been studied fairly extensively as treatments for major depressive disorder, there have been far fewer evaluations of these therapies as adjunctive treatments for bipolar disorder. In fact, the Cochran study[16] focusing on medication adherence remains the only major systematic evaluation of CBT. Recently, Frank and colleagues[17] have begun systematic evaluations of IPT combined with social rhythm therapy (IPSRT) for patients with bipolar disorders.

Research Background

The observation has been made repeatedly that bipolar patients are sensitive to life events.[18] For example, Ellicott et al.[19] found that bipolar patients (N = 61) with high life-events stress scores were 4.5 times more likely to relapse over a 2-year follow-up period than those with medium or low life-events stress scores. Johnson and Miller[20] found that recovery from an episode of bipolar disorder took much longer (median = 395 days) when patients had a severe life event prior to their episode than when no life event had occurred (median = 112 days). In a 2-year follow-up study, Johnson et al.[21] found that life events predicted levels of depression during follow-up, but not mania. They noted further that patients with high social supports (i.e., confiding relationships) recovered more quickly from bipolar episodes and were less vulnerable to increases in symptoms of depression (but not mania) over time, independent of life events.

Although there are probably many avenues by which life events influence bipolar symptoms, at least one important pathway concerns the disruption of daily routines and sleep/wake cycles.[22–24] The social rhythm stability hypothesis states that life events that disrupt predictable daily routines and sleep/wake cycles (social rhythms) are particularly potent in precipitating symptoms of mania and depression.[23,24] In support of this model, Malkoff-Schwartz et al.[25] found that, in the 8 weeks prior to a manic episode, bipolar I patients experienced a disproportionate prevalence of life events that were likely to have disrupted sleep/wake cycles (e.g., birth of a baby, transmeridian air travel). Interestingly, and in contrast to the above-cited studies on life events, an excess of socially disruptive life events was not observed in the 8 weeks prior to depressive episodes.

IPSRT Studies

The IPSRT model of psychotherapy for bipolar disorder derives from the life event and social rhythm literature.[17,26,27] This model includes the core elements of Klerman and colleagues'[28] IPT for depression but is disorder-specific in that it pays particular attention to the disruptions that interpersonal events cause for the patient's daily routines and, subsequently, mood states. One of its core interventions involves asking patients to keep track of their daily activities through a self-report assignment called the Social Rhythm Metric.[29] Gradually, through IPSRT and the daily monitoring of activities and mood states, patients learn to find an optimal balance between social stimulation, stress, sleep, and mood, even in the face of life stressors that would provoke changes in these routines. As IPSRT progresses, patients address interpersonal problems that are associated with the onset and persistence of bipolar episodes, including grief reactions (including grieving over the lost healthy self), interpersonal disputes, role transitions, and interpersonal deficits.

In an ongoing study of IPSRT (the Maintenance Therapies in Bipolar Disorder study),[26,27] patients who began in an acute bipolar episode were randomly assigned to 45-minute IPSRT sessions (with mood-stabilizing medications) or to an intensive clinical management intervention, also with medications. The latter consisted of 20-minute sessions with a psychotherapist who focused on medication effects and symptom management. Session frequencies were identical across the 2 groups. Randomization was done first during a preliminary, acute phase of treatment, with sessions held weekly, and again at the beginning of a preventive (maintenance) phase of treatment, with sessions held once every 2 weeks or monthly for up to 2 years.

Preliminary results suggest that patients in IPSRT show significantly greater stability of social routines and sleep/wake cycles with increasing time (up to 52 weeks) in preliminary treatment. Patients in intensive clinical management who completed the Social Rhythm Metric but for whom it was not a focus of treatment did not show changes in lifestyle regularity over the same interval.[26] Preliminary results do not suggest a benefit for IPSRT in terms of delaying full recurrences of mood disorder. However, a recent follow-up of patients in the trial, in which subsyndromal as well as syndromal fluctuations were examined, indicated that patients in IPSRT who completed a full year of preventive treatment (N = 86) were significantly more likely to maintain a euthymic state over the course of the year than those in intensive clinical management. In contrast, those in clinical management were less likely to be euthymic over the course of preventive treatment; in fact, the proportion in a depressed phase increased over the interval. No treatment group differences were found for manic symptoms.[30]

Interestingly, patients who stayed in the same psychosocial treatment from the preliminary to the preventive phase (i.e., received either continuous IPT or continuous clinical management) had fewer recurrences than those

who switched from one modality to the other when making the transition from the preliminary to the preventive phase. Thus, consistency of routines, including the routine of the patient's psychosocial treatment, may protect against a deteriorating course of the disorder.[27]

Summary

Individual IPT is promising when delivered in conjunction with mood-stabilizing medications in the preliminary acute and preventive (maintenance) phases of treatment of bipolar disorder. Given that the model was originally derived from the interpersonal model for depression, it is perhaps not surprising that IPSRT ameliorates depressive symptoms more than manic symptoms. Whether IPSRT improves symptoms by regulating social rhythms has not yet been demonstrated, although the final results from the Maintenance Therapies in Bipolar Disorders trial are still pending.

FAMILY PSYCHOEDUCATIONAL MODELS OF TREATMENT

Basic Assumptions and Background Research

Family psychoeducational models assume that the environmental milieu within which a bipolar, manic, or depressed patient resides is an important determinant of the likelihood of relapse. These models typically target the postepisode aftercare period. Unlike older family systems models, family psychoeducational models assume that the family or marital environment is a moderator of the degree to which underlying biological vulnerability mechanisms are expressed as symptomatic states. As a consequence, family psychoeducation is delivered along with maintenance medication. Psychoeducational models derive from previous work on schizophrenia and psychoeducational treatment. Behavioral and psychoeducational family models are effective adjuncts to neuroleptic regimens in delaying relapses of schizophrenia.[31,32]

Psychoeducational models acknowledge that episodes of psychiatric disorder create a great emotional, financial, and practical burden for caregiving relatives. When under this kind of stress, many relatives show high levels of expressed emotion (EE) behaviors. These behaviors include high levels of criticism (statements of dislike or resentment), hostility, and emotional overinvolvement (overconcern, overprotection, inordinately self-sacrificing behaviors). In 24 of 27 studies of schizophrenia, rates of relapse have been 2 to 3 times higher over 9-month to 1-year follow-up periods if the patient returned after an episode of illness to a highly critical, hostile, and/or emotionally overinvolved high-EE home than if he or she returned to a low-EE home (not excessively critical, nonhostile, normally involved).[33] This result has been observed in 4 studies of bipolar disorder and 3 studies of major depressive disorder as well.[3,33]

In most of the studies, EE has been assessed via the Camberwell Family Interview, a 1- to 1½-hour interview with caregiving relatives conducted while the patient is acutely ill.[34] However, when high- and low-EE families are observed 1 month later, after the height of the patient's episode has receded, there are observable differences in family interaction. Overt behavior is more negative in high-EE families: high levels of criticism, negative nonverbal behaviors, and attack-counterattack cycles distinguish these families from low-EE families, whether the patient is schizophrenic, bipolar, or depressed.[35–39] Bipolar patients are active participants in these interactions (especially when hypomanic) and often provoke anger, hostility, or intrusiveness in relatives. In part, these reactions among relatives may reflect an internal attributional process: high-EE relatives are more prone than low-EE relatives to attribute the patient's negative behaviors (including symptoms) to factors that are internal to, personal to, and controllable by the patient.[38,40–43] Following from these and other research observations, family psychoeducational models for bipolar disorder have proceeded with 2 major aims. First, patients and family members should benefit from education about the nature, symptoms, course, and treatment of bipolar disorder, particularly education that addresses the controllability versus uncontrollability of mood disorder symptoms. Second, the family's adoption and continued use of communication and problem-solving skills should help reduce tension in the postepisode family milieu.

The Colorado and UCLA Studies of FFT

Family-focused treatment is a 9-month psychoeducational treatment for bipolar patients in any type of family milieu.[44] It is delivered in 3 modules over 21 sessions (weekly for 12 weeks, once every 2 weeks for 12 weeks, and monthly for 3 months). In the first module, psychoeducation, patients and relatives (typically parents or spouses) learn about the nature, etiology, and treatment of bipolar disorder. They are taught to recognize the signs and symptoms of new episodes and to develop a relapse prevention plan. A second module focuses on behavior rehearsal exercises designed to enhance communication between patients and relatives (e.g., active listening, delivering positive feedback). A final module trains patients and relatives to define and solve specific family problems (e.g., how to manage the household). Thus, FFT targets the lack of understanding of the disorder presumed in part to underlie high-EE attitudes and enhances family members' and patients' skills for improving family interactions.

Two studies of FFT have been conducted, one at the University of Colorado[44–46] and the other at the University of California, Los Angeles (UCLA).[47,48] The 2 studies included patients who had had a recent, acute episode of bipolar disorder and were being maintained with mood-stabilizing medications (typically lithium or an anticonvul-

sant, with adjunctive agents as needed). However, the comparison groups differed: in the Colorado study,[44–46] the comparison group was given 2 sessions of family education and individual crisis sessions as needed over 9 months (crisis management group). The UCLA study[47,48] compared FFT with an individually focused patient intervention (symptom management and problem solving) delivered with an intensity identical to the FFT (21 sessions over 9 months).

In the Colorado study, FFT and medication led to lower rates of relapse than did the comparison crisis management intervention and medication (29% vs. 53%).[45] In survival analysis models, which were computed on the full intent-to-treat sample (N = 101), FFT was associated with longer delays prior to relapse over the 12 months than crisis management. When only treatment completers (N = 79) were considered, patients in FFT had less severe depressive symptoms over the 12 months than those in crisis management, a difference that was not observed until 9 months into treatment. Neither medication regimens nor compliance accounted for the results.

In the UCLA study (N = 53), no effects of FFT were seen over the first year of treatment.[48] However, effects favoring FFT were consistently observed over a 2-year follow-up on time to relapse and time to rehospitalization. Again, results could not be accounted for by medication variables. The delayed clinical effects of FFT seen in both studies suggest that patients and family members need time to absorb the education and skill-training materials into their day-to-day lives before ameliorative effects on the illness are seen.

What attributes of families change as a result of FFT? Simoneau et al.[46] examined verbatim transcripts of 10-minute family problem-solving discussions from the Colorado study, obtained prior to the FFT or crisis management interventions and again at 12 months (once the treatment protocols had ended). Among 44 families who returned for the 1-year assessment, no treatment differences were found for changes in negative interactional behaviors (e.g., frequency of parent/patient criticisms). However, families who received FFT showed a 37% increase in positive interactional behaviors over the year, whereas families in crisis management intervention showed slight decreases (–6%) in positive interactional behaviors during this interval. The increases in positive behaviors occurred among patients as well as relatives. More–fine-tuned analyses revealed that the effects of FFT were largely on positive nonverbal behaviors (e.g., smiling, nodding, affectionate voice tone) rather than positive verbal behaviors (e.g., statements of acceptance or acknowledgment).

The Cornell Studies of Family Intervention

Perhaps the first controlled trial of family psychoeducation for mood disorder patients was conducted by Glick, Clarkin, and associates.[49,50] This group at Cornell Medical Center randomly assigned 186 psychotic and affectively ill inpatients to brief family intervention (9 weekly or twice-weekly sessions) plus standard medications or standard hospital care (also with medications). The intervention, conducted only on an inpatient basis, targeted posthospital coping and adjustment and educated patients and families about the nature and treatment of psychiatric illness. Broad effects of the family intervention on symptoms and global functioning were observed at 6- and 18-month follow-up; these effects favored female patients with affective and schizophrenic disorders. Also, at 6 and 18 months, family treatment was associated with improvements in relatives' attitudes about female patients (e.g., less rejecting feelings about the patient). When the data were analyzed separately for the smaller bipolar subgroup (N = 21), treatment effects at various timepoints were still observed, but less consistently and again only among females.[49–52]

A second study examined married bipolar patients (mean age = 47.7 years) who were consecutively admitted to the Cornell inpatient and outpatient psychiatric services.[53] All patients were given standard medications, including mood stabilizers, antidepressants, and antipsychotics. Patients in the experimental group (N = 18) also received 25 outpatient sessions of psychoeducational marital intervention over 11 months. The objectives of the intervention were to encourage the spouse and patient to develop more positive attitudes toward each other, to decrease negativity in marital interactions, and to enlist the spouse in support of the patient's medication adherence. Patients in the comparison group (N = 15) received medication management but no marital intervention. At 11 months, patients given marital therapy plus medication had superior medication adherence scores and greater improvement in overall (Global Assessment Scale) scores. However, there were no effects of psychoeducation on the course of mood disorder symptoms. To date, there have been no reports on the effects of this psychoeducational intervention on family stress variables.

The Brown Study of Group Family Therapy

Miller and colleagues[54,55] at Brown Medical Center have completed 2 studies of family therapy for bipolar disorder. The first was a small study[54] that compared the effects of adding family therapy to standard medication treatment. In their pilot work, they found that bipolar patients in dysfunctional families had twice the rate of rehospitalization over a 5-year follow-up period compared with bipolar patients in families that were not dysfunctional. They predicted, therefore, that an intervention focused on improving family functioning might lead not only to improved family functioning but also to decreased rates of relapse/recurrence and decreased rehospitalizations. In a pilot study of 14 patients,[54] they found that family therapy for bipolar patients in dysfunctional families improved the quality of family life and decreased the rate of relapse.

In a recently completed follow-up study,[55] these investigators studied 92 very carefully diagnosed bipolar patients by comparing the effects of 3 treatment approaches: (1) standard treatment (i.e., medication plus clinical management), (2) standard treatment plus family therapy given to each participating family separately, and (3) standard treatment plus multifamily therapy, in which treatment was presented to groups of families. Family therapy consisted of 6 to 8 sessions during the first 4 months of treatment with "booster" sessions as clinically indicated. Multifamily therapy comprised 4 to 6 patients and their families; participants met in 90-minute sessions for 6 consecutive weeks, and "reunion" meetings were held every 6 months. In all patients, treatment continued for 28 months.

Strict recovery criteria were used, including continuing in treatment and having very low depression and mania rating scores. Slightly more than 30% of the family therapy patients recovered, whereas fewer than 20% of the standard treatment patients were recovered. Perhaps the most important finding of this study was that the effects of family interventions on the symptomatic outcome of patients were especially pronounced for patients in families who exhibited poor family functioning prior to treatment. Among dysfunctional families, there was a significant difference favoring the 2 family therapy approaches over the standard treatment in terms of the proportion of patients recovered. However, the 2 family therapy approaches did not differ from each other in these proportions. There were no significant treatment effects on the response rates of patients in families with good functioning prior to treatment; indeed, patients in these families showed very little symptomatic improvement regardless of the treatment group to which they were assigned.

Summary

The 6 studies are consistent in suggesting that family or marital psychoeducation is an efficacious adjunct to pharmacotherapy for bipolar patients who are recovering from an episode of mood disorder. Modifying the postepisode family milieu may provide additional protection for the patient from early relapse or ongoing residual symptoms. The subgroups of bipolar patients who do and do not benefit from family intervention have not been identified. Also, with the exception of the UCLA study,[48] these studies have evaluated family treatment as an add-on to pharmacotherapy rather than comparing it with another form of psychosocial treatment of similar intensity. Thus, the specific effects of family psychoeducation are not yet clear.

Finally, it is not certain that the family must be involved in order to see clinical benefits from psychoeducation. Perry et al.[14] demonstrated that individual psychoeducation was superior to routine care in delaying manic relapses and improving social-occupational functioning among 69 episodic bipolar patients. The effects of family versus individual psychoeducation deserve further examination.

CONCLUSION

Bipolar patients will be offered more efficacious, effective, and lasting treatment when psychosocial interventions are combined with somatic interventions. Several studies have suggested that psychoeducation and medication compliance interventions enhance the quality of treatment and sustain adherence to medication regimens, resulting in decreased relapse/recurrence rates of bipolar disorder. Initial data suggest that adjunctive IPSRT may promote euthymia in a larger percentage of patients receiving standard medication treatment. The mechanisms of these treatment effects have not been identified, but it is interesting to note that the effect seems stronger for depressive symptoms. The strongest psychosocial treatment data indicate that family therapy improves family functioning, decreases symptoms (especially depressive symptoms) of bipolar disorder, and sustains treatment effects when it is added to standard medication treatments. Thus, it seems clinically important to combine these psychosocial interventions with somatic interventions for the successful treatment of bipolar disorders.

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