

## A Psycho Educational Program for Relapse Prevention in Bipolar Disorder

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**Abstracts:** Bipolar Mood Disorder (BMD) affects approximately 1% of the adult population. It is an episodic long-term illness, which causes substantial psychosocial morbidity. Using psychosocial intervention in addition to maintenance pharmacological treatment may increase medication compliance, decrease hospitalization and increase overall functioning. This study examined whether a psycho educational program for relapse prevention is more effective than treatment as usual in reducing relapse and rehospitalization rates among outpatients with BMD. Sixty outpatients with DSM IV bipolar disorder diagnosis were randomly assigned to receive either the psychosocial program (experimental group  $n = 30$ ) or usual treatment (control group  $n = 30$ ) and were followed up for an 18-months prospective controlled study. Patients in both groups were prescribed standard doses of maintenance lithium carbonate. Treatment with experimental group consisted of a combination of 6 sessions of biweekly psycho educational therapy and lithium therapy. The control group consisted routine advices and lithium. Outcome rates over 18 months were in 7 patients (23.3%) for relapse and 5 patients (16.6%) for rehospitalization in the experimental group, compared with 11 patients (36.6%) for relapse and 8 patients (26.6%) for rehospitalization in control group ( $p = 0.01$  and  $p = 0.05$ , respectively). The findings of this study suggest the beneficial effects of psycho educational program in reducing of relapse in BMD.

**Key words:** Bipolar disorder, psycho education, relapse prevention

### INTRODUCTION

Bipolar Mood Disorder (BMD) or Manic Depressive illness (MD) affects approximately 1% of adult population (APA, 1994). It is an episodic long-term illness which causes substantial psychosocial morbidity that frequently affects the patient's marriage, children, occupation and other aspect of the patient's life (Benjamin *et al.*, 2003). Divorce rate is substantially higher in patients with BMD (Benjamin *et al.*, 2003). Ninety percent of person who have a single manic episode are likely to have another. As the disorder progress, the time between episodes often decreases. After about five episodes, however, the inter-episode interval often stabilizes at 6-9 months. Five to 15% of person with bipolar disorder have four or more episodes per year and can be classified as rapid cyclers (Benjamin *et al.*, 2003). High cost extensive morbidity and availability of effective treatment combine to make BMD a matter of clinical and public health (Michael *et al.*, 2003). In the United States the cost of bipolar disorder is estimated to exceed 45 billion dollars per year (Beatrice and Aubry, 2007). Therefore relapse prevention and reducing of rehospitalization are very important (Beatrice and Aubry, 2007). Mood stabilizing drugs such as lithium, carbamazepine and valproate have important

role in relapse prevention of this illness (Keck *et al.*, 1997). Lithium carbonate originally appeared to be effective in some 70-80% of bipolar patients, but current estimates suggest that even with adjunctive use of antidepressants and antipsychotics, a figure of 40-50% efficacy in many lithium clinics is more accurate (Keck *et al.*, 1997). However, patients with this disorder are frequently ambivalent about treatment. This ambivalence often takes the form of noncompliance with medication and other treatments. Noncompliance with mood stabilizing medications is a major cause of relapse (Keck *et al.*, 1997; Parikh *et al.*, 1997). Until recently research into the efficacy of treatment of bipolar disorder focused mainly on the pharmacological treatment. Over the last decade more and more research has concentrated on the psychological treatments for this disorder (Rothbaum and Astin, 2000). Despite the use of mood stabilizing agents, longitudinal data suggests relapse rate as high as 40% in 1 year, 60% in 2 year and 73% in 5 or more years (Michael *et al.*, 2003; Beatrice and Aubry, 2007; Keck *et al.*, 1997; Parikh *et al.*, 1997; Rothbaum and Astin, 2000; Simoneau *et al.*, 1999) and overall adherence to medication treatment brings with its own challenges, with poor medication compliance evident in one half to two thirds of patients within the first

12 month of treatment (Michael *et al.*, 2003). All of these findings encourage the search for additional modalities of intervention for bipolar disorder (Michael *et al.*, 2003; Beatrice and Aubry, 2007; Keck *et al.*, 1997; Parikh *et al.*, 1997; Rothbaum and Astin, 2000; Simoneau *et al.*, 1999). Using psychosocial intervention in addition to maintenance pharmacological treatment may increase medication compliance, decrease hospitalization and increase overall functioning (American Psychiatric Association, 1994; Keck *et al.*, 1997). Psychological intervention includes a specific set of interventions, some of which have been included in concept of supportive psychotherapy and or insight oriented psychotherapy and others in the concept of clinical management (Benjamin *et al.*, 2003; Parikh *et al.*, 1997). The general goals, are to assess and treat acute exacerbations, prevent recurrences, improve inter episode functioning and provide assistance, insight and support to the patients and their family (Rothbaum and Astin, 2000; Simoneau *et al.*, 1999; Frank *et al.*, 1999). This study examined whether, a psycho educational program for relapse prevention is more effective than treatment as usual in reducing relapse and rehospitalization rates among outpatients with BMD. Patients with BMD often benefit from education and feedback regarding their illness, prognosis and treatment (Benjamin *et al.*, 2003; Rothbaum and Astin, 2000). In this study psycho educational program for relapse prevention include providing education regarding bipolar disorder, enhancing treatment compliance, promoting regular pattern of activity and wakefulness, promoting understanding of and adaptation to psychosocial effects of BMD, identifying new episode early and reducing the morbidity and sequel of bipolar disorder. The study compares the effectiveness of psycho educational program (experimental group) with treatment as usual (control group) in preventing relapse and rehospitalization rates in BMD outpatients.

## MATERIALS AND METHODS

Sixty outpatients of Razi mental hospital of Tabriz University of Medical sciences with DSM iv bipolar disorder completed the study. The 60 participants were drawn from 94 outpatients who were screened for the study. Of these 94 (34 or 36%) were excluded for the following reasons: No regular contact with examiner, aged less than 18 or over 60, concurrent substance abuse or dependence and lived too far away. The 60 remaining patients were randomly assigned to two groups: The experimental (n = 30) and control (n = 30). All patients 60 were treated with lithium maintenance therapy

(900-1200 mg day<sup>-1</sup>) and they were in full remission phase at the baseline of study. The control group continued only lithium and received routine advices. The experimental group and their family received 6 sessions of biweekly psycho education program individually. We considered the psychosocial risk factors associated with bipolar disorder and designed our study to effective psychoeducation to diminish these effects and improve outcome (Marvin *et al.*, 2000; Miklowitz and Alloy, 1999; Callahan and Bauer, 1999). So, the educational component consisted of 5 topics: Become knowledgeable about the illness specially the importance of maintenance therapy. Learn to recognize prodromal symptom. Learn to have a pattern of sleep and activity. Use the knowledge as a tool to enhance compliance. Learn to avoid from emotional stress (Frank and Thase, 1999; Rothbaum and Astin, 2000; Marcus *et al.*, 1999). They were followed up for an 18 months prospective controlled study.

Prospective rating was made at each monthly clinical visit using the clinical findings, relapse and rehospitalization rates and Global Assessment of Functioning scale (GAF). The GAF were administered at baseline and at 6, 12 and 18 months and at the each relapse episode. Relapse and rehospitalization outcomes analyzed by z test.

## RESULTS

Outcome rates over 18 months were 23.3% (7 patients) for relapse and 16.6% (5 patients) for rehospitalization in the 30 patients in the experimental group, compared with 36.6% (11 patients) for relapse and 26.6% (8 patients) for rehospitalization in the 30 patients in the control group (p = 0.01 and p = 0.05, respectively). Some patients have more than one relapse or rehospitalization at the 18 months period of follow up, so the total number of relapses was 9 for experimental group vs 15 for control groups (p = 0.01). The total days of staying in hospital were 90 days for experimental group vs 165 days for control group (p = 0.01). The mean GAF score for experimental group was 68 vs. 55 for control group (Table 1).

## DISCUSSION

This study examined the efficacy of an 18 month program of psychoeducational treatment and pharmacotherapy versus pharmacotherapy alone and standard management. There were 13.3% reduction of relapse and 10% reduction of rehospitalization rate in the total sample. This statistically significant reduction was accompanied by far lower the total days of hospitalization

Table 1: Outcome results in experimental and control groups

| Outcome                | Experimental group n = 30 | Control group n = 30 | Total      | p value  |
|------------------------|---------------------------|----------------------|------------|----------|
| Number of Patients     | 30                        | 30                   | 60         | —        |
| Relapse rate           | 7 (23.3%)                 | 11 (36.6%)           | 18 (59.9%) | p = 0.01 |
| Rehospitalization rate | 5 (16.6%)                 | 8 (26.6%)            | 13 (43.2%) | p = 0.05 |
| Total hospital days    | 90                        | 165                  | 255        | p = 0.01 |
| Mean GAF scores        | 68                        | 55                   | 61.5       | p = 0.05 |

(75 days reduction). The sample experienced mean 13-point improvement in GAF scores. Result showed the significant differences in outcome rates in 2 groups. Possible causes in evaluating the results of this study should be recognized as:

**Enhancing treatment compliance:** Patients education assist in reinforcing his or her role as collaborator in the treatment of this persistent illness (Van den Berg *et al.*, 2006; Vieta and Colom, 2004). Our patients in this study were educated about the nature of the illness and its symptom and outcome. It had a good result in reducing relapse as showed in many other studies (Simoneau *et al.*, 1999; Frank *et al.*, 1999).

**Identifying new episodes early:** Patients education assists them to recognize the symptom of new episodes (Olom *et al.*, 1998). They will know when to report subsyndromal symptoms and gradually learn to increase or decrease medications with the waxing and waning of the illness (Olom *et al.*, 2003; Colom *et al.*, 2005). Many patients experience changes in sleep patterns early in the development of an episode (American Psychiatric Association, 1994; Benjamin *et al.*, 2003; Michael *et al.*, 2003; Beatrice and Aubry, 2007; Keck *et al.*, 1997; Parikh *et al.*, 1997; Rothbaum and Astin, 2000; Simoneau *et al.*, 1999; Frank *et al.*, 1999; Marvin *et al.*, 2000; Miklowitz and Alloy, 1999; Callahan and Bauer, 1999; Rothbaum and Astin, 2000; Marcus *et al.*, 1999; Van den Berg *et al.*, 2006; Vieta and Colom, 2004; Olom *et al.*, 1998, 2003; Colom *et al.*, 2005; Lam *et al.*, 2005). The identification of these early prodromal signs or symptoms is facilitated by the presence of a consistent relationship between the psychiatrist and the patient as well as the patient's family (Scott *et al.*, 2006) our patients were educated about them.

**Promoting regular patterns of activity and wakefulness:** Many studies reported that patients with BMD may benefit from regular patterns of daily activity including sleeping, eating, physical activity and social and/or emotional stimulation (American Psychiatric Association, 1994; Benjamin *et al.*, 2003; Michael *et al.*, 2003). Some patients find that if they establish regular patterns of sleeping, other important aspects of life fall into regular patterns as well (American Psychiatric Association, 1994; Benjamin *et al.*, 2003; Michael *et al.*, 2003).

The finding of present study indicated that although pharmacological treatment are critical component in the treatment of patients with acute BMD as well as prevention of future episodes, but psychosocial intervention also has significant benefits in relapse prevention of illness. Using psychosocial intervention in addition to maintenance therapy may increase medication compliance and identifying prodromal symptoms and having a pattern of sleeping which they can decrease relapse and increase overall functioning.

## CONCLUSION

Given the results published to date, psychoeducation should be part of the integrated treatment of bipolar disorder. As a complement to pharmacotherapy, psychoeducation delivered individually or in a group setting constitutes a first line psychological intervention (Clarkin *et al.*, 1998).

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