# **Original Article**

## **Recurrence and Relapse in Bipolar Mood Disorder**

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#### Abstract

**Background:** Despite the effectiveness of pharmacotherapy in acute phase of bipolar mood disorder, patients often experience relapses or recurrent episodes. Hospitalization of patients need a great deal of financial and humanistic resources which can be saved through understanding more about the rate of relapse and factors affecting this rate.

**Methods:** In a descriptive analytical study, 380 patients with bipolar disorder who were hospitalized in psychiatric emergency ward of Noor hospital, Isfahan, Iran, were followed. Each patient was considered for; the frequency of relapse and recurrence, kind of pharmachotherapy, presence of psychotherapeutic treatments, frequency of visits by psychiatrist and the rank of present episode.

**Results:** The overall prevalence of recurrence was 42.2%. Recurrence was lower in patients using lithium carbonate or sodium valproate or combined therapy (about 40%), compared to those using carbamazepine (80%). Recurrence was higher in patients treated with only pharmacotherapy (44.5%) compared to those treated with both pharmacotherapy and psychotherapy (22.2%). Patients who were visited monthy by psychiatrist had lower rate of recurrence compared to those who had irregular visits.

**Conclusion:** The higher rate of recurrence observed in carbamazepine therapy may be due to its adverse reactions and consequently poor compliance to this drug. Lower rates of recurrence with psychotherapy and regular visits may be related to the preventive effects of these procedures and especially to the effective management of stress.

Key words: Bipolar Mood Disorder, Recurrence, Relapse.

Bipolar mood Disorder (BMD) is a relatively serious psychiatric disorder, with a prevalence of 1.6%<sup>1</sup>. Drugs usually used for the treatment are lithium carbonate, sodium valproate, and carbamazepine. However, Therapeutic responses in many cases are insufficient or nonenduring<sup>2</sup>. Pharmacotherapy is effective in eliminating signs and symptoms of each episode, but, usually it does not prevent relapses and recurrences. So, patients need to be treated and followed longtime<sup>2</sup>.

Because of personal and social functional impairment, hospital beds occupation, direct treatment expenses, stress on family functions, waste of time and many suicides, recurrence and relapse waste many human and financial supplies. Some studies show 38.3%-45% recurrence rate for Bipolar Mood disorder<sup>2, 3</sup>.

In our experience in Iran we encountered more emergency admissions of BMD patients than other patients, but we did not find any studies on its course, and especially about its relapse rate. Surely each country has a pertinent condition that can play a role in exacerbation or remission of disorders. Therefore, in order to prevent the wasting of the above mentioned sources, we need to know the rate of recurrence and relapse, and their related factors in Iran; this study follows these objectives.

## **Materials and Methods**

This is a descriptive – analytic study. We focused our work on 380 BMD patients, who were hospitalized in psychiatric emergency ward in Noor hospital,

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Isfahan, Iran, during 2001. Patients were followed for one year after discharge from hospital. The only exclusion criterion was pharmacotherapy discontinuation. The aims of study were finding:

1) the frequency of relapses and recurrences during one year.

2) correlation of relapses with pharmacotherapy, psychotherapy and psychiatric visits styles. For practical purposes, in this study, we defined recurrence as "starting signs and symptoms after 2 months of remission" and relapse as "starting signs and symptoms within 2 months of being symptom free"<sup>4</sup>.

Data were collected in a questionnaire, from patients, files, and also, from direct patients interview. Frequency data were analyzed using chi - square test. A P value < 0.05 was considered as statistically significant. Data were analyzed on a computer using SPSS 10.0.

#### Results

Three hundred and eighty patients were studied (203 (53.4%) men and 177 (46.6%) women). One hundred and sixty one patients (42.4%) developed relapse or recurrence (45 (28%) relapses and 116 (72%) recurrences). Relapse or Recurrence rates were significantly higher in patients under carbamazepine treatment (12 (80%) compared to 149 (41%) in other forms of drug treatment; P = 0.006, table 1). From 36 patients who were treated with both drug and psycotherapy, only 8 patients (22.2%) showed recurrence or relapse, whereas this rate was 44.5% (153 of 344) in patients who did not receive psychotherapy after discharge. Patients who were visited monthly by a psychiatrist showed 26.1% recurrence and relapse. This rate was 30.55% for bimonthly psychiatrist visit and 67.85% for every 3 months or irregular psychiatrist visit (P < 0.05). The recurrence and relapse rates were 33.3% after the first episode, whereas this figure rose to 85.7% in patients with seven episodes or more (P < 0.05).

## Discussion

We studied the relapse and recurrence rates in bipolar mood disorder during one year after discharge. This rate was 42.2%, just similar to the reports from other studies  $(38.3\%-45\%)^{2,3}$ .

There was no significant difference between relapse and recurrence rates in treatment with lithium carbonate, sodium valproate, or combined regimens. However, we found a significant difference between treatment with carbamazapine and other types of therapy. This rate was higher with carbamazapine. It may be due to irregular drug consumption, lower than effective dosages, or poor effect of carbamazapine in maintenance therapy. Some studies showed better prevention of relapse and recurrence with lithium therapy<sup>5, 6</sup> but others could not prove any correlation between relapse and recurrence and the kind of pharmacotherapy<sup>7</sup>.

The relapse and recurrence rate in patients under combined psycotherapy and pharmacotherapy was lower (22.2%) than those under pharmacotherapy alone (44.5%, P < 0.05). In this report only 9% (36 of 380) of patients attended psychotherapy sessions. Psychotherapy, especially interpersonal one, could prevent relapse and recurrence by reducing tensions<sup>8, 9</sup>. Cognitive psychotherapy could increase compliance, and reduce the number and length of episodes<sup>10</sup>. This study shows increasing relapse and recurrence rate by increasing interval duration of psychiatrist visit. 37% of patients had psychiatric visits irregularly or once every 3 months. In other words, one thirds of patients had insufficient number of visits. It has been recommended that manic patients should have monthly psychiatrist visits<sup>2</sup>. Surely, insufficient information of patients and their families about the need for regular follow up, and, economic difficulties for regular visits may be related to such poor follow up. The study also shows direct correlation between relapse and recurrence rate and the number of previous episodes, which is similar to results of other studies<sup>11</sup>.

**Table 1.** Comparison of relapse or recurrence rate among different types of drug treatment. Data are n(%)

	Relapse or Recurrence	
	Negative	Positive
Carbamazepine	3 (20)	12 (80)
Sodium Valproate	136 (60)	89 (40)*
Lithium Carbonate	46 (57.5)	34 (42.5)
Combined	34 (57)	26 (43.3)

\* P = 0.006 compared to other drugs

In conclusion, this study shows a recurrence and relapse rate of BMD similar to what is found in other countries, and also shows a correlation between relapse and recurrence rate in one hand, and irregular attendance to psychiatrist visit, nonattendance to psychotherapy sessions, and increase in previous episodes, in the other hand.

This study was a non-controlled and non-blinded one. Therefore it can not be considered a perfect study. However as it was a retrospective study in which the researchers and the therapists were not the same people, the results may be used as a guide for other clinical trials and controlled studies. It can be recommend that patient's family should be given sufficient information at discharge visits on the importance of regular psychiatrist visits to decrease relapse and recurrence of the disease.

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