

*Original Article***Family psychoeducation: An adjunctive intervention for mood disorder patients***Fataneh Ghadirian **, *Mahmoud Nasiri ***, *Kobra Karami ******Abstract**

BACKGROUND: In recent years, several controlled studies have showed that family psychoeducational interventions have been effective for improving family function and recovery course in mood disorders. Therefore, we established a family psychoeducational group intervention with 6 sessions to provide information about the illness, early warning signs, cognitive and behavioral strategies for stress management, problem solving and communication skills. We offered group intervention for the patients' relatives. The objective of this study was to evaluate the psychoeducational intervention outcome in mood disorder patients and their relatives in Iran.

METHODS: Seventeen relatives of mood disorder patients attended at 8 sessions (each 90 min) of family psychoeducational group therapy. Relatives' knowledge about mood disorder and their adaptation level were assessed using Understanding Mood Disorder questionnaires (UMDQ) and Family Assessment Device (FAD) before and after the group intervention in two groups. No interventions were done for patients. We assessed demographic variables, symptom severity, drug compliance and global function in patients at the beginning of the study, on discharge and 3 months after the family intervention.

RESULTS: The relatives' knowledge about mood disorders was significantly improved. They also have benefited from the discussions and exchanging information about the useful coping strategies. Relatives also felt significantly better after being informed about the illness. Symptom severity, drug compliance and global function in patients showed no significant differences in follow ups.

CONCLUSION: These findings showed that family psychoeducational interventions in relative of Iranian mood disorder patients, improve their knowledge about the illness and the adaptation level in family is increased.

KEY WORDS: Mood disorder, family psychoeducation, intervention, relatives.

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Mood refers to an internal emotional state of individual. Mood disorder groups are disturbance of mood, accompanied by related cognitive, psychomotor, psycho physiological and interpersonal difficulties.¹

These disorders are very common all over the world, so that WHO has predicted mood disorders will be a health problem in 21 century in the world.²

No one is immune from mood disorders. They are common in men, women, adolescents, and children. This group of disorders is distin-

guished by two important facts;¹ They rank among the most serious health problems in the world² and they are among poorly diagnosed and treated of the health problems.³

Statistical analysis showed that prevalence of mood disorders in the United States is 25 % of all diseases that it is higher than all types of cancers prevalence. Annually, 7% of American people experience mood disorders that is estimated relatively 11 million people in one year. These results show that odds ratio of this disorder is increasing in younger people.^{2,3}

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Mood disorders are severe, chronic and recurrent disorders that represent a major health problem in which leads to economic burden and high mortality rates.¹

The efficacy of some psychological treatments has led to a relevant paradigm shift in the treatment of mood disorders, switching from an exclusively pharmacological therapeutic approach, to a combined model in which pharmacotherapy plays a central role, and psychological interventions help cover the gap between theoretical and "real" effectiveness.⁴

Recently randomized studies on family-focused psychotherapeutic strategies as adjunctive treatments, showed their efficacy in recovery of mood disorder patients, so today's psychological interventions have generally focused on life events or family or marital function.⁵

Pharmacotherapy and family intervention may not only provide a good positive response to treatment but also can help patients and families to cope with its symptoms that may persist in spite of optimal treatment.⁶

Problematic family functioning is not only distressing for the family but also has an impact on the course of illness. Patients with family distress show slower response to treatment. Poor family functioning has a negative impact on both short and long-term recovery. It is also related to the likelihood of maintaining wellness or relapsing. If family respond effectively, the illness maybe relatively brief and remit more readily.⁷

Sharing information about the illness, its treatment, and the early signs and symptoms of relapse, as well as the impact of residual symptoms, can be very helpful for families.⁸ A discussion of illness characteristics and available treatments should lead to an emphasis on compliance. The more family members know about the disorder and the more they feel like collaborative partners in the management of the illness, they support ongoing treatment efforts for their loved one, more.⁵ Common goals of psychoeducational interventions include: providing information on the illness and emotional support to patients and their families, enhancement of treatment compliance, prophylaxis for recur-

rences, avoidance of drug and alcohol use, treatment of anxiety and insomnia, coping with functional impairment and prevention of suicide.⁹

Few studies have examined the combined effects of family psychoeducation and pharmacotherapy for mood disorders. Thus, present study was conducted to assess, whether adjunctive family psychoeducation significantly improve family adaptation and recovery course in mood disorders patients.

Methods

2.1. Patients

The patients were recruited from the University affiliated psychiatric hospital, Ahwaz, Iran. Inclusion criteria were: having fulfill DSM-IV criteria for bipolar I or II disorder or major depression, age between 18 and 65 years old and regular living with a relative. Exclusion criteria were: mental retardation and alcohol or drug abuse.

2.2. Relatives

All relatives and friends of mood disorder patients in intervention group were offered to participate in a group intervention that consisted of 8 weekly 1, 5- hour sessions.

2.3. Assessments of the patients

Diagnosis was confirmed using the structured clinical interview for DSM-IV axis I and II.^{10,11} At baseline, current affective symptomatology was assessed using the Hamilton depression rating scale (HAMD)¹¹ and the Bech-Rafaelsen mania rating scale.¹² Also global functioning was assessed using the Global Assessment Function (GAF) that is normally assessed in V axis of DSM_IV_TR for all patients.^{13,14} Two parameters above were assessed at baseline, on discharge and 3 months after discharge by hospital psychiatrics.

2.4. Assessments for the relatives

The knowledge of mood disorder and its treatment was assessed via Understanding Mood Disorder Questionnaire (UMDQ). It consists of 28 multiple-choice items from which we accumulated a sum score and the percentage of right answers.¹⁵ The way the relatives managed to

cope with their loved ones illness, and their adaptation level was assessed with the Iranian Family Assessment Device (FAD)¹⁶ that is a 60-item scale that assesses the six dimensions of the McMaster Model of Family Functioning and determined the overall health/pathology of family.

Families were assessed in pre and post-treatment, with respect to their knowledge of mood disorder and adaptation level in two groups, and then their feedback was obtained.

The patients were assessed with the questionnaires before intervention and 3 months after the intervention.

2.5. Psychoeducational interventions for the relatives

This intervention consisted of 8 psychoeducational 90-min weekly sessions.¹⁶ Relatives randomly assigned in intervention group and 14 relatives in control group. The patients did not attend in the groups. The relatives received a detailed written handout with the most relevant topics of the sessions. Despite the structured style, discussion was encouraged. Table 1 presents the sessions of the psychoeducational program for relatives. All the sessions were led by the same trained psychiatric nursing that was experienced in mood disorder patients and a psychiatrist of our psychiatric Centre.

Table 1. Sessions of the psychoeducational relative group

| |
|---|
| 1. Introduction and overview |
| 2. Causal and triggering factors |
| 3. Medical treatment |
| 4. Depression: symptoms, coping strategies, relapse prevention |
| 5. Mania: symptoms, coping strategies, relapse prevention |
| 6. Strengthen the own resources |
| 7. Communication and problem solving strategies, coping with suicidal behaviors |
| 8. Questions and feedback |

2.6. Data analysis

All data were analyzed via the statistical package for social sciences (SPSS) software, version

12.0. Comparison of the data between the groups was done using independent t-tests with a level of significance at 5%.

Results

3.1. Sample description

34 mood disorder patients and relatives fulfilling selection criteria were included in this analysis.¹⁵ Relatives of case group participated in the group for 8 psychoeducational sessions. During the following period 3 members of control group dropped out because the patient's diagnosis was changed during the study, or disagreed to continue study and at least 31 subjects remained for analysis (Table 2).

Table 2. Baseline characteristics of the patients

| | Case group (N = 17) | Control group (N = 14) |
|-----------------------------|------------------------|------------------------------|
| Female | 76.5% | 64.3% |
| Age | 32.12 ± 12.56 | 34.36 ± 8.56 |
| Marital status | | |
| Single | 41.2% | 50.0% |
| Married or others | 58.8% | 50.0% |
| Diagnosis | | |
| Bipolar | 80.0% | 78.0% |
| Depression | 20.0% | 22.0% |
| Duration | 7.82 ± 7 | 7.92 ± 6.39 |
| Education | | |
| Secondary school and middle | 53.0% | 64.2% |
| High school and other | 47.0% | 35.8% |

3.2. Relatives' knowledge of mood disorder

There were statistically significant improvements on the sum scores of the knowledge questionnaire of mood disorder before and after the intervention between two groups ($p < 0.001$). The percentage of right answers in the pre-assessment measures were 36.9% at the case group and 35.0% at the control group compared with the post-assessment measures with 72.5% at intervention group and 49.6% of right answers at control group.

Table 3. Baseline characteristics of the relatives

| | Case group (N = 17) | Control group (N = 14) |
|-----------------------------|------------------------|---------------------------|
| Relationship | | |
| Father/mother | 46.9% | 43.5% |
| Partner | 38.6% | 39.1% |
| Brother/sister | 8.2% | 13.0% |
| Son/daughter | 6.3% | 4.3% |
| Female | 64.7% | 64.2% |
| Age | 49.1 ± 14.7 | 48.7 ± 15.9 |
| Education | | |
| Secondary school and middle | 53.0% | 61.4% |
| High school and other | 47.0% | 38.6% |

3.3. Family adaptation

There were statistically significant improvements in the total scores of the FAD questionnaire before and after the intervention between two groups (p = 0.1) (Table 4).

3.4. Patients

Patients' symptoms were not reduced significantly after the intervention (p = 0.42) and 3 months later (p = 0.97) between two groups. Also global functioning in patients was not increased significantly on discharge (p = 0.78) and 3 months later (p = 0.62) between two groups (Table 5).

Table 4. Pre- and post scores of the relatives (in %)

| | Pre | | Post | |
|---------------------|-------|---------|-------|---------|
| | Case | Control | Case | Control |
| Level of adaptation | | | | |
| poor | 64.7% | 57.0% | 17.6% | 64.2% |
| good | 35.3% | 43.0% | 82.4% | 35.8% |
| p-value | .72 | | 0.01 | |

Table 5. Pre-, post- and follow-up scores of the patients

| | Pre | Post | 3 months |
|-------------------------|---------------|--------------|---------------|
| Symptom severity | | | |
| Case | 28.18 ± 6.33 | 16.76 ± 7.16 | 17.12 ± 9.30 |
| Control | 28.64 ± 7.23 | 15.07 ± 3.26 | 17.00 ± 9.27 |
| P-value | 0.85 | 0.42 | 0.97 |
| Global function | | | |
| Case | 19.71 ± 10.67 | 68.53 ± 6.06 | 65.59 ± 13.44 |
| Control | 14.29 ± 8.28 | 67.86 ± 7.26 | 62.86 ± 17.61 |
| P-value | 0.13 | 0.78 | 0.62 |

The relatives felt better being informed after the intervention (p < 0.001) and at 3- month follow-up (p = 0.02). They all rated that the psychoeducational program helped them to improve their relationship with the patient.

Discussion

The present evaluation of our group program with patients and relatives is obviously limited due to small sample size. However, the striking improvements due to our group-interventions in relatives, is very promising for a beneficial role of such programs. Bauer et al^{17,18} van Gent and Zwart¹⁹ and Peet and Harvey²⁰ also have shown an improvement of patient's and relative's knowledge after psychoeducational interventions. Similarly, Reinares et al²¹ found an improvement of the relatives' knowledge and a reduction of the relatives' subjective burden. In addition, several studies showed that certain family attitudes, such as high expressed emotions, negative affective style or a combination of both could worsen the course of bipolar disorder.²²⁻²⁶ Therefore investigating new interventions that may decrease these two behavioral attitudes, seems worthy.

Furthermore our findings are in line with some of the controlled studies. A randomized controlled study by Miklowitz et al²⁷ showed no

significant difference between patients in the family psychoeducational group and control group in symptom severity after a 1-year follow-up ($p = 0.94$), but there was greater improvement in family psychoeducation group. Similarly, Miller et al²⁸ reported the same findings. In global function, Lam et al²⁹ and Scott et al³⁰ showed an increase of psychosocial functioning and a decrease of relapses after cognitive-behavioral group therapy. Ghasemi et al³¹ also found that although family psychoeducation don't increase general function in mood disorder patients immediately, but leads to significant difference, 18 months after intervention.

The researchers declare that have no conflict of interest in this study and they have surveyed under the research ethics.

Limitations

One clear limitation of the study is the small sample size. Another problem is the dropout rate. To reduce the dropout rate, it could be

considered to offer the group sessions in the evening hours, which would make group participation also possible for who are working. The high drop-out rate of the relatives' follow-up ratings might be another problem, as it may be possible that only the relatives who benefited from the group and who were satisfied with the group answered the follow-up questionnaire.

Despite the limitations, our data suggest that our family psychoeducational group intervention generates some positive changes in the relatives. To solve the problem with the small sample size, large international multicentre studies should be conducted.

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