



# The relationship of expressed emotion with mental health in the families of bipolar patients

*Revista Publicando, 5 No 17. 2018, 52-57. ISSN 1390-9304*

## The relationship of expressed emotion with mental health in the families of bipolar patients

Elahe Mohammad Ebrahim<sup>1</sup>

**1 Master of Science (MSc) in Clinical Psychology, Tehran, Iran. liebrahimi64@yahoo.com**

### Abstract

**Background and aim:** The high level of expressed emotion is a part of the family's negative attitude toward the patient. This study is conducted with the aim of determining the relationship of expressed emotion with mental health in the families of bipolar patients. **Methods:** This study is a clinical trial with random sampling. 40 people were selected based on the inclusion criteria, out of which 20 were randomly assigned to the intervention group and 20 to the control group. Family training sessions were conducted in 10 sessions each week for 2 hours. In this study, the level of expressed emotion questionnaire created by Cole and Kazarian was used. The SPSS ver.24 software was used to analyze the data. **Findings:** In this study, the mean age of subjects obtained as 39.05 years with a standard deviation of 5.62 years. The mean age of the disease was 2.37 with a standard deviation of 0.92. Before performing statistical analysis, the natural distribution of expressed emotion score was evaluated ( $p = 0.001$ ). Based on the findings, there was no significant difference in the control group between the mean scores of expressed emotions before and after the intervention ( $P=0.84$ ), but there was a significant difference between the two groups in the intervention group (0.000), which indicated the impact of education in the target group. The analysis of covariance was used to investigate the difference between the sub-scales of expressed emotion. Based on the results of this analysis, we found that there is a significant difference between post educational intervention and before training. **Conclusion:** Psychological training is effective in reducing the level of expressed emotions in families of bipolar patients.

**Keywords:** Expressed emotion, Mental health, Family of bipolar patients



# The relationship of expressed emotion with mental health in the families of bipolar patients

*Revista Publicando, 5 No 17. 2018, 52-57. ISSN 1390-9304*

## Introduction

Bipolar disorder is characterized by mood swings between high energy and activity (known as mild madness or mania) and sadness or discomfort known as depression. These symptoms tend to last for weeks or months (1). The sign of bipolar disorder is the presence of extreme mood swings. There is a time lag between feeling good and feeling bad that includes depression too. When feeling high, a person with bipolar symptoms may feel to be at the "highest point in the world," and is able to do whatever is in his mind, and is able to do several things at a time (does not finish any of them). Sometimes this superiority, instead of the high mood, results in more bad temper in the person (2).

Expressed emotion refers to critical attitudes that relatives have towards a person with a psychiatric disorder. Factors and patterns of critical behavior, hostility and excessive emotional attachment form the structure of expressed emotion (3, 4). Expressed emotion is used to predict the likelihood of recurrence in a wide variety of mental disorders (5). Expressed emotion can cause recurrence of mental disorder symptoms in a vulnerable person against stress (6, 7). The rate of expressed emotion in Iran has been reported as 61% and in the western countries as 40 to 74% (3, 8). In families with bipolar patients whose level of expressed emotion are high, this rate is reported as 90% during nine months.

The prevalence of bipolar disorder is 1.3 to 3.8% in the world. Studies conducted in different countries have shown the high economic burden of this disease (9). The cost of this disorder is estimated at \$ 45 million, with \$ 7 million for treatment and \$ 38 million for indirect costs (10). During the care of patients with bipolar disorder, caregivers have reported the communication with these patients being very difficult. The family has one of the most important and major support systems for the patient, and the role of the family cannot be disregarded (3).

High level of expressed emotion is a part of the family's negative attitude toward the patient. In a few studies, the effect of training based on acceptance and commitment on the expressed emotion of the family of patients with these disorders has been studied (3, 11). According to the above and sensing a need for this study, this study is conducted with the aim of evaluating the relationship of expressed emotion with mental health in the family of bipolar patients.

## Methods

This study is a clinical trial with random sampling. After studying all the patients with bipolar disorder, 54 patients were selected, of which 40 patients were selected based on the inclusion criteria and 10 were excluded from the study. The inclusion criteria include: caregiver (family members) in the age range of 25 to 45 years old, having at least an elementary education level, having a patient with chronic bipolar disorder (type I and II) with 2-year history of the disorder. Exclusion criteria include: severe physical illness, addiction, comorbid psychiatric problems.



## The relationship of expressed emotion with mental health in the families of bipolar patients

*Revista Publicando, 5 No 17. 2018, 52-57. ISSN 1390-9304*

All subjects completed the demographic questionnaire including age, gender, duration of the disorder, education level, the relation of caregiver with the patient. The first stage was completed before the start of the training sessions and the second stage started after the training.

Then, 20 subjects were randomly assigned to the intervention group and 20 subjects to the control group. Family training sessions were conducted in 10 sessions each week for 2 hours. In this study, the level of expressed emotion questionnaire created by Cole and Kazarian was used; This tool is used to assess the level of emotion expressed by caregivers in four scales of the negative attitude towards the patient, tolerance and expectations, harassment and intrusiveness, and emotional responses.

This test consists of 60 questions with 4-option answer in accordance with the structure of expressed emotion, and each sub-scale contains 15 questions. In this test, in addition to scores of four sub-scales, a total score is also obtained, in which high scores indicate high levels of expressed emotion. The test range is 60 to 240. Scores higher than 149 indicate high expressed emotion and scores below 116 indicate low expressed emotion (17). This scale was first translated in Iran by Dehghani, its internal validity is determined by Cronbach's alpha method and its external validity is reported as 86% (12, 13).

### ***Content of training sessions:***

*First session:* Introduction, definition and description of bipolar patients, teaching psychological concepts based on the acceptance and commitment approach, the role and importance of the families in reducing expressed emotion to reduce family problems.

*Second session:* Definition of bipolar disorder, stats of its incidence and prevalence, the consequences of lack of proper treatment, how families deal with the patient.

*Third session:* Describing the concept of psychological education, teaching changing the lifestyle.

*Fourth session:* Teaching the skills of mindfulness, acceptance and cognitive defusion to increase flexibility and reduce negative emotions.

*Fifth session:* How to control undesirable and harmful factors.

*Sixth session:* A review of past sessions, learners were asked to write their personal values and turn these values into their own behavioral goals.

*Seventh session:* Teaching practical methods for training defusion.

*Eighth session:* Planning the objective based on values, and motivating learners.

*Ninth session:* Breathing exercises, dealing with reality, having an open mind.

*Tenth session:* Emphasizing the use of scientific and practical methods 20 and itself.



# The relationship of expressed emotion with mental health in the families of bipolar patients

*Revista Publicando, 5 No 17. 2018, 52-57. ISSN 1390-9304*

The SPSS ver.24 software, and t-test, Leven, covariance and Kolmogorov-Smirnov statistical tests were used to analyze the statistical data.

## Findings

In this study, the mean age of subjects obtained as 39.05 years with a standard deviation of 5.62 years. In terms of education level, 17.5% (7 subjects) had elementary education, 32.5% (13 subjects) secondary education, 35% (14 subjects) elementary education, 7.5% (3 subjects) associate degree, and 7.5% (3 subjects) bachelor's degree and higher. In terms of the relation of the caregiver with the patient, 42.5% (13 subjects) were mothers, 32.5% (17 subjects) fathers, 15% (6 subjects) sisters, and 10% (4 subjects) brothers. In terms of gender, 57.5% (23 subjects) were females and 42.5% (17 subjects) males.

The mean age of the disease was 2.37 with a standard deviation of 0.92. Before performing statistical analysis, the natural distribution of expressed emotion scores was evaluated ( $p = 0.001$ ). Based on the findings, there was no significant difference in the control group between the mean scores of expressed emotion before and after the intervention ( $P=0.84$ ), but there was a significant difference between the two groups in the intervention group (0.000), which indicated the impact of training in the target group. The analysis of covariance was used to investigate the difference between the sub-scales of expressed emotion. Based on the results of this analysis, we found that there is a significant difference between post educational intervention and before training, which means that the training resulted in a significant reduction in the level of expressed emotion after the intervention (Table 1).

**Table 1.** *The distribution of mean scores of expressed emotion sub-scales before and after the intervention in the two groups of intervention and control*

Significance level	Mean (sd) After the Intervention	Mean (sd) Before Intervention		
p= 0.00	)6.12( 17.18	)3.48( 13.59	Intervention	sub scale
p= 0.22	)5.76( 13.47	)5.81( 13.36	Control	
p= 0.00	)4.40( 21.29	)3.96( 17.75	Intervention	Negative attitude
p=0.14	)4.20( 16.10	)4.21( 16.03	Control	
p= 0/00	)5.98( 20.80	)3.90( 16.84	Intervention	Bearing and waiting
p= 0.07	)3.52( 16.42	)3.52( 16.34	Control	
p= 0.00	)6.12( 17.18	)3.48( 13.59	Intervention	Harassment and interference
p= 0.22	)5.76( 13.47	)5.81( 13.36	Control	
p= 0.00	)4.40( 21.29	)3.96( 17.75	Intervention	Emotional response
p=0.14	)4.20( 16.10	)4.21( 16.03	Control	



# The relationship of expressed emotion with mental health in the families of bipolar patients

*Revista Publicando, 5 No 17. 2018, 52-57. ISSN 1390-9304*

## Discussion

This study was conducted with the aim of determining the relationship between expressed emotion and mental health in the families of bipolar patients. The findings of this study showed that after intervention, there was a significant reduction in the level of expressed emotion in the family of bipolar patients. There was also a significant difference in all four sub-scales. In the study by honing et al., results showed that psychological training of relatives had a significant effect on reducing the level of expressed emotion compared to the control group (14). In Japan, another study was carried out that had results in line with this study (15).

In the study by Sazor et al., the results showed that psychological training based on acceptance and commitment can be effective in reducing the level of expressed emotion in the families of patients (3). In the study by Blanch et al., they did not consider the effect of training in bipolar patients as adequate, which is not consistent with the present study (16).

Also, in the study of Eisner et al., in which they evaluated the effect of education on the families of bipolar patients, the results showed that there was also no significant difference after the training. The results of this study have a clear difference with the present study, which can be attributed to the training sessions, because in the present study ten training sessions were held, while in their study only one to two training sessions were held (17).

Due to further searches in this regard, no studies were found in this field. The existence of a control group, the use of a new method in the treatment of the family of patients and the development of educational sessions with a variety of topics can be cited as strengths of the present study.

The weaknesses of this study can also be noted that reduces the power of generalizability. At the end, it is suggested that future researchers consider the limitations of this study in their study in order to achieve better results.

## Conclusion

Psychological training is effective in reducing the level of expressed emotion of the families of bipolar patients. Therefore, it is suggested that steps be taken in the treatment centers by conducting family educational sessions for full understanding of the disease and reducing the level of expressed emotion by the family.

## Reference

- 1 Vancampfort, D., et al., *Risk of metabolic syndrome and its components in people with schizophrenia and related psychotic disorders, bipolar disorder and major depressive disorder: a systematic review and meta-analysis*. World Psychiatry, 2015. **14**(3): p-339 .347
- 2 Kim, T., et al., *Applying machine-learning techniques for treatment selection in bipolar disorder for patients deciding between lithium or quetiapine*. 2017.



## The relationship of expressed emotion with mental health in the families of bipolar patients

*Revista Publicando, 5 No 17. 2018, 52-57. ISSN 1390-9304*

- .3 Sazvar, S.A., et al., *Impact of acceptance and commitment-based psychoeducation on the adjustment of expressed emotion in families of patients with bipolar disorder*. Feyz Journal of Kashan University of Medical Sciences, 2017. **21**(3): p. 265-271.
- .4 Wuerker, A.M., *Relational control patterns and expressed emotion in families of persons with schizophrenia and bipolar disorder*. Family process, 1994. **33**(4): p. 389-407.
- .5 Butzlaff, R.L. and J.M. Hooley, *Expressed emotion and psychiatric relapse: a meta-analysis*. Archives of general psychiatry, 1998. **55**(6): p. 547-552.
- .6 Amaresha, A.C. and G. Venkatasubramanian, *Expressed emotion in schizophrenia: an overview*. Indian journal of psychological medicine, 2012. **34**(1): p. 12.
- .7 Hooley, J.M. and J.B. Hiller, *Personality and expressed emotion*. Journal of abnormal psychology, 2000. **109**(1): p. 40.
- .8 Ozkiris, A., et al., *The relationship between insight and the level of expressed emotion in patients with obsessive-compulsive disorder*. Nordic journal of psychiatry, 2015. **69**(3): p. 204-209.
- .9 Shakeri, J., et al., *Effects of omega-3 supplement in the treatment of patients with bipolar I disorder*. International journal of preventive medicine, 2016. **7**.
- .10 Dilsaver, S.C., *An estimate of the minimum economic burden of bipolar I and II disorders in the United States: 2009*. Journal of affective disorders, 2011. **129**(1-3): p. 79-83.
- .11 Reinares, M., et al., *The role of family interventions in bipolar disorder: A systematic review*. Clinical psychology review, 2016. **43**: p. 47-57.
- .12 Dehghani, S., *Expressed Emotion and Sexuality*. J Fundam Ment Health, 2003 :20-19(6 . p. 84-91.
- .13 Sepúlveda, A.R., et al., *The Spanish validation of level of expressed emotion scale for relatives of people with eating disorders*. The Spanish journal of psychology, 2012. **15**(2): p. 825-839.
- .14 Honig, A., et al., *Psycho-education in bipolar disorder: effect on expressed emotion*. Psychiatry research, 1997. **72**(1): p. 17-22.
- .15 Mottaghipour, Y., et al., *Expressed emotion and the course of schizophrenia in Iran*. Social Psychiatry and Psychiatric Epidemiology, 2001. **36**(4): p. 195-199.
- .16 González-Blanch, C., et al., *Effects of family psychoeducation on expressed emotion and burden of care in first-episode psychosis: a prospective observational study*. The Spanish journal of psychology, 2010. **13**(1): p. 389-395.
- .17 Eisner, L.R. and S.L. Johnson, *An acceptance-based psychoeducation intervention to reduce expressed emotion in relatives of bipolar patients*. Behavior therapy, 2008. **39**(4): p. 375-385.