

The influence of psychoeducation on family's emotional expressions in caring patients with paranoid schizophrenia

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Objective: To determine the influence of psychoeducation therapy on family's emotional expression in caring patients with paranoid schizophrenia.

Methodology: In this experimental study, we used random allocation sampling. The families as primary caregiver for patients with paranoid schizophrenia and who had capacity to provide informed consent were included in the study. The family in the experimental group (42 parents) received family psychoeducation and in the control group (42 parents) received health education at Amino Gondohutomo Mental Hospital, Semarang, Indonesia. Emotional

Expressivity Scale (EES) was administered for pre and post intervention. Repeated ANOVA were used to analyze the pre-post data.

Results: From 84 parents, 64.3% were male in the experimental group and 52.4% in the control group. Family's emotional expression significantly improved in the experimental group ($p \leq 0.05$) and insignificantly improved in control group ($p \geq 0.05$).

Conclusion: Application of family psychoeducation could minimize the emotional expressions of the family. (Rawal Med J 202;45:915-919).

Keywords: Family psychoeducation, paranoid schizophrenia, emotional expression.

INTRODUCTION

Family members as primary caregivers for patients with paranoid schizophrenia may experience some difficulty in natural expression of emotion. The high level of family emotional expression was correlated with the family burden.¹ Family members have psychological burden due to intense caring for and fear of patient's behavior such as unrest, shame, the feeling of isolated, useless, misery, mental health stigma as a secondary impact and psychological stress.^{2,3,4} The family burden depend on how family appraise their condition, it may impact family members to express their emotional as a caregivers of patient with paranoid schizophrenia and lead to relapse of condition.⁵

Emotional expressions may be influenced by some factors including physical health, environment, and experiential factor. Disapproval of social environment may also affect the emotional expressions stability.⁶ Emotion expression as a robust and valuable predictor of symptom relapse.⁷ The unstable emotional expressions may lead to paranoid schizophrenia recurrence and prolong the family's distress.^{8,9} Primary caregivers and family

are expected to acknowledge the characteristic of patient with paranoid schizophrenia, the unpredictable behavior change, overcoming psychic burden, and improving emotional expressions in taking care of the patients.¹⁰

The combination of family education, stress management, and assertive training aim to increase family knowledge about paranoid schizophrenia and minimize the family burden by strengthen family ability in taking care the patients.¹¹ Family psychoeducation for family significantly reduce the rate of recurrence, improving patient's recovery, decrease of burden and distress of families and improving family's quality of life.^{12,13,14} Interventions with strength-based approaches are needed for family to deal with negative emotional in caring with schizophrenia patients.¹⁵ But, no evidence has been reported on the influence of family psychoeducation on family's emotional expression. We hypothesized that there are statistically significant differences between family's emotional expressions' scores of the experimental group with the intervention of family psychoeducation and the control group with the standard treatment.

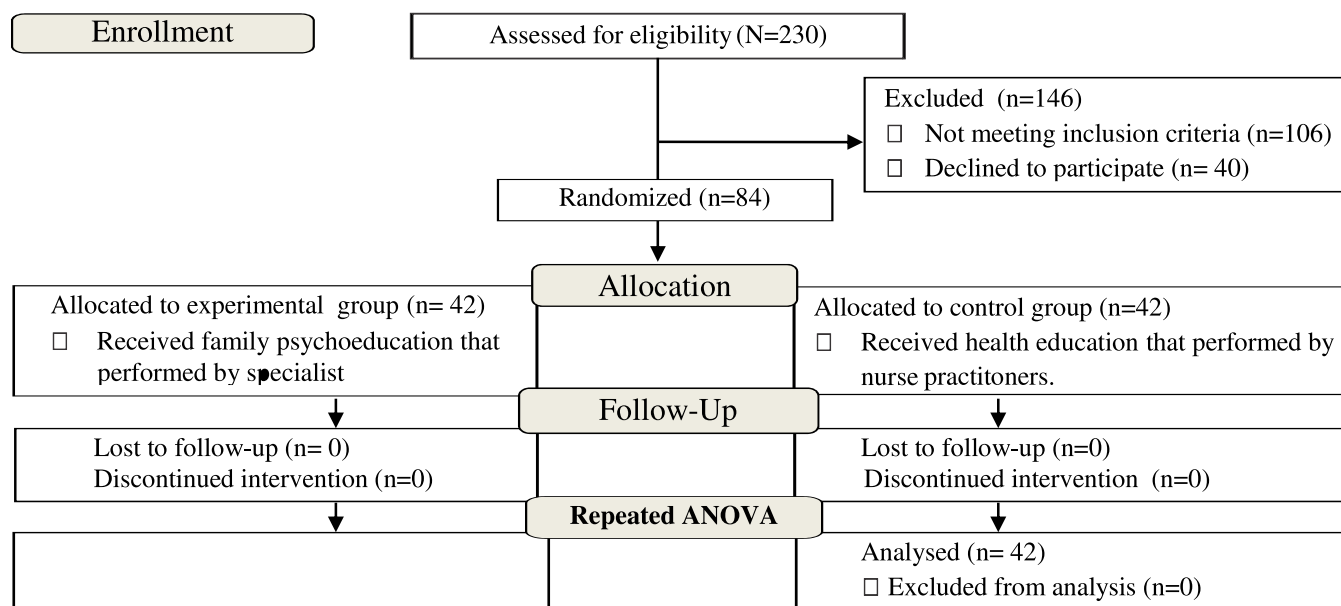
METHODOLOGY

This experimental study was conducted in Amino Gondohutomo Mental Hospital in Semarang, Indonesia from February to March 2018. Ethical approval was obtained from hospital ethics committee. Families as primary caregiver for patients with paranoid schizophrenia who had capacity to provide informed consent were included in the study. Family caregivers with chronic diseases and schizophrenia patients relapse more than six months were excluded from the study. There were 230 family members who regularly visited the Hospital; of these, 106 did not fulfill inclusion criteria and 40 declined to participate. A total of 84 participants were randomly selected to be divided into a control groups of 42 subjects and an experimental group of 42 subjects (Fig.). The experimental group received 3 weeks family psychoeducation, while the control group only got the health education.

The family psychoeducation was performed by seven specialist nurses and standard treatment was performed by nurse practitioners. The family psychoeducation was given in twelve sessions in

three weeks. The protocols of the family psychoeducation was modified from basic component of psychoeducation.¹⁶ The first-fourth session, the therapists assessed the knowledge of parents about the symptoms of paranoid schizophrenia; provided the information about symptoms management; discussed the importance of the compliance of antipsychotic treatment and its side effect; and discussed the early sign of relaps and relaps prevention. Fifth until eighth session, the therapists discussed about the problem of substance abuse, family problem and other issues; discuss about communication pattern and stress management; therapist gave experiential exercises for parents with stress management in order to deal with day today stress; therapists also reinforced the parents to improve the insight into the patient's illness. Ninth-twelve session, the therapists discussed about handling expressed emotion; discussed about assertive training; gave experiential exercise to improve communication and reinforced parents to enhance the adaptive coping in caring the paranoid schizophrenia patients.¹⁷

Figure. Consort flow chart of study.



We measured the family's emotional expressions from both groups in the first week before the intervention. All participants completed questionnaires in order to measure their emotional

expressivity at the start of the study and then again at the end session of intervention. A week after the intervention, a follow-up was done. The measurement was assisted by the 17-items of

emotional expressivity scale (EES) that consisted of 6-point scale from 1 (never) to 6 (always) with minimum score at 17 and maximum score at 102.¹⁸ This instrument measures the family member's ability to express their emotions. The validity and reliability of the Indonesian version of EES instrument is good. Chronbach's alpha were reported to be 0.97.

Statistical Analysis: We used SPSS version 21 for analysis. Repeated measures ANOVA test were used to determine the difference between family emotional expression before and after intervention of family psycho education in experimental group and standard treatment in control group. $p < 0.05$ was considered significant.

RESULTS

Most of the family members were male in experimental group (64%) and in control group (52%), married in experimental group (93%) and in the control group (86%), worked as private sector workers in experimental group (57%) and in the control group (55%), and educational backgrounds were high school in experimental group (36%) and in the control group (45%) (Table 1).

Table 1. Demographic data.

Variable	Experimental group (n = 42)		Control group (n = 42)	
	F	%	F	%
Gender				
- Male	27	64.3	22	52.4
- Female	15	37.7	20	47.6
Marriage status				
- Unmarried	2	4.8	4	9.5
- Married	39	92.8	36	85.7
- Divorced	1	2.4	2	4.8
Occupation				
- Unemployed	6	14.3	6	14.3
- Private sector worker	24	57.1	23	54.8
- Civil servant	5	11.9	4	9.5
- Labor	7	16.7	9	21.4
Education				
- Not educated	1	2.4	0	0
- Elementary school	11	26.2	10	23.8
- Junior high school	14	33.3	13	31
- Senior high school	15	35.7	19	45.2
- College	1	2.4	0	0

Table 2. Pre and Post treatment values.

Group	Variable	No of subjects	Pre-test		Post-test	
			M	SD	M	SD
Experimental	Family emotional expressions	42	45.79	6.88	51.21	4.51
Control	Family emotional expressions	42	45.93	7.73	60.86	8.21

Mean family emotional expression score was increased from 45.93 ± 7.33 to 60.86 ± 8.21 in control group and increased from 45.79 ± 6.88 to 51.21 ± 4.51 in experimental group (Table 2). By using repeated ANOVA, there was significant improvement of family emotional expressions scores after family member received family psychoeducation, $F(1, 41) = 18.22$, ($p < 0.001$).

DISCUSSION

The results showed that family psychoeducation for family in caring patients with paranoid schizophrenia had a significant influence on the reduction of family's emotional expressions. The emotional expressions tended to be the high expression of critical, hostile, and emotional behavior. On the other hand, the high emotional expressions may lead to the psychological problems relapse such in schizophrenia.¹⁹

Family in caring patients with paranoid schizophrenia might feel afraid, confuse, and stressful as they have no idea how to respond and take care of the paranoid schizophrenia family member.⁴ Knowing the significant role of emotional expressions toward the prevention of schizophrenia relapse, nursing intervention was needed to cope with the problems. One of the interventions was in the form of family psychoeducation which was proven to be able in improving emotional expression. Family could practice how to deal the problem that affected by illness with positive ways. This results of this study showed that the changes score of family emotional expressions was significantly different in experimental group. Paranoid schizophrenia patients with aggressive behavior and impulsivity have more suspiciousness, mistrust and anger.²⁰ The other problem for the family by having a paranoid schizophrenia patient at

home is that the family receives more burden and has a higher stress which leads to the unstable family's emotional expression. Therefore, in family psychoeducation, the stress management reinforcement and assertive training were given to help stabilizing emotional expressions of the family. One of the session of family psychoeducation taught family about how to recognise the symptoms and how to cope the problem with assertive training module. This was an effective way to deal with emotional expression of the family as the primary caregivers. This is similar to a study which reported that unassertive behavior of patient with schizophrenia due to lack of social skill, decreased motivation and increased social anxiety.²¹ This helped patients to develop assertiveness skills by communicating what patient wants, feels, and thinks about other people in appropriately directly.²² Assertive training module as a part of family psychoeducation in its session has been used to maintain a stable emotional expressions's family. This therapy should be applied for patients with the relapses and frequent hospitalizing as it improves evitable social competence.

Two limitation of our study are: 1) the participants of our study were family who have visited paranoid schizophrenia patients in the psychiatric hospital, so that the findings may not be generalized for family who take care patients in community; 2) we did not consider the external environment factors such as stigma which could precipitate family to experience distress. However, a follow up is needed to elucidate how sustained effects are. For future research, the effect of family psychoeducation studies can be done in the another mental hospital in Indonesia region, and another specialization. We recommend that the family psychoeducation should be offered as psychotherapy for family in caring patients with paranoid schizophrenia. It could be conducted by psychiatric nurses to minimize the emotional expressions problem of the family due to the burden.

CONCLUSION

Family psychoeducation delivered by the specialist nurse improved family emotional expression. After 3 weeks of family psychoeducation implementation, the family went through emotional

expression reduction. The score of the family's emotional expression who accept the family psychoeducation was lower than the family without family psychoeducation.

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REFERENCES

1. Nirmala BP, Vrandra MN, Reddy S. Expressed emotion and caregiver burden in patients with schizophrenia. *Indian J Psychol Med* 2011;33(2):119-22.
2. Pangandaheng ND. Pengalaman keluarga merawat klien dengan gangguan jiwa. [Thesis]. Surabaya: Universitas Airlangga 2018;50-64.
3. Dinos S, Stevens S, Serfaty M, Weich S, King M. Stigma: the feelings and experiences of 46 people with mental illness. *Br J Psychiatry* 2004;184(2):176-81.
4. Maddock C, Pariente CM. How does stress affect you? An overview of stress, immunity, depression and disease. *Epidemiologia e psichiatria sociale* 2001;10(03):153-62.
5. Antony MM, Ledley DR, Heimberg RG. Improving outcomes and preventing relapse in cognitive-behavioral therapy. New York: Guilford Press. 2005.xiv,432.
6. Buck R. Emotional expression, suppression, and control: Nonverbal communication in cultural context. *J Intercultural Communication Res* 2003;32:175-187.
7. Weintraub MJ, Hall DL, Carbonella JY, Weisman de Mamani A, Hooley JM. Integrity of Literature on Expressed Emotion and Relapse in Patients with Schizophrenia Verified by a p-Curve Analysis. *Family Process* 2017;56(2):436-444.
8. Gonzalez-Blanch C, Martin-Munoz V, Pardo-Garcia G, Martinez-Garcia O, Alvarez-Jimenez M, Rodriguez-Sanchez JM, et al. Effects of family psychoeducation on expressed emotion and burden of care in first-episode

- psychosis: a prospective observational study. *Spanish J Psychol* 2010;13(1):389-95.
9. Hooley JM. Expressed emotion and relapse of psychopathology. *Annu Rev Clin Psychol* 2007;3:329-52.
10. Boyd M. *Psychiatric nursing: contemporary practice*. Wolters Kluwer Health. 2008.
11. Stuart G, Laraia M. *Principles and practice of psychiatric nursing*. Missouri: Mosby Inc; 2005.
12. McFarlane WR, Dixon L, Lukens E, Lucksted A. Family psychoeducation and schizophrenia: a review of the literature. *J Marital Family Ther* 2003;29(2):223-45.
13. Gutiérrez-Maldonado J, Caqueo-Úrizar A. Effectiveness of a psycho-educational intervention for reducing burden in latin american families of patients with schizophrenia. *Quality Life Res* 2007;16(5):739-47.
14. Uehara T, Kawashima Y, Goto M, Tasaki SI, Someya T. Psychoeducation for the families of patients with eating disorders and changes in expressed emotion: A preliminary study. *Comprehensive Psychiatry* 2001;42(2):132-8.
15. Amaresha AC, Venkatasubramanian G. Expressed emotion in schizophrenia: an overview. *Indian J Psychol Med* 2012;34(1):12-20.
16. Grover S, Chakrabarti S, Kulhara P, Avasthi A. *Clinical Practice Guidelines for Management of Schizophrenia*. *Indian J Psychiatry* 2017;59(Suppl 1):S19-S33.
17. Zahara R, Hizir, Hermansyah Pendidikan kesehatan terhadap peningkatan pengetahuan keluarga penderita skizofrenia dengan perilaku kekerasan. *Jurnal Ilmu Keperawatan* 2015;3(2):134-46.
18. Kring AM, Smith DA, Neale JM. Individual differences in dispositional expressiveness: development and validation of the Emotional Expressivity Scale. *J Personality Soc Psychol* 1994;66(5):934.
19. Bharti J. Expressed emotion among caregivers of person with schizophrenia and obsessive compulsive disorder: a comparative study. *Int J Indian Psychol* 2015;3:189-200.
20. Abu-Akel A, Abushua'leh K. Theory of mind in violent and nonviolent patients with paranoid schizophrenia. *Schizophrenia Res* 2004;69:45-53.
21. Tavakoli S, Lumley MA, Hijazi AM, Slavin-Spenny OM, Parris GP. Effects of assertiveness training and expressive writing on acculturative stress in international students: A randomized trial. *J Counseling Psychol* 2009;56(4):590-6.
22. Koutoukidis G, Stainton K, Hughson J. *Tabbner's Nursing Care: Theory and Practice*. 6 Edition. Elsevier. Australia. 2013.