



Original Article

Effectiveness of psychoeducational and supportive therapy on the resilience of families with mental disorders

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Abstract

Objectives: This study aims to evaluate the effectiveness of Psychoeducational and Supportive Therapy (PeSo) on the resilience of families with members suffering from mental disorders.

Methods: This study employed a quasi-experimental pre-test and post-test control group design. A total of 120 families were recruited and divided into two groups: the intervention group (n=60) and the control group (n=60). The intervention group received the Psychoeducational and Supportive Therapy (PeSo) module, which was conducted in 6 sessions. Data were collected using a Family Resilience Questionnaire and analyzed using dependent and independent t-tests.

Results: In the intervention group, the mean family resilience score before therapy was 1.87 (SD=0.676), increasing to 2.57 (SD=0.500) after therapy, with a mean difference of 0.700 (SD=0.591), a 95% confidence interval ranging from 0.853 to 0.547, and a p-value<0.001. In the control group, the mean score before therapy was 1.85 (SD=0.685) and 1.97 (SD=0.610) after therapy, with a mean difference of 0.117 (SD=0.415), a 95% confidence interval of 0.224 to 0.009, and a p-value=0.034, indicating a statistically significant improvement in both groups. However, the intervention group showed a much more significant improvement compared to the control group (p<0.001).

Conclusion: Psychoeducational and Supportive Therapy (PeSo) significantly improves the resilience of families with mental disorders. This therapy is recommended as an effective nursing intervention to be integrated into community mental health services to support family caregivers.

Keywords: Mental disorders; psychoeducation; resilience family; supportive therapy

The prevalence of households with members experiencing severe mental disorders in Indonesia is quite significant, reported at 6.7% or around 282,654 households.^[1] Mental disorders are a major global public health problem, affecting the quality of life of individuals and the functioning of families more broadly. With the paradigm shift in mental health services from an institutional approach to a community-based approach, families have become the primary caregivers responsible for care, monitoring of symptoms, and maintenance of patient stability. As a result, families directly experience substantial psychological, social, and economic burdens during the caregiving process.^[2]

Mental disorders place a heavy psychosocial and economic burden on families as the primary care unit.^[3] Families with mental disorders often experience prolonged stress, anxiety, emotional exhaustion, and limited social interaction. The relationship between caregiving burden and caregivers' mental health has been well documented, with caregivers exhibiting higher levels of depression and fatigue than the general population.^[4] When families do not receive adequate support and knowledge, their ability to adapt to prolonged stress decreases, which can affect family resilience.

Family resilience is defined as the ability of the family system to survive, adapt, and thrive in the face of crises, including

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mental health issues.^[5] This includes effective communication, internal social support, problem-solving skills, and strong collective expectations. A high level of family resilience can reduce negative psychosocial impacts and improve the overall well-being of both the family and the patient.^[6]

McCubbin and McCubbin state that family resilience is a combination of positive behavior patterns and functional competencies possessed by each individual in the family and the family unit as a whole. These positive behaviors and individual competencies are needed to respond to stressful and harmful environments (such as significant life events). In addition, this also determines the family's ability to recover by maintaining its integrity as a unit while maintaining and improving the well-being of family members and the family unit as a whole.^[7]

To address these challenges, family psychoeducation has been recognized as an important intervention. Family psychoeducation improves families' understanding of the client's condition, enhances caregiving skills, and encourages a proactive role in care.^[8] However, knowledge alone is often not enough. Family support (supportive therapy) also plays a key role by providing emotional and instrumental support, which reduces psychological stress.^[9] Existing psychosocial data confirm that positive social support increases resilience through adaptive coping mechanisms.^[6]

Although each of these therapies has its benefits, the use of a single method often has limitations. Psychoeducation increases knowledge but is not sufficient to overcome severe emotional exhaustion. Conversely, supportive therapy provides emotional support but lacks structured caregiving guidance. Therefore, there is a need to combine psychoeducational therapy and supportive therapy in both theory and practice. Theoretically, this combination of therapies is in line with family systems theory, which emphasizes that family resilience arises from the interaction between increased knowledge through psychoeducation, emotional regulation, and relational support provided by supportive therapy.^[6]

Based on this theoretical framework, researchers developed an integrated intervention model called PeSo Therapy (Psychoeducation–Supportive Therapy). This therapy focuses on families with members experiencing mental disorders and is highly relevant to community-based mental health care, using a holistic approach. By combining educational and supportive aspects into a single intervention, PeSo Therapy aims to improve feasibility and sustainability compared to using a single therapy.^[5]

Study Aim and Hypothesis

This study aims to evaluate the effectiveness of Psychoeducational and Supportive Therapy (PeSo) on family resilience in caring for patients with mental disorders.

What is presently known on this subject?

- The family is the unit closest to the patient and is the primary caregiver. The family plays a role in determining the care needed by the patient. Long-term treatment often leads to family members feeling overwhelmed and struggling to accept the patient's condition, which ultimately puts the patient at risk of relapse. The combination of psychoeducational and supportive therapy provides families with knowledge in caring for patients and optimizes the support needed for families to become resilient in caregiving.

What does this article add to the existing knowledge?

- The combination of psychoeducational and supportive therapy to enhance family resilience in caring for patients with mental disorders has not previously been implemented in Indonesia. This combination therapy is expected to enhance knowledge and skills in patient care, utilize support systems from both within and outside the family, and thereby create resilient families in caring for patients.

What are the implications for practice?

- This research provides evidence of the need for interventions to enhance family resilience in caring for patients with mental disorders. Family resilience is necessary to prevent relapse in patients with mental disorders. These findings can guide nurses in enhancing family resilience in the community through psychoeducational and supportive therapy.

The hypothesis proposed in this study is:

H1: Psychoeducation and supportive therapy are effective in improving the resilience of families with mental disorders.

Materials and Method

Study Design

This research is a quasi-experimental study with a pretest-posttest control group design, conducted between July and October 2024 at two primary healthcare centers: Mungkid Health Center and Sawangan Health Center in Magelang, Indonesia.

Sample

The target population for this study includes nuclear families residing in the working areas of Mungkid Health Center and Sawangan Health Center who live with and care for a family member diagnosed with a mental disorder and who have experienced a relapse. According to data obtained from the mental health program in both primary healthcare centers, the total population consisted of 160 eligible families.

A total of 120 respondents were selected as the study sample, consisting of 60 families in the intervention group and 60 families in the control group. The sample size was calculated using a formula to compare two independent means. The calculation was based on a moderate effect size (Cohen's $d=0.5$), which is generally recommended for psychosocial and behavioral interventions when previous population-based estimates are limited.^[10,11] This assumption of a moderate effect size is further supported by previous quasi-experimental studies reporting comparable intervention effects.^[12] With a significance level (α)=0.05 and 80% statistical power, the minimum sample size required is 60 families per group.

The intervention and control groups were determined based on the treatment to be evaluated in the study, whereby the intervention group received the treatment being studied, namely PeSo therapy (family psychoeducation and supportive therapy), and the control group received standard care, with the main objective being to compare the effects. Group allocation was performed using a non-random approach. Respondents who met the inclusion criteria were assigned to either the intervention group or the control group based on the order in which they were numbered.

Participants were required to attend all six PeSo therapy sessions to ensure the integrity of the intervention. Criteria for withdrawal from the study included: (1) absence from more than two consecutive sessions, (2) moving out of the study area, (3) hospitalization during the intervention period, or (4) voluntary withdrawal by the respondent. Participants who withdrew were excluded from the final analysis.

Inclusion and Exclusion Criteria

Inclusion Criteria:

- Nuclear families living in the same household as a family member with a mental disorder.
- Families residing in the working area of Mungkid Health Center and Sawangan Health Center.
- Families who have previously experienced a relapse episode of the family member with a mental disorder.

Exclusion Criteria:

- Patients with mental disorders who do not live with family.
- Families with members who have physical disabilities that hinder participation in therapy sessions.

Ethical Considerations

The Health Research Ethics Committee of the Faculty of Health Sciences, Muhammadiyah University Magelang, granted approval for this research on August 30, 2024 (Number: 005/KEPK-FIKES/II.3.AU/F/2024). All procedures were conducted in accordance with the principles of the Declaration of Helsinki. Respondents were informed about this research and provided their consent both in writing and verbally.

Intervention Protocol and Procedure

The intervention used in this study was Psychoeducational and Supportive Therapy (PeSo), using a module as a guideline. This module was developed by the researchers and validated by psychiatric nursing experts before implementation. The intervention was administered by mental health nursing specialists. The structure and rules of PeSo therapy consisted of six sessions conducted over three weeks (two sessions per week). Each ses-

sion lasted approximately 60 minutes. Participation in all sessions was mandatory for inclusion in the final analysis. Participants were excluded from the study if they missed more than two consecutive sessions or voluntarily withdrew their consent.

Intervention Phase

This therapy combines educational methods (lectures, booklets) with supportive techniques (group sharing, emotional venting). The content of the six sessions is as follows:

1. Identifying the problems of the patient and family

Facilitators help families recognize the health problems of patients and family members and identify support systems within and outside the family.

2. Addressing the patient's mental health issues

In this session, families are given the opportunity to share their experiences in caring for patients, and facilitators train families on how to care for patients and utilize support systems.

3. Managing family stress

In this session, the facilitator identifies the family's experiences in stress management and then trains the family to manage stress through relaxation exercises and the use of support systems.

4. Managing family burden

In this session, the facilitator identifies the family's experiences in managing family burden, trains the family to manage these burdens, and utilizes support systems.

5. Preventing patient relapse

Facilitators educate families about the meaning, causes, stages of relapse, and its signs and symptoms, and train families on how to prevent relapse.

6. Conducting monitoring and evaluation of implementation and benefits

In the final session, the facilitator evaluates the family's abilities and the benefits of PeSo therapy.

Data Collection Tools

The data collection instrument consists of two parts. Part A is a demographic data sheet designed to obtain information about the family, including age, gender, education, and relationship to the patient. This data is similar to the questionnaire conducted by^[13] Regarding respondent characteristics, this includes age, gender, education, marital status, and relationship to the patient. The same was also reported by^[14] regarding the personal information of the patient's family.

Part B consists of the Family Resilience Questionnaire. This instrument was developed and adapted by the researchers based on the dimensions of the Family Resilience Model proposed by McCubbin and McCubbin.^[15] These items were specifically modified to align with the Indonesian cultural

Table 1. Study participants characteristics

No	Variabel	Category	Frequency	Percentage
1	Age	20-30 years old	20	16.7
		31-40 years old	9	7.5
		41-50 years old	57	47.5
		51-60 years old	29	24.2
		≥ 61 years old	5	4.2
2	Gender	Man	35	29.2
		Woman	85	70.8
3	Education	Elementary School	10	8.3
		Junior high School	33	27.5
		Senior High School	67	55.8
		Bachelor	10	8.3
4	Family relationships	Couple	12	10
		Parent	47	39.2
		Children	50	41.7
		Sibling	11	9.2
5	Family Resilience	Low	37	30.3
		Middle	63	51.6
		High	20	16.4

Table 2. Effectiveness of PeSo therapy on family resilience scores: Analysis within and between groups

Group	Pre-test mean (SD)	Post-test mean (SD)	Within-group p-value ^a	Mean difference (Pre-Post)	Between-group p-value ^b
Intervention (n=60)	1.87 (0.676)	2.57 (0.500)	<0.001	0.700	<0.001
Control (n=60)	1.85 (0.685)	1.97 (0.610)	0.034	0.117	

^a: Analysis using paired sample t-tests (to compare pre- and post-test scores within each group), ^b: Analysis using independent sample t-tests (to compare post-test scores between the intervention group and the control group. p-value <0.05 is considered statistically significant).

context and the specific conditions of families caring for patients with mental disorders.

Because the instrument was adapted for this study, the researchers conducted validity and reliability tests prior to data collection. A pilot study was conducted on 30 respondents who had similar characteristics to the research population but were not included in the final sample. The validity of the instrument was assessed using Pearson's Product Moment correlation, and the results showed that all 25 items were valid $p < 0.05$ ($r_{count} > r_{table}$). The reliability test showed excellent results, with a Cronbach's Alpha coefficient of 0.982.

Statistical Evaluation

Data Analysis

Data analysis was performed using SPSS software version 25.0. The analysis consisted of univariate and bivariate analyses. Univariate analysis was performed to describe the characteristics of the respondents, including age, gender, education level, and relationship with the patient. These variables were presented as frequency distributions and percentages.

Prior to hypothesis testing, a normality test was performed to determine the distribution of the data. Since the data were normally distributed, parametric tests were used. Bivariate analysis was performed using two statistical tests:

1. **Paired t-test:** This test was used to analyze the difference in average resilience scores before and after the intervention in each group (intervention and control).
2. **Independent samples t-test:** This test was used to compare the difference in average resilience scores between the intervention group and the control group.

The statistical significance level was set at $p < 0.05$.

Results

Table 1 presents the demographic characteristics of the respondents. The majority of participants were female, aged 41–50 years, with a high school education, with children as caregivers, and family resilience in the moderate category.

Table 2 shows changes in family resilience scores in the intervention and control groups. Paired sample t-test results show a significant increase in resilience scores in both groups

after therapy. In the intervention group, the average score increased from 1.87 in the pre-test to 2.57 in the post-test ($p < 0.001$), while the control group showed a statistically significant increase from 1.85 to 1.97 ($p = 0.034$) but to a lesser extent. Further analysis using an independent t-test revealed a significant difference between the groups, with the intervention group showing a higher mean difference ($\Delta = 0.700$) compared to the control group ($\Delta = 0.117$; $p < 0.001$). These results indicate that PeSo therapy is more effective than standard community care in improving family resilience.

Discussion

The findings of this study confirm that Psychoeducational and Supportive Therapy (PeSo) significantly improves the resilience of families caring for patients with mental disorders. The results of the analysis show that both groups exhibited changes in resilience over time, but families who received PeSo therapy achieved significantly higher post-intervention resilience scores compared to the control group. This supports the hypothesis that integrated interventions combining knowledge and emotional support are more effective than standard care in helping families care for patients.

These results are consistent with previous studies that suggest family-based interventions are crucial for psychosocial problems. Consistent with the findings, our study validates that increasing family knowledge through psychoeducation helps reduce anxiety and confusion about the patient's condition.^[16,17] Furthermore, our results support findings emphasizing that resilient families tend to have open communication and strong emotional support.^[18] However, this study expands on previous knowledge by demonstrating the synergistic effects of the PeSo module. Families often face complex challenges, including stigma, isolation, and emotional distress, which cannot be resolved with a single, non-specific intervention.^[3,4] By integrating psychoeducation (to address lack of caregiving knowledge and skills) with supportive therapy (to facilitate emotional venting and stress management), PeSo therapy provides a holistic approach. This combination likely explains why the intervention group showed superior resilience compared to the control group, as it empowered families to mobilize internal and external resources.^[5,6]

The role of psychoeducation in improving resilience observed in this study can be attributed to the educational component of the PeSo module. Families of patients with mental disorders often experience high levels of stress due to a lack of knowledge about symptom management and treatment adherence. These findings reinforce recent studies which highlight that family psychoeducation effectively reduces caregiver burden by correcting misconceptions and providing practical caregiving strategies.^[9,19] When families understand the

disease trajectory, it enables them to develop a more resilient outlook and better problem-solving skills.^[20]

Supportive therapy plays an important role in strengthening the emotional stability of families in PeSo therapy. Caregivers often face social isolation and emotional exhaustion, which erode family resilience. Our findings align with studies that found interventions facilitating emotional venting and peer support significantly reduced emotional distress within families.^[13] By providing a safe space to express frustration and anxiety, PeSo therapy likely enhances families' adaptive coping mechanisms, as supported by evidence emphasizing that emotion regulation is a core component of resilient caregiving systems.^[21]

The effectiveness of PeSo therapy observed in this study also highlights important clinical implications. As noted in the literature, such interventions can reduce the risk of relapse and potentially lower treatment costs.^[17] Because families play an important role in the rehabilitation and social reintegration of patients,^[2,17] integrating PeSo therapy into community mental health services is highly recommended. This strategy offers a practical way for nurses to shift from patient-centered care to a family-centered approach, ensuring that caregivers are not "forgotten patients" but active and resilient partners in the recovery process.

This synergistic intervention expands the existing literature by demonstrating the combined effects of the two approaches. While single-component interventions often address only one aspect of care, the integration of psychoeducation and supportive therapy in PeSo provides holistic benefits. This is consistent with the latest recommendations for mental health nursing, which advocate family-centered care.^[22] This comprehensive approach explains why the intervention group showed superior resilience compared to the control group.

Limitations

Although the findings are positive, several limitations should be acknowledged. First, this study was conducted in a specific region, which may limit the generalizability of the findings to other populations with different cultural or socioeconomic contexts. Second, data collection relied on self-administered questionnaires, which may be subject to social desirability bias. Finally, this study only evaluated the immediate post-intervention effects; therefore, the long-term sustainability of the increase in family resilience remains unknown and requires further longitudinal research.

Conclusion

This study concludes that Psychoeducational and Supportive Therapy (PeSo) is effective in significantly improving the resilience of families caring for patients with mental disorders. The

findings show that the PeSo intervention produces superior results compared to standard community care alone. The integration of psychoeducation and supportive therapy has been proven to be an important strategy in helping families adapt to the challenges of caregiving.

Based on these results, it is recommended that community mental health services integrate the PeSo therapy module as a complementary nursing intervention to strengthen the family support system. Furthermore, given the limitations of the study regarding short-term evaluation and specific demographics, future research should use a Randomized Controlled Trial (RCT) design with a longitudinal approach to evaluate the long-term sustainability of the intervention's effects across different populations.

Ethics Committee Approval: The study was approved by the Faculty of Health Sciences, Muhammadiyah University Magelang Ethics Committee (no: 005/KEPK-FIKES/II.3.AU/F/2024, date: 30/08/2024).

Informed Consent: Informed consent was obtained from all individual participants included in the study.

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References

1. Riskesdas. Hasil Riset Kesehatan Dasar Badan Penelitian dan Pengembangan Kesehatan Kementerian Kesehatan Republik Indonesia. Jakarta: Kementerian Kesehatan RI; 2018. [Article in Indonesian]
2. Ong HS, Fernandez PA, Lim HK. Family engagement as part of managing patients with mental illness in primary care. *Singapore Med J* 2021;62:213–9.
3. Viana MC, Gruber MJ, Shahly V, Alhamzawi A, Alonso J, Andrade LH, et al. Family burden related to mental and physical disorders in the world: results from the WHO World Mental Health (WMH) surveys. *Rev Bras Psiquiatr* 2013;35:115–25.
4. Soh XC, Hartanto A, Ling N, Reyes M, Sim L, Majeed NM. Prevalence of depression, anxiety, burden, burnout, and stress in informal caregivers: An umbrella review of meta-analyses. *Arch Gerontol Geriatr Plus* 2025;2:100197.
5. Wei W, Dong L, Ye J, Xiao Z. Current status and influencing factors of family resilience in families of children with epilepsy: a cross-sectional study. *Front Psychiatry* 2024;15:1354380.
6. Zhang Y, Hu Y, Yang M. The relationship between family communication and family resilience in Chinese parents of depressed adolescents: a serial multiple mediation of social support and psychological resilience. *BMC Psychol* 2024;12:33.
7. Apostelina E. Resiliensi keluarga pada keluarga yang memiliki anak autisme. *J Penelit dan Pengukuran Psikol* 2012;1:164–76. [Article in Indonesian]
8. Arisandy D, Amanda Astri P. Psikoedukasi menguatkan resiliensi keluarga dalam merawat pasien skizofrenia di puskesmas gandus Palembang. *J Pengabdian Inov Masy Indones* 2025;4:217–22. [Article in Indonesian]
9. Sari A, Duman ZÇ. Effects of the family support and psychoeducation program based on the Calgary Family Intervention Model on the coping, psychological distress and psychological resilience levels of the family caregivers of chronic psychiatric patients. *Arch Psychiatr Nurs* 2022;41:1–10.
10. Cohen J. Statistical power analysis for the behavioral sciences. 2nd ed. Hillsdale, NJ: Lawrence Erlbaum Associates; 1988.
11. Flanagan J, Beck CT. Polit & Beck's nursing research: generating and assessing evidence for nursing practice. 12th ed. Mexico: Lippincott Williams & Wilkins; 2024.
12. Yilmaz R, Karaoglan Yilmaz FG, Keser H. Vertical versus shared e-leadership approach in online project-based learning: a comparison of self-regulated learning skills, motivation and group collaboration processes. *J Comput High Educ* 2020;32:628–54.
13. Hayes KN, Rossetti KG, Zlomke K. Community support, family resilience and mental health among caregivers of youth with autism spectrum disorder. *Child Care Health Dev* 2023;49:130–6.
14. Marzban A, Fereidooni-Moghadam M, Ghezelbash S. The relationship between spiritual intelligence and resilience in family caregivers of patients with chronic mental disorders. *Perspect Psychiatr Care* 2022;58:2846–53.
15. Hanson SMH, Gedaly-Duff V, Kaakinen JR. Family health care nursing theory, practice, and research. 3rd ed. Philadelphia: F.A. Davis Company; 2005.
16. Ricky DP, Keliat BA, Daulima NHC. Efek terapi perilaku, terapi kognitif perilaku dan psikoedukasi keluarga pada klien halusinasi menggunakan pendekatan teori berubah kurt lewin. *J Keperawatan Jiwa Persat Perawat Nas Indones* 2014. [Article in Indonesian]
17. Iswanti DI, Nursalam N, Fitryasari R, Mendrofa FAM, Kandar K. Family empowerment strategies for relapse prevention in individuals with schizophrenia: a scoping review. *J Psychosoc Nurs Ment Health Serv* 2024;62:19–27. [Article in Indonesian]

18. Syam R, Fakhri NF, Jalal NM, Gaffar SB, Evalista M. Psikoedukasi ketahanan keluarga sebagai solusi penanganan kenakalan remaja di era digital. *J GEMBIRA (Pengabdian Kpd Masyarakat)* 2024;2:776–83. [Article in Indonesian]
19. Okafor AJ, Monahan M. Effectiveness of psychoeducation on burden among family caregivers of adults with schizophrenia: a systematic review and meta-analysis. *Nurs Res Pract* 2023;2023:1–16.
20. Basu D, Nagpal S, Mutiso V, Ndeti D, Lauwrens Z, Hadfield K, et al. Enhancing resilience and mental health of children and adolescents by integrated school- and family-based approaches, with a special focus on developing countries: a narrative review and call for action. *World Soc Psychiatry* 2020;2:7.
21. Panzeri A, Bottesi G, Ghisi M, Scalavizzi C, Spoto A, Vidotto G. Emotional regulation, coping, and resilience in informal caregivers: a network analysis approach. *Behav Sci (Basel)* 2024;14:709.
22. National Collaborating Centre for Mental Health (UK). *Service user experience in adult mental health: improving the experience of care for people using adult NHS mental health services*. Leicester (UK): British Psychological Society (UK); 2012.