

Efficacy of brief family psychoeducation among caregivers of patients with schizophrenia: cohort study

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ABSTRACT

Background: Family psychoeducation supports schizophrenia patients and their families with education, skills, and communication training, aiming to prevent relapse and improve outcomes.

Aim: To understand long-term effect of brief family psychoeducation on personal experiences, family burden, Depression, Anxiety and Stress among the caregivers of patients with schizophrenia. **Methods:** The study, comprising 128 participants split into intervention and treatment-as-usual groups, intervention was a six sessions brief psychoeducation for caregivers during the patients' hospitalization, assessments were made on pre-post intervention and follow-up assessment was done after six months. **Results:** Research demonstrates that psychoeducation extends benefits over time, with sustained reductions in depression, anxiety, stress, and family burden for caregivers of schizophrenia patients compared to standard treatment. **Conclusion:** Family psychoeducation offers long-lasting benefits for patients and caregivers.

Keywords: Psychoeducation, Schizophrenia, caregiver, longterm

INTRODUCTION

Family Psychoeducation for schizophrenia refers broadly to several different models of treatment in which the family members of a person with schizophrenia participate and are focused on the intervention and management of the reintegration.^[1] Family members of persons with schizophrenia play a crucial role in providing support and care. However, caring for a loved one with schizophrenia can be challenging and emotionally taxing. Families often struggle to understand the complexities of the disorder and may experience feelings of guilt, frustration, and isolation.^[2] In response to the challenges faced by families of individuals with schizophrenia, family psychoeducation programs have emerged as effective interventions. Family psychoeducation is a structured and evidence-based approach that aims to empower families with knowledge and skills to better understand and cope with schizophrenia.^[3]

Family psychoeducation programs typically include several core components:

1. Education about Schizophrenia: Providing families with information about the nature of schizophrenia, its symptoms, causes, and treatment options.
2. Communication Skills Training: Teaching families effective communication strategies to improve interactions with their loved one and reduce conflicts.
3. Problem-Solving Skills: Equipping families with problem-solving techniques to address challenges related to caregiving and managing symptoms.
4. Crisis Management Planning: Developing plans to handle crises or relapses effectively, including identifying early warning signs and accessing appropriate support services.
5. Social Support: Facilitating peer support groups or family networks to connect families with others who are facing similar challenges.^[4]

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Brief module for Psychoeducation was used for the study all the sessions delivered by a Psychiatric Social Worker to caregivers and patients in an inpatient setting. This Psychoeducation module was developed for north Indian patients and their family members. Wording and phrases were similar to often used terms by the caregivers for expressing the psychotic symptoms of the patient but it was considered to include only non-derogatory and socially acceptable words. The terms reflect in native Hindi speakers about psychotic illness, including black magic, spirit intrusion, or the myths regarding visiting to mental health establishment as well as religious ideas associated with understanding illness and seeking care in society were included. The interventions were conducted in 6 sessions, twice per week. The Participants were the caregivers matching the study criteria. The Psycho education was conducted individually for each caregiver, and one group interaction was made in every fortnight for the caregivers even though stable patients were also welcomed in group sessions. Dyadic method was used for the sessions and lasted approx. 55 minutes. The sessions focused on (1) the definition and aetiology of Schizophrenia; (2) signs and symptoms of the Schizophrenia; (3) treatment and care for the disorder (services available for the patient care); (4) family expectation and expected role in patient care; (5) Importance of support system; and (6) Myth clarification with group discussion, and early signs and symptoms of exacerbation or relapse. Result of the previous showed statistically significant positive improvement in post intervention assessment among study participants.^[1]

Research, conducted by Pharoah et al.,^[5] has consistently shown that family psychoeducation for schizophrenia is associated with reduced relapse rates, decreased hospitalizations, and improved overall functioning. Randomized Controlled Trials (RCTs) considered the gold standard for evaluating treatment interventions. McFarlane et al.^[3] and Dixon et al.^[4] have shown significant reductions in relapse rates and hospitalizations among individuals with schizophrenia who received family psychoeducation compared to those who did not. Longitudinal studies track participants over an extended period to assess the long-term effects of interventions, Falloon et al.^[6] and

Hogarty et al.^[7] has demonstrated sustained benefits of family psychoeducation, including reduced relapse rates and improved family functioning, even years after the completion of the intervention. Research by Pharoah et al.^[5] and Mueser et al.^[8] has shown that family psychoeducation programs are cost-effective, as they lead to reduced healthcare utilization and associated costs, such as hospitalizations and emergency room visits. Studies by Dixon et al.^[2] and Simes et al.^[9] have highlighted the positive impact of family psychoeducation on family dynamics, communication, and coping strategies, as reported by family members themselves. This qualitative research provides insights into the experiences and perspectives of participants. Studies conducted in diverse settings, by Xiang et al. and Ran et al.^[10-11] in China and Barrowclough et al. and Berry et al.^[12-13] in the UK, and Singh et al.,^[1] Srivastava and Pandey^[14] and Bhawna et al.^[15] in India have consistently shown positive outcomes for individuals with schizophrenia and their families.

These diverse types of research provide robust evidence supporting the effectiveness of family psychoeducation for schizophrenia across various domains, including clinical outcomes, family functioning, and cost-effectiveness. Numerous studies have demonstrated the effectiveness of family psychoeducation in improving outcomes for individuals with schizophrenia and their families. Research has shown that family psychoeducation can reduce the risk of relapse, hospitalization rates, and symptom severity, while also improving medication adherence and family functioning (Pitschel-Walz et al., 2001; Pharoah et al., 2006).^[5, 16]

AIM

To assess the long-term effect of brief family psychoeducation on personal experiences, family burden, and depression, anxiety and stress among the family caregivers of patients with schizophrenia.

MATERIAL AND METHODS

Venue of the study: Study was conducted at Institute of Mental Health, Pt. BD Sharma University of Health Sciences, Rohtak, Haryana. This is 120 bedded post graduate teaching institute and tertiary referral centre for the patients with mental health needs. People

from Haryana, and a large number of patients from Punjab, Rajasthan, and UP were availing the treatment facilities from this institute.

Study Design: It was a cohort, randomized trial with 2 parallel groups, intervention and treatment as usual with pre, post and 6 month follow up assessment.

Sampling: Sampling was done with the help of simple random sampling technique. All the families fulfilling the study criteria were approached for the study participation. 684 patients diagnosed with schizophrenia (as per ICD-10 criteria)^[17] were admitted from November to August 2018. Every fourth patient admitted in the ward along with caregivers and fulfilling the study criteria were included in the study. All were screened for the study participation 109 caregivers of the patients were secondary relatives (not living with patient), 5 caregivers were miners and 58 were refused for written consent to join Psychoeducational sessions (172) excluded from the study. Final sample for the study was 128 which were further divided in two groups with random allocation by the computer-generated lottery method. Group one was intervention group and group two was treatment as usual. Six-month follow-up assessment was done on the both group between July to November 2018 at the OPD level. 54 participants from intervention group and 43 participants from treatment as usual group were participated in the follow-up assessment (figure 1).

Inclusion Criteria: Individuals diagnosed with schizophrenia according to the ICD 10 Criteria,^[17] family caregiver who has completed the family psychoeducation program at the hospital and has been residing with the patient for a minimum of one year. They should also possess the ability to comprehend Hindi, irrespective of gender, and must be aged 18 years or older.

Exclusion Criteria: More than 1 family member with mental illness, severe physical/mental illness in the caregiver

Tools for the study

Depression Anxiety and Stress scale Hindi:

A set of three self-report scales designed to measure the negative emotional states of depression, anxiety and stress among the adult population. It was originally developed by Lovibond and Lovibond^[18] and translated and

adopted in several languages including Hindi.^[19] Psychometric property of Hindi adaptation was valid and coefficient alpha was rated .83 and test-retest validity was also found good.

Burden Assessment Schedule: it was a 20-Item questionnaire developed by Thara et al.^[20] to measures subjective caregiver burden. This scale measures the degree of burden in 5 areas they are impact on wellbeing, Marital relationship, Appreciation for caring, impact on relations with others and Perceived severity of the disease. Inter-rater reliability for the scale was good (Kappa .80) the test-retest reliability, computed for a period of 3 months, is 0.91, and the alpha co-efficient is .92. The schedule uses a 3-point scale, marked 1-3. The responses were 1 for not at all, 2 for some extent and 3 for very much. Thus, the maximum score in each area of burden is 12 with higher scores indicating high degree of burden.

Procedure: All the admitted patients with schizophrenia and their caregivers were approached for the study at the time of admission counselling all the participants with regular follow-up were approached for follow-up assessment after six months from the hospital discharge. Caregivers who matched study criteria were included for the study. Participants received 6 consecutive sessions in 5 days interval and re-assessed after six months.

Self-structured socio-demographic datasheet that contain the basic information about patient and his/ her family caregiver was used for collecting participant's information. Depression Anxiety Stress Scale (DASS Hindi) and Burden Assessment Schedule were administered to the participants after the written inform consent. For the group one DASS Hindi and Family Burden scale were applied after the family psycho education completion and for group two both the scale was re-administered after 18-25 days (at the time of Pre discharge planning). For both the groups six moth follow-up assessment was done.

RESULTS

The participants' socio-demographic details followed a normal distribution. To create sub-groups for groups one and two, computer-generated lottery numbers were utilized. The findings indicate that the mean age of patients was 39.69±5.98, while caregivers had a mean

age of 38.10 ± 12.76 . A significant portion of patients (48.43%) had attained primary education, with 30% at a 10th-grade level, and only 2.34% had pursued higher education. Similarly, only seven percent were found to be illiterate. Among caregivers, 66% had a solid academic background, having completed at least high school, while the minimum education level for 25% of caregivers was 5th grade. Regarding marital status, 38.28% of patients were married, whereas 20.31% were separated or divorced. Among caregivers, 61.71% were married, with 10% separated or divorced. In terms of employment, 42.96% of patients and 55.46% of caregivers held salaried positions in either government or private sectors, while 30% of patients and 32% of caregivers were self-employed or farmers. At the pre and post-assessment stages, 28.80% of caregivers were spouses, with a slight increase noted in the largest group, siblings, at 29.68%. Additionally, 18.75% were children, and 14.84% were parents. In the follow-up assessment, the maximum dropouts were observed among siblings, decreasing to 24%. The majority (61%) of participants lived in joint families, predominantly Hindu (87.5%), with a (39.84%) residing in rural area.

The results demonstrate the effectiveness of psychoeducation in alleviating depression, anxiety, and stress among caregivers. The findings show significant changes in depression and anxiety levels between the post-assessment and follow-up assessment, whereas stress levels exhibited only slight changes, which were not statistically significant within the groups. However, a notable observation emerged when comparing the treatment-as-usual group, where there was a significant increase in depression, anxiety, and stress levels between the groups.

Table two illustrates significant changes in the level of family burden across various domains, transitioning from high (pre-assessment) to low (post-assessment). This level remained stable for up to six months, with a notable increase observed in the treatment-as-usual group but minimal change in the intervention group. The results indicate differences between groups in the impact on wellbeing, perceived severity of illness, and overall family burden score. Additionally, statistically significant differences were observed between the groups in all five domains.

Figure 1: Sampling

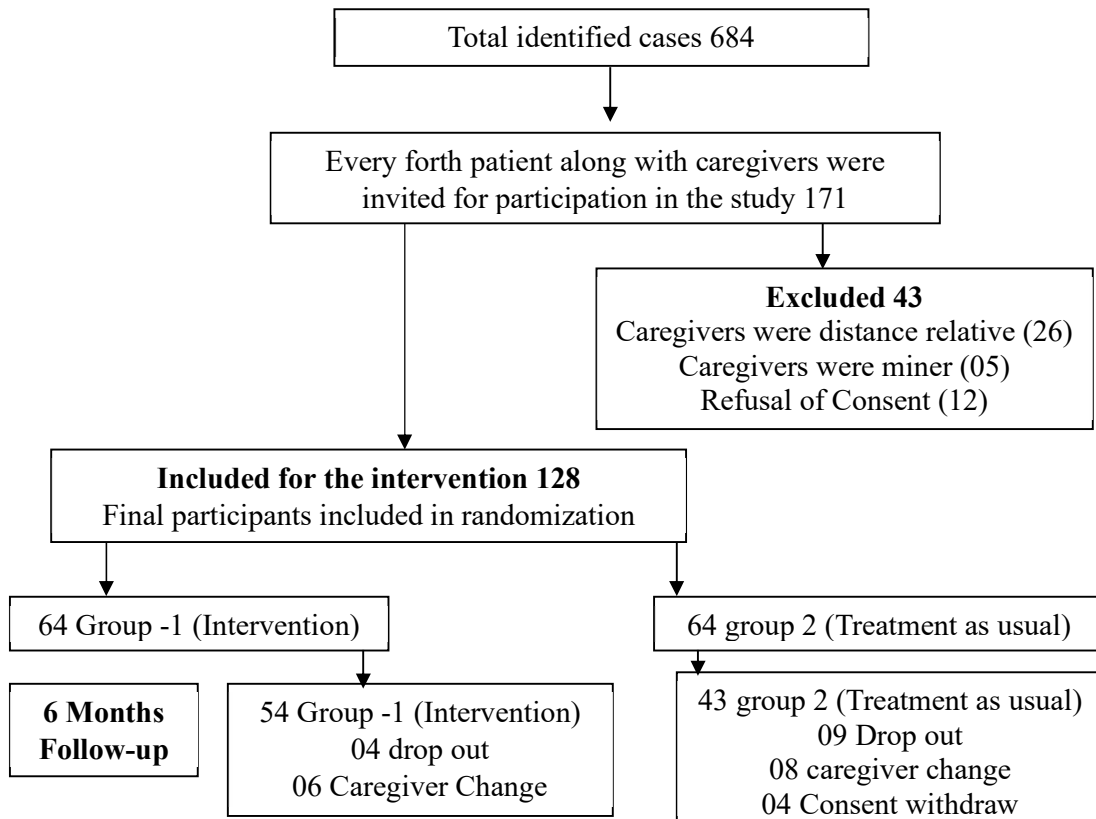


Table 1: Impact of Brief Family Psychoeducation on depression anxiety and stress among Participants (caregivers) post-intervention 6-month

Variables	Gr [#]	Pre	Post	Follow-up	Between groups		
		Mean ± SD	Mean ± SD	Mean ± SD	Mean ²	F	Sig
Depression	1	22.14±3.65	9.64±2.40	9.87±2.09	174.209	17.663	0.000
	2	22.31±3.41	14.51±2.74	15.95±3.42			
Anxiety	1	20.62±4.13	5.68±2.28	5.22±2.17	269.109	27.574	0.000
	2	20.37±4.28	11.79±2.82	12.90±2.35			
Stress	1	36.79±4.50	10.92±5.01	10.42±4.62	269.109	27.574	0.000
	2	35.43±4.99	19.98±3.79	20.09±4.07			

#Group 1 = Intervention 2 =Treatment as Usual

Table 2: Impact of Brief Family Psychoeducation on family burden among Participants post-intervention 6-month

Variables	GR [#]	Pre	Post	Follow-up	Between groups		
		Mean ± SD	Mean ± SD	Mean ± SD	Mean ²	F	Sig
Impact on wellbeing	1	10.06±1.15	5.06±0.30	4.62±0.85	161.817	92.067	0.000
	2	9.92±1.05	7.85±1.34	7.93±1.54			
Marital Relationship	1	9.94±1.14	4.23±0.56	4.41±0.61	19.945	21.211	0.000
	2	9.9±1.41	4.95±1.14	5.52±0.79			
Appreciation for caring	1	9.70±0.09	4.34±0.82	4.53±0.81	99.932	67.077	0.000
	2	9.92±0.99	7.56±1.08	7.88±1.03			
Impact on relation with others	1	10.09±1.13	5.09±0.34	4.46±0.88	3.792	20.698	0.000
	2	9.82±1.09	7.26±1.45	6.97±1.47			
Perceived severity of illness	1	9.5±1.22	4.15±0.54	4.42±0.74	151.916	109.775	0.000
	2	9.76±1.36	7.56±1.13	7.65±1.08			
Family Burden	1	42±5.61	19.78±2.93	16.40±7.81	1402.083	36.296	0.000
	2	42.53±5.45	31.79±4.10	32.12±3.91			

#Group 1 = Intervention 2 =Treatment as Usual

DISCUSSION

The long-term impact of psychoeducation on caregivers of individuals with schizophrenia is a topic of significant importance, particularly given the prevalence of the condition and its associated challenges. The current study, which closely aligns with findings from the National Mental Health Survey,^[21] highlights the relevance of addressing schizophrenia management within the context of cultural nuances and educational needs. As reported by NMHS, schizophrenia tends to peak in prevalence

during one's 40s, a finding consistent with the present research wherein the mean age of patients was approximately 39.69 years. Additionally, the present study^[1] underscores the educational disparities among patients, with nearly half educated only up to the primary level and a notable percentage being illiterate.

Understanding the impact of psychoeducation requires recognition of the broader context of mental health treatment. Lack of knowledge about mental illness and its treatment has been associated with non-adherence to treatment, leading to relapse

and increased caregiver burden.^[22] Relapse, in turn, exacerbates caregiver distress.^[22] Psychoeducation has emerged as a promising strategy to mitigate these challenges by improving caregivers' understanding of psychotic disorders.^[1,23,24]

The current study demonstrates the effectiveness of culturally reframed family psychoeducation in India, particularly in enhancing knowledge about schizophrenia among caregivers compared to standard treatment methods and its long-lasting impact. This echoes findings from previous research emphasizing the importance of considering ethnic-cultural factors in psychoeducation delivery.^[1,24-26] Cultural nuances influence how families perceive and manage psychotic disorders, underscoring the need for tailored interventions.

In settings with limited mental health resources and social stigma, families often rely on non-medical sources for information, leading to misconceptions and ineffective management practices.^[24] This underscores the critical role of systematic psychoeducation in providing accurate information and reducing caregiver distress.

The study findings reveal significant reductions in depression, anxiety, and stress levels among caregivers, with sustained improvements observed in the intervention group. This aligns with previous research highlighting the benefits of enhancing caregiver knowledge in improving patient outcomes and caregiver well-being.^[16, 25-28]

Conflict of interest: None

Source of funding: Nil

Ethical clearance: Taken

CONCLUSION

Current study underscores the effectiveness of psychoeducation in schizophrenia management, particularly within culturally diverse contexts. By empowering caregivers with knowledge and support, psychoeducation not only enhances patient

care but also promotes caregiver resilience and well-being. Future efforts should prioritize the integration of psychoeducation into mental health interventions to optimize outcomes for both patients and caregivers.

REFERENCES

1. Singh B, Singh U, Gupta R, Singh P. Brief family intervention for caregivers of patients with schizophrenia. *Indian Journal of Behavioural Sciences*. 2021;24(01):38-47.
2. Dixon L, Adams C, Lucksted A. Update on family psychoeducation for schizophrenia. *Schizophr Bull*. 2000;26(1):5-20.
3. McFarlane WR, Dixon L, Lukens E, Lucksted A. Family psychoeducation and schizophrenia: A review of the literature. *J Marital Fam Ther*. 2003;29(2):223-45.
4. Dixon L, McFarlane WR, Lefley H, Lucksted A, Cohen M, Falloon I, Mueser K, Miklowitz D, Solomon P, Sondheimer D. Evidence-based practices for services to families of people with psychiatric disabilities. *Psychiatric services*. 2001;52(7):903-10.
5. Pharoah F, Mari J, Rathbone J, Wong W. Family intervention for schizophrenia. *Cochrane Database Syst Rev*. 2010;(12):CD000088. doi: 10.1002/14651858.CD000088
6. Falloon IR, Pederson J. Family management in the prevention of morbidity of schizophrenia: the adjustment of the family unit. *Br J Psy*. 1985;147(2):156-63.
7. Hogarty GE, Anderson CM, Reiss DJ, Kornblith SJ, Greenwald DP, Ulrich RF, Carter M. Family psychoeducation, social skills training, and maintenance chemotherapy in the aftercare treatment of schizophrenia: II. Two-year effects of a controlled study on relapse and adjustment. *Arch Gen Psychiatry*. 1991;48(4):340-7.
8. Mueser KT, Deavers F, Penn DL, Cassisi JE. Psychosocial treatments for schizophrenia. *Annu Rev Clin Psychol*. 2013;9:465-97.
9. Simes D, Shochet I, Murray K, Sands IG. A systematic review of qualitative research of the experiences of young people and their caregivers affected by suicidality and self-harm: implications for family-based treatment. *Adolescent research review*. 2022;7(2):211-33.

10. Ran MS, Xiang MZ, Chan CL, Leff J, Simpson P, Huang MS, Shan YH, Li SG. Effectiveness of psychoeducational intervention for rural Chinese families experiencing schizophrenia: A randomised controlled trial. *Soc Psychiatry Psychiatr Epidemiol* 2003;38:69-75.
11. Xiang YT, Weng YZ, Li WY, Gao L, Chen GL, Xie L, Chang YL, Tang WK, Ungvari GS. Efficacy of the community re-entry module for patients with schizophrenia in Beijing, China: outcome at 2-year follow-up. *Br J Psy* 2007;90(1):49-56.
12. Barrowclough C, Lobban F, Hatton C, Quinn J. An investigation of models of illness in carers of schizophrenia patients using the Illness Perception Questionnaire. *Br J Health Psychol* 2001;40(4):371-85.
13. Berry K, Barrowclough C, Wearden A. A pilot study investigating the use of psychological formulations to modify psychiatric staff perceptions of service users with psychosis. *Behavioural and cognitive psychotherapy*. 2009;37(1):39-48.
14. Srivastava P, Panday R. Psychoeducation an effective tool as treatment modality in mental health. *International Journal of Indian Psychology*. 2016;4(1):123-30.
15. Bhawana K, Chellappan XB, Rohilla J. Efficacy of family psychoeducation on drug compliance, self-esteem and caregivers' burden among selected psychiatric inpatients from a tertiary care centre, North India. *Ind Psychiatry J*. 2022;31(1):89-97.
16. Pitschel-Walz G, Leucht S, Bäuml J, Kissling W, Engel RR. The effect of family interventions on relapse and rehospitalization in schizophrenia - a meta-analysis. *Schizophr Bull*. 2001;27(1):73-92.
17. World Health Organization. The ICD-10 classification of mental and behavioural disorders: clinical descriptions and diagnostic guidelines. Geneva: World Health Organization; 1992.
18. Lovibond SH, Lovibond PF. Manual for the Depression Anxiety Stress Scales. Sydney: Psychology Foundation, 1995.
19. Singh B, Prabhuappa KP, Eqbal S, Singh AR. Depression, anxiety and stress scale: Reliability and validity of Hindi adaptation. *Int J Educ Manage Stud*. 2013;3:446-9.
20. Thara R, Padmavati R, Kumar S, Srinivasan L. Instrument to assess burden on caregivers of chronic mentally ill. *Indian J. Psychiatry*. 1998;40(1):21-9.
21. Murthy RS. National mental health survey of India 2015–2016. *Indian journal of psychiatry*. 2017;59(1):21-6.
22. Moritz S, Hünsche A, Lincoln TM. Nonadherence to antipsychotics: the role of positive attitudes towards positive symptoms. *Eur Neuropsychopharmacol* 2014;24(11):1745-52.
23. Marchira CR, Puspitasari WA, Rochmawati I, Mulyani S. Evaluation of primary health workers training pgram to provide psychoeducation to family caregivers of persons with psychotic disorder. *J Med Sci*. 2016;47(1):34-42.
24. Sin J, Norman I. Psychoeducational interventions for family members of people with schizophrenia: a mixed-method systematic review. *The Journal of clinical psychiatry*. 2013;74(12):16055.
25. Marchira CR, Supriyanto I, Subandi S, Good MJ, Good BJ. Brief interactive psychoeducation for caregivers of patients with early phase psychosis in Yogyakarta, Indonesia. *Early Intervention in Psychiatry*. 2019;13(3):469-76.
26. Jackson HJ, McGorry PD, editors. The recognition and management of early psychosis: a preventive approach. Cambridge University Press; 2009.
27. Kitchener BA, Jorm AF. Mental health first aid training: review of evaluation studies. *Aust N Z J Psychiatry*. 2006;40(1):6-8.
28. Leavey G, Gulamhussein S, Papadopoulos C, Johnson-Sabine E, Blizard B, King M. A randomized controlled trial of a brief intervention for families of patients with a first episode of psychosis. *Psychological medicine*. 2004;34(3):423-31.

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