ORIGINAL RESEARCH PAPER

The effect of psychoeducational interventions on family functioning in caregivers of individuals with alcohol use disorder

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ABSTRACT

Background: Alcohol use disorder (AUD) is a widespread issue with significant physical, psychological, and social repercussions. Its impact extends beyond the individual, profoundly affecting their family caregivers. However, most research to date has concentrated on individuals with AUD and interventions aimed at promoting abstinence, with limited attention given to the needs and challenges of their support systems. *Aim:* This study examines the role of psychoeducational interventions (PEIs) on family functioning among caregivers of individuals with alcohol use disorder. *Methods:* Using a cross-sectional design, 128 caregivers were recruited from two psychiatric hospitals in Amritsar, India. Participants were categorized into two groups: 38 caregivers who regularly attended psychoeducational sessions and 90 who did not. The Family Assessment Device was utilized to measure perceived family functioning, with higher scores indicating greater dysfunction. Independent sample t-tests were conducted to compare family functioning perceptions between the two groups. *Results:* Results revealed that caregivers who attended PEIs sessions reported significantly lower levels of perceived family dysfunction across all measured domains ($p < .001$). The largest improvements were observed in behaviour control ($d = 0.653$) and problem-solving ($d = 0.622$), with moderate effects in general functioning ($d = 0.518$) and overall family functioning ($d = 0.600$). *Conclusion:* The study highlights the importance of tailored interventions to enhance family functioning and caregiver well-being. Future research should focus on longitudinal designs to establish causality and explore the long-term benefits of psychoeducational programs in diverse caregiving contexts.

Keywords: Alcohol use disorder, caregiver, stress, coping, family function, psychoeducation

INTRODUCTION

Alcohol consumption has become a global health concern, steadily increasing worldwide. Recognized as a contributing factor to over 60 distinct diseases, alcohol ranks as the third leading global risk factor for disease burden.[1] Annually, nearly 3 million people die due to alcohol's harmful effects.[2] The burden of alcohol-related diseases is particularly pronounced in middle-income countries like India, where the public health implications remain inadequately addressed.[3]

The Magnitude of Substance Use in India report reveals the severity of the issue, reporting that 14.6% of individuals aged 10 to 75 consume alcohol, with 5.2% demonstrating problematic usage and 2.7% exhibiting signs of dependence.[4]

In the Indian subcontinent, families play a crucial role in caring for patients with mental illnesses. Family caregivers often provide

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unpaid care to relatives in need and assist family members requiring support due to illness.[5] The burden of caregiving is significantly influenced by the family environment.[6] The unpredictable and unreliable behaviour often exhibited by individuals with AUD may lead to heightened anxiety and physical distress among caregivers.[7] This, in turn, impairs their ability to cope effectively, increasing their susceptibility to mental health challenges.[7]

Drawing from the McMaster Model of Family Functioning,[8] family functioning (FF) can be defined as the ability of a family system to meet the physical and emotional needs of its members, maintain effective communication, and adapt to challenges. This model conceptualizes FF through six key dimensions: problem-solving, communication, roles, affective responsiveness, affective involvement, and behavior control. Empirical evidence consistently highlights the profound impact of FF on caregiver well-being. Previous research has demonstrated that poor family functioning correlates with diminished health-related quality of life and increased psychological distress.[9] Similar patterns have been observed in schizophrenia caregiving,[10] with further studies extending these insights to AUD. These studies highlight that FF not only predicts caregivers' well-being but also mediates the negative effects of patients' alcohol consumption on caregivers' well-being.[11,12]

These findings highlight the pivotal role of FF in determining caregivers' well-being, emphasizing the necessity of developing interventions aimed at enhancing family functioning. Such interventions could provide caregivers with the resources and support needed to foster healthier family dynamics, ultimately improving their overall quality of life.

Building on the importance of enhancing FF to improve caregiver well-being, psychoeducational interventions (PEI) emerge as a targeted strategy to address these challenges.[13] Unlike traditional educational approaches, PEIs integrate comprehensive knowledge transfer with psychotherapeutic techniques that go beyond mere information sharing, incorporating stress management, relaxation exercises, problem-solving methods, and positive-thinking strategies.[14]

Recent studies have highlighted PEIs' potential in transforming family dynamics. Studies conducted in out of Indian context have consistently showed that caregivers participating in PEIs reported significant reductions in their perception of family dysfunction, further emphasized PEIs' effectiveness in reducing caregiver burden and psychological distress. Studies conducted outside the Indian context have consistently shown that caregivers participating in PEIs experience significant reductions in their perception of family dysfunction[15–17] with further research highlighting their effectiveness in reducing caregiver burden and psychological distress.[18]

Despite the promising evidence, a significant research gap exists in understanding the effectiveness of PEIs specifically within AUD caregiving contexts. Caregiving for individuals with AUD presents unique challenges that extend beyond physical health management, encompassing complex psychosocial dynamics of addiction. Moreover, in the Indian population, the effectiveness of PEIs on caregivers has yet to be systematically investigated, leaving an important void in the existing literature.

This study aims to address this gap by examining the role of PEIs on FF among AUD caregivers. By comparing caregivers who received PEIs with those who did not, it seeks to understand the potential of targeted interventions in improving family dynamics. While the focus is on caregiving dynamics in India, the findings have broader implications, as similar challenges in FF and caregiving stress have been documented globally. By contributing insights that potentially bridge regional and international contexts, this investigation aims to inform intervention strategies that are both culturally sensitive and universally applicable.

Hypothesis

It was hypothesized that caregivers participating in psychoeducational sessions would report significantly improved perceptions of family functioning compared to those who did not attend psychoeducational sessions.

METHODSAND MATERIALS

Participants

The present study utilized a cross-sectional research design and received approval from the Institutional Ethics Committee of the university (Approval No. 1088/HG dated 22.11.2022). Written informed consent was obtained from all participants, ensuring adherence to the ethical principles outlined in the Declaration of Helsinki. The study was conducted at two psychiatric hospitals in Amritsar between August 2022 and January 2023. Participants, including patients and their caregivers, were recruited using a purposive sampling technique. Initial assessments were conducted to confirm that all participants met the pre-established inclusion and exclusion criteria before proceeding with the study.

Caregivers included in the study were those providing care for a male family member aged 20 to 65 years diagnosed with AUD based on ICD-11 criteria. Both male and female caregivers aged 18 years and older were eligible to participate. However, caregivers were excluded if they were caring for a male family member with dependence on substances other than alcohol (excluding nicotine) or with a comorbid physical or psychiatric illness. Additionally, caregivers from families where another member, apart from the patient, was undergoing treatment for a diagnosed chronic physical illness or psychiatric disorder were not included. Caregivers who themselves had a diagnosed chronic physical illness or psychiatric disorder were also excluded from the study.

For this study, a primary caregiver was defined as a person residing with the patient and actively involved in the patient's care for at least one year. If more than one caregiver fulfilled the definition, preference was given to the person more actively engaged with the patient.

Among the 128 participants, 90 caregivers had not attended psychoeducational sessions, while 38 had been participating regularly, attending at least one session per week for a minimum of one year. Participation in PEI was voluntary and not determined by the researchers. Caregivers independently chose whether to attend these sessions based on their personal interest and availability. The PEI was delivered in a structured group format, facilitated by trained psychotherapists with each session lasting approximately 45-60 minutes. These sessions focused on addressing various aspects of caregiving such as educating caregivers on the biopsychosocial causes of AUD and its impact on patients, coping strategies to manage caregiving stress, and behavioural management techniques to improve caregiver-patient interactions. Additionally, the focus of PEI was on enhancing problem-solving skills within the family system, and provided a supportive platform for emotional expression and catharsis for the caregivers

Randomized sampling was not feasible as participants were reluctant to commit to a large-scale intervention lasting several months. To accommodate these practical constraints, pre-formed groups were recruited, making this study exploratory in nature. While this approach limits the generalizability of the findings, it provides valuable insights into the real-world applicability of psychoeducational interventions in caregiving contexts.

Study tools

Family Assessment Device:[19] The Family Assessment Device (FAD) is a self-report instrument designed to assess family functioning by evaluating both perceived functionality and dysfunction across family dynamics. It consists of 60 items rated on a four-point Likert scale, ranging from strong agreement to strong disagreement. Higher scores on the FAD indicate greater levels of perceived dysfunction within the family system. For this study, the total FAD score was used to provide a comprehensive measure of family dynamics, encompassing multiple dimensions of family functioning.

Procedure

Participants were thoroughly informed about the study's purpose, procedures, and their roles prior to data collection. Rapport-building was prioritized, and participants were briefed in detail about the study. Written informed consent was obtained from those who agreed to participate, with assurances of confidentiality and the right to withdraw at any stage without repercussions. Following consent, patients and their caregivers underwent assessments to confirm compliance with the pre-established inclusion and exclusion criteria. Clear instructions were provided for each test, adhering to the respective test manuals. Assessments were conducted individually, ensuring that each participant was evaluated independently. Data analysis was carried out using SPSS version 21 (SPSS-21). The distribution of data was assessed, and skewness values within ±2 and kurtosis values within ±7 were deemed acceptable for parametric analyses.[20] An independent sample t-test was employed to analyse the data.

RESULTS

The demographic characteristics of patients and caregivers, including age, education, occupation, marital status, and caregiving roles, have been detailed in previous work.[12] In summary, patients ranged in age from 20 to 65 years, with a mean age of 41 years, while caregivers were aged 18 to 80 years, with a mean age of 43.05 years. Most patients worked in clerical, shop owner, or farming roles, whereas the majority of caregivers were homemakers. Spouses made up 65.63% of caregivers, highlighting their pivotal role in managing AUD. The caregiving duration varied, with a large proportion providing care for 1–2 years.

Table 1: Family Functioning among Caregivers Who Attended PEI (Group 1, n = 38) and Those Who Did Not (Group 2, n = 90)

Family Functioning Domains	Group	Mean	Standard Deviation	Skewness	Kurtosis
General functioning	1	19.53	7.53	1.014	-.132
	2	27.61	10.11	.364	-1.014
Affective involvement	1	10.37	5.48	1.832	2.579
	2	14.48	6.98	.390	-1.333
Behaviour control	1	14.89	5.27	.775	.541
	2	22.48	7.58	-.278	-1.13
Communication	1	14.24	5.74	1.344	1.095
	2	18.48	6.67	.437	-.671
Problem solving	1	9.82	3.90	1.157	.919
	2	15.17	5.62	.016	-1.159
Responsiveness	1	10.89	5.51	.952	-.433
	2	14.58	6.32	.203	-1.50
Roles	1	19.66	7.22	.598	-.702
	2	26.12	7.84	.049	-.923
Family Functioning (Overall)	1	99.39	33.88	.998	.171
	2	138.91	42.41	.180	-1.16

Moving further, Table 1 presents the descriptive statistics for FF domains across two caregiver groups. Caregivers who attended PEI sessions (Group 1, n=38) reported consistently lower mean scores across all domains, indicating better perception of FF compared to those who did not attend (Group 2, n=90). The skewness and kurtosis values were within acceptable ranges, supporting the use of parametric statistical analyses.

Table 2: Levene's Test for Equality of Variances Across Variables

Variable	Levene's F	p-value	Variance assumption
General functioning	8.058	.005	Not assumed
Affective involvement	11.389	.001	Not assumed
Behaviour control	10.028	.002	Not assumed
Communication	2.634	.107	Assumed
Problem solving	10.525	.002	Not assumed
Responsiveness	4.109	.045	Not assumed
Roles	.507	.478	Assumed
Overall Family Functioning	5.326	.023	Not assumed

Levene's test for equality of variances, as shown in Table 2, revealed significant differences in variances for all domains ($p < .05$), except for communication and roles domains, necessitating different t-test calculations based on variance assumptions.

Moving on table 3, t-test results demonstrated statistically significant differences between the groups across all FF domains. In affective involvement, Group 1 caregivers (M = 10.37) reported significantly lower levels of emotional disengagement compared to Group 2 (M = 14.48), with a small to moderate effect size (Cohen's d = 0.380). General functioning showed Group 1 (M = 19.53) perceiving less dysfunction than Group 2 (M = 27.61), with a moderate effect size (Cohen's d = 0.518).

The most substantial differences emerged in behaviour control and problem-solving domains. Behaviour control revealed a large effect size (Cohen's d = 0.653), with Group 1 (M = 14.89) demonstrating markedly improved behaviour management compared to Group 2 (M = 22.48). Similarly, problem-solving abilities showed a moderate effect size (Cohen's d = 0.622), with Group 1 (M = 9.82) significantly outperforming Group 2 (M = 15.17).

Communication and responsiveness domains, while statistically significant, exhibited smaller effect sizes. Communication showed a modest improvement (Cohen's d = 0.305), with Group 1 (M = 14.24) having better perception of this domain than Group 2 (M = 18.48). Responsiveness similarly demonstrated a small to moderate effect (Cohen's d = 0.371), with Group 1 (M = 10.89) showing enhanced

Table 3: t-Test for Family Functioning and its domains Between Caregivers Who Attended PEI (Group 1, n=38) and Those Who Did Not (Group 2, n=90)

Variable	t-value	df	p-value	Cohen's d	95% Confidence Interval	
					Lower Limit	Upper Limit
General functioning	4.988	92.557	<.001	0.518	4.866	11.303
Affective involvement	3.559	87.881	.001	0.380	1.815	6.404
Behaviour control	6.480	98.620	<.001	0.653	5.261	9.905
Communication	3.420	126	.001	0.305	1.787	6.695
Problem solving	6.173	98.616	<.001	0.622	3.631	7.071
Responsiveness	3.306	79.351	.001	0.371	1.466	5.900
Roles	4.360	126	<.001	0.388	3.530	9.398
Family Functioning (Overall)	5.578	86.422	<.001	0.600	25.434	53.599

perception of family need responsiveness compared to Group 2 (M = 14.58).

Family roles also indicated improved functioning, with Group 1 (M = 19.66) reporting less dysfunction compared to Group 2 (M = 26.12), showing a small to moderate effect size (Cohen's d = 0.388). The overall family functioning analysis revealed a significant difference, with Group 1 (M = 99.39) demonstrating substantially better functioning than Group 2 (M = 138.91), accompanied by a moderate effect size (Cohen's d = 0.600).

In conclusion, the PEI sessions were associated with significant reductions in perceived family dysfunction across all domains. The most notable improvements were observed in behaviour control, problem-solving, and overall family functioning, highlighting the potential effectiveness of targeted psychoeducational interventions for caregivers of individuals with AUD.

DISCUSSION

The current study aimed to explore differences in FF between caregivers who attended PEI sessions and those who did not, focusing on specific domains of FF. The findings revealed significant differences across all domains, with caregivers who participated in PEI sessions consistently reporting lower levels of perceived family dysfunction. These results highlight the potential role of PEIs in promoting better family dynamics and caregiver well-being in specific population of AUD caregivers.

The results of this study align with previous studies demonstrating the positive effects of PEIs on family functioning and caregiver well-being. Consistent with findings of present study, prior studies have shown that caregivers who participate in psychoeducation programs report reductions in family dysfunction.[15–17] Di Lorenzo et al. (2024) had highlighted that PEIs significantly improve family functioning and reduce caregiver burden and psychological distress, fostering healthier family dynamics and improved caregiving outcomes.[18]

Specific domains like roles and behavioural control have been shown to benefit from psychoeducation, as supported by research indicating notable improvements in these areas following targeted interventions.[15] Additionally, interventions incorporating psychoeducation have demonstrated efficacy in reducing stress, enhancing communication, and providing caregivers with skills to manage caregiving challenges more effectively.[17] These benefits are likely attributable to the structured support, education, and problem-solving strategies that psychoeducational programs provide, helping caregivers address complex family dynamics.[18] This alignment with prior research highlights the relevance of PEIs as a valuable tool in enhancing FF and caregiver well-being.

The observed improvements in family functioning across various domains can be explained by several mechanisms that are inherent to PEIs. For general functioning, psychoeducation equips caregivers with skills to manage caregiving challenges more effectively,[13] fostering an environment of stability and reducing the perception of overall dysfunction. In the domain of affective involvement, the sessions promote emotional awareness and empathy,[21] helping caregivers engage more positively with family members and reducing emotional disengagement.

Improvements in behaviour control are likely due to the training provided in managing difficult behaviours and setting clear boundaries,[22] which enables caregivers to maintain order and reduce chaos within the family. Enhanced communication is another key outcome, as psychoeducational interventions teach caregivers effective ways to express concerns and listen actively,[23] fostering healthier and more constructive family interactions.

The improvements in problem-solving can be attributed to the structured methodologies introduced during the sessions,[13] enabling caregivers to approach challenges methodically and implement practical solutions. Responsiveness to family needs is enhanced as caregivers may gain a better understanding of family dynamics and learn to address issues in a timely and effective manner. For the domain of roles, psychoeducation helps clarify expectations and responsibilities within the family,[24] reducing ambiguity and fostering a more equitable distribution of caregiving duties. The cumulative effect of these improvements in specific domains may contribute to a better overall perception of family functioning, as caregivers develop a cohesive framework for managing their roles and responsibilities while fostering a supportive and harmonious home environment.

In conclusion, the findings of this study highlight the potential benefits of PEIs for improving perception of FF among family caregivers of AUD patients. The significant reductions in perceived FF dysfunction across all domains emphasize the value of PEI programs in addressing the challenges faced by caregivers. These improvements can be attributed to the skills and strategies taught through psychoeducation, including emotional awareness, effective communication, and problem-solving techniques.

Implications

The findings of this study hold significant implications at both micro and macro levels. Clinically, PEIs potentially emerge as a powerful tool for improving family functioning and caregiver well-being. These interventions offer a structured, evidence-based approach that can help clinicians alleviate caregiving stress, enhance emotional engagement, and foster healthier family dynamics. Notably, research among caregivers of individuals with AUD has demonstrated that family functioning not only serves as a critical predictor of caregivers' overall well-being but also partially mediates the relationship between stressors and well-being.[11] Integrating psychoeducation into mental health practice equips caregivers with essential skills in communication, behaviour management, and problem-solving, paving the way for improved perception of family functioning, thereby reducing the effect of stressors on their wellbeing.

At the macro level, these findings underscore the need for systemic efforts to incorporate psychoeducational programs into routine mental health care. Policymakers should prioritize funding and resources for training mental health professionals and expanding the accessibility of psychoeducation, particularly in under-resourced settings. This could include developing national guidelines for PEIs and integrating them into existing caregiving frameworks to improve long-term outcomes for caregivers and care recipients. Furthermore, public health campaigns could raise awareness about the benefits of psychoeducation, encouraging wider participation and reducing stigma associated with AUD.

Limitations and Future Suggestions

This study has certain methodological limitations that may affect its trustworthiness. The use of pre-formed, non-randomized groups reflects the exploratory nature of the research, as randomized sampling was not feasible due to participants' reluctance to commit to a large-scale intervention lasting several months. While this approach provides valuable insights, it introduces the possibility of sampling bias, as caregivers who voluntarily participated in PEI sessions might differ in significant ways from those who did not. Additionally, the cross-sectional nature of the study precludes causal interpretations of the observed associations. Lastly, the relatively small sample size of the intervention group and the absence of long-term follow-up data limit the generalizability and temporal validity of the findings.

Despite these limitations, the study possesses notable strengths. It addresses a largely underexplored area in AUD caregiving and examines multiple domains of family functioning, offering a comprehensive analysis of how PEIs can benefit caregivers. The inclusion of effect sizes further contextualizes the findings, demonstrating the practical significance of the observed differences. Future research should employ randomized controlled trials to confirm the findings of the present study, while also expanding sample sizes and incorporating longitudinal designs to assess the sustainability of PEI's benefits. Such efforts would enhance the reliability of findings and provide a stronger basis for integrating PEIs into clinical and policy frameworks.

CONCLUSION

This study underscores the pivotal role of PEIs in enhancing perception of FF among caregivers of individuals with AUD. By fostering improvements across multiple FF domains, PEIs emerge as a practical tool for addressing caregiving challenges. The findings highlight the need for integrating PEIs into routine caregiving frameworks, emphasizing their potential to reduce caregiver burden, enhance emotional engagement, and improve overall well-being. However, given the exploratory nature of this study, the findings should be interpreted with caution. Future research should employ randomized controlled trials to confirm the results of the present study, expand sample sizes, and incorporate longitudinal designs to assess the sustainability of PEI's benefits. Such efforts would enhance the reliability of findings and provide a stronger basis for integrating PEIs into clinical and policy frameworks. Policymakers and clinicians should prioritize the development and dissemination of structured PEI programs to create supportive environments for caregivers, ultimately improving outcomes for both caregivers and care recipients.

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REFERENCES

1. Ramanan VV, Singh SK. A study on alcohol use and its related health and social problems in rural Puducherry, India. J Fam Med Prim Care. 2016;5:804–8.
2. World Health Organization. Global status report on alcohol and health 2018. Geneva: World Health Organization; 2018. Available from https://iris.who.int/handle/10665/274603
3. Rastogi A, Manthey J, Wiemker V, et al. Alcohol consumption in India: a systematic review and modelling study for sub-national estimates of drinking patterns. Addiction. 2022;117:1871–86.
4. NDDTC, AIIMS. Magnitude of Substance Use in India. Ministry of Social Justice & Empowerment; 2019. Available from https://pib.gov.in/Pressreleaseshare.aspx?PRID=1565001
5. Mattoo SK, Nebhinani N, Kumar BNA, et al. Family burden with substance dependence: a study from India. Indian J Med Res. 2013;137:704–11.
6. Takkalaki SM, Koujalgi SR. Burden and coping among primary caregivers of persons with alcohol use disorder. Indian J Psychiatr Soc Work. 2024;14(1):20-6.
7. Vadher S, Desai R, Panchal B, et al. Burden of care in caregivers of patients with alcohol use disorder and schizophrenia and its association with anxiety, depression and quality of life. Gen Psychiatry. 2020;33:e100215.
8. Epstein NB, Bishop DS, Levin S. The McMaster Model of Family Functioning. J Marital Fam Ther. 1978;4:19–31.
9. Brickell TA, French LM, Sullivan JK, et al. Unhealthy family functioning is associated with health-related quality of life among military spouse caregivers. Psychol Trauma. 2022;14:587–96.
10. Clari R, Headley J, Egger J, et al. Perceived burden and family functioning among informal caregivers of individuals living with schizophrenia in Tanzania: a cross-sectional study. BMC Psychiatry. 2022;22:10.

11. Kalra H, Tung S. Mediating role of social support and family functioning on quality of life of family caregivers of individuals with alcohol use disorder. Indian J Psychol Med. 2024; doi: 10.1177/02537176241275566.
12. Kalra H, Tung S. Study of family functioning as a predictor of quality of life in caregivers of individuals with alcohol dependence syndrome. Indian J Soc Psychiatry. Epub ahead of print 2025. doi: 10.4103/ijsp.ijsp_16_24.
13. Cheng Q, Xu B, Ng MSN, et al. Effectiveness of psychoeducational interventions among caregivers of patients with cancer: A systematic review and meta-analysis. Int J Nurs Stud. 2022;127:104162.
14. Lukens EP, McFarlane WR. Psychoeducation as evidence-based practice: Considerations for practice, research, and policy. Brief Treat Crisis Interv. 2004;4:205–25.
15. Hashemi Z, Javadi S, Zamir S. The effects of family psychoeducation courses on depression, anxiety and family functioning in the caregivers of schizophrenic patients. Health Scope. Epub ahead of print 2021. doi: 10.5812/jhealthscope.104116.
16. Tessier A, Roger K, Gregoire A, et al. Family psychoeducation to improve outcome in caregivers and patients with schizophrenia: a randomized clinical trial. Front Psychiatry. Epub ahead of print. doi: 10.3389/fpsyt.2023.1171661.
17. Zhang ZJ, Lo HHM, Ho WC, Lau ENS, Ng SM, Mak WWS, et al. Mindfulness-based family psychoeducation intervention for caregivers of young adults with first-episode psychosis: results at 9-month follow-up. Front Psychiatry. 2024 Sep 26;15:1460151. doi: 10.3389/fpsyt.2024.1460151.
18. Di Lorenzo R, Dardi A, Serafini V, Amorado MJ, Ferri P, Filippini T. Psychoeducational Intervention for Caregivers of Adolescents and Young Adults with Psychiatric Disorders: A 7-Year Systematic Review. J Clin Med. 2024;13:7010. doi: 10.3390/jcm13237010
19. Epstein NB, Baldwin LM, Bishop DS. The McMaster Family Assessment Device. J Marital Fam Ther. 1983;9:171–80.
20. Black WC, Babin BJ, Anderson RE. Multivariate data analysis: A global perspective. Pearson; 2010.
21. Cathlin CA, Salim RMA. The effectiveness of a psychoeducation intervention program for enhancing self-esteem and empathy: A study of emerging adult college students. J Paedagogy. 2024;11:462–72. doi: 10.33394/jp.v11i3.11414
22. Brown NW. Psychoeducational groups: Process and practice. 4th ed. Routledge. 2018. doi: 10.4324/9781315169590.
23. Fürst CJ, Wengström Y, Årestedt K, Öhlen J, et al. Delivering and participating in a psychoeducational intervention for family caregivers during palliative home care: a qualitative study from the perspectives of health professionals and family caregivers. BMC Palliat Care. 2015;14:16. doi: 10.1186/s12904-015-0015-1
24. Varghese M, Kirpekar V, Loganathan S. Family interventions: Basic principles and techniques. Indian J Psychiatry. 2020;62:S192–200. doi: 10.4103/psychiatry.IndianJPsychiatry_770_19

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