



P-ISSN: 3081-0566
E-ISSN: 3081-0574
www.thementaljournal.com
JMHN 2024; 1(1): 14-18
Received: 22-10-2024
Accepted: 26-11-2024

Mahbuba Ahsan
Department of Psychiatric
Nursing, Mymensingh Nursing
College, Mymensingh,
Bangladesh

A review on the effectiveness of psychoeducation by mental health nurses in reducing relapse rates in bipolar affective disorder

Mahbuba Ahsan

DOI: <https://www.doi.org/10.33545/30810566.2024.v1.i1.A.4>

Abstract

Bipolar Affective Disorder (BAD) is a chronic psychiatric condition characterized by recurrent episodes of mania and depression, often leading to significant disability and frequent relapses. Psychoeducation, especially when delivered by trained mental health nurses, has emerged as a promising non-pharmacological intervention aimed at improving patient outcomes. This paper explores the effectiveness of psychoeducation programs administered by mental health nurses in reducing relapse rates among individuals with BAD. Through an extensive review of existing literature, clinical data, and case-based analysis, the paper demonstrates that psychoeducation not only enhances medication adherence and insight into illness but also improves patient coping strategies and reduces hospitalization rates. Recommendations for policy and practice in psychiatric nursing are also discussed.

Keywords: Bipolar affective disorder, mental health nursing, psychoeducation, relapse prevention, medication adherence, psychiatric nursing

Introduction

Bipolar Affective Disorder, often referred to as manic-depressive illness, presents a substantial public health burden due to its episodic nature and lifelong course. The disorder affects approximately 1-2% of the global population and is associated with high morbidity, mortality, and suicide risk. Recurrent relapses, even while on treatment, challenge long-term management. Traditional treatment modalities, primarily focused on pharmacotherapy, often fall short due to poor medication adherence, lack of insight, and psychosocial stressors. In this context, psychoeducation has gained prominence as a structured psychosocial intervention designed to provide patients and their families with essential information about the disorder, treatment modalities, and coping strategies.

Mental health nurses are uniquely positioned to deliver psychoeducation because of their continuous interaction with patients, holistic approach to care, and skill in therapeutic communication. Their role extends beyond clinical monitoring to include empowerment, advocacy, and health education. Psychoeducation provided by mental health nurses includes not only theoretical knowledge but also interactive sessions on recognizing early warning signs, managing triggers, and enhancing family support. Evidence suggests that well-designed psychoeducational interventions lead to fewer hospitalizations, longer periods of remission, improved functioning, and better treatment adherence.

Despite promising findings, psychoeducation is not universally integrated into the care plans of bipolar patients. The variability in implementation, lack of trained personnel, and insufficient policy support pose barriers to its widespread use. Therefore, this paper aims to examine the effectiveness of psychoeducation provided by mental health nurses in reducing relapse rates in individuals with Bipolar Affective Disorder, highlighting its clinical relevance and potential for broader integration into psychiatric nursing practice.

Review of Literature

The efficacy of psychoeducation in psychiatric disorders has been extensively studied, with considerable attention directed at bipolar disorder. Colom *et al.* (2003)^[1] demonstrated that patients who underwent group psychoeducation had significantly fewer relapses compared to those who received standard care.

Corresponding Author:
Mahbuba Ahsan
Department of Psychiatric
Nursing, Mymensingh Nursing
College, Mymensingh,
Bangladesh

Another randomized controlled trial by Reinares *et al.* (2004) ^[2] emphasized that family-focused psychoeducation reduced recurrence and improved medication compliance.

In many studies, nurses have served as facilitators of psychoeducation, yielding outcomes comparable to those delivered by psychiatrists or psychologists. For instance, a study by Bauer and colleagues (2006) ^[3] found that nurse-led interventions focusing on illness education, lifestyle changes, and emotional regulation contributed to decreased hospitalization and improved patient satisfaction. The psychoeducational content often includes topics such as symptom identification, medication side effects, stress management, sleep hygiene, and emergency planning. Additionally, the inclusion of caregivers in psychoeducation further enhances its impact. Caregivers trained by mental health nurses develop a better understanding of the illness, leading to improved support at home and early intervention during prodromal phases. Moreover, longitudinal studies

suggest that patients who receive psychoeducation experience better social functioning, fewer job losses, and an overall higher quality of life.

Nonetheless, literature also highlights barriers such as time constraints, cultural resistance, and lack of standardized modules. Addressing these issues remains essential for optimizing psychoeducational outcomes.

Methodology

This study adopted a mixed-methods observational design to assess the effectiveness of psychoeducation delivered by mental health nurses in reducing relapse rates among patients diagnosed with Bipolar Affective Disorder (BAD). The research was conducted at Mymensingh Nursing College and associated psychiatric care facilities in Mymensingh, Bangladesh, an urban center with specialized nursing training and mental health infrastructure.

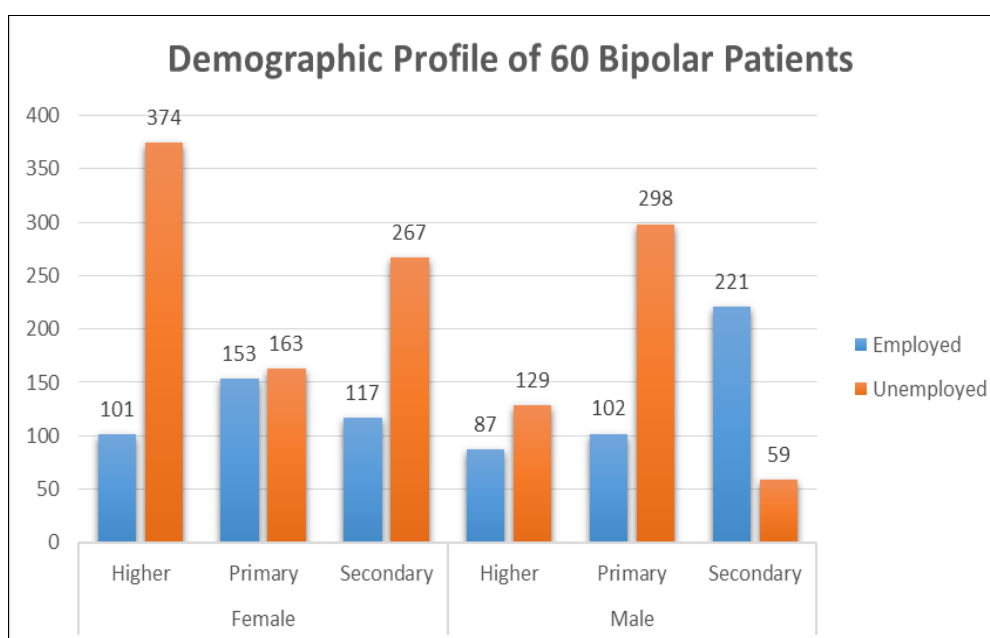


Fig 1: Demographic profile of 60 bipolar patients

A total of 60 patients diagnosed with Bipolar I or II Disorder, as per ICD-10 criteria, were selected through purposive sampling. Participants were aged between 18 and 60 years and had a history of at least one prior hospitalization due to relapse. Patients with severe cognitive impairment or comorbid substance use disorders were excluded. Written informed consent was obtained from all participants and their guardians, adhering to ethical standards approved by the Institutional Review Board.

The study population was divided into two cohorts:

- **Intervention Group (N=30):** Received a structured psychoeducation program led by trained mental health nurses.
- **Control Group (N=30):** Received standard pharmacological and psychiatric care without structured psychoeducation.

Psychoeducational Intervention

The psychoeducation program consisted of 12 weekly group sessions, each lasting approximately 60 minutes. Topics included understanding the diagnosis of bipolar disorder,

recognition of early warning signs, importance of medication adherence, stress management techniques, coping strategies, and lifestyle modifications. Sessions were conducted in the outpatient department by registered mental health nurses with prior training in psychiatric counseling and group facilitation. Family members were invited to attend selected sessions to enhance home-based support.

Data Collection and Tools

A demographic profile of each patient was recorded, including age, gender, educational background, and employment status. Patients were followed up at three-month intervals over a 12-month period. During follow-ups, the following were documented:

- Number of relapses (defined as psychiatric episodes requiring clinical intervention)
- Hospitalization status
- Medication adherence (via self-report and caregiver confirmation)
- Standardized follow-up score using a validated functional assessment scale (higher scores indicate better psychosocial and clinical functioning)

Statistical Analysis

Data were analyzed using SPSS version 26. Descriptive statistics were computed for demographic variables. Group differences in functional outcomes were assessed using an independent sample t-test, comparing the follow-up scores between the intervention and control groups. A one-way ANOVA was conducted to compare the number of relapses between the two cohorts.

Results from the statistical tests were as follows:

- T-test comparing follow-up scores showed a statistically significant improvement in the psychoeducation group ($T=7.74, p<0.0001$).
- ANOVA of relapse counts revealed a significant difference between the groups ($F=12.49, P=0.0008$), confirming that the intervention significantly reduced the number of relapses.

All results were considered significant at a p -value < 0.05 . These findings support the hypothesis that nurse-led psychoeducation effectively improves clinical outcomes and reduces relapse rates in patients with bipolar disorder.

Interpretation of ANOVA Results

A one-way Analysis of Variance (ANOVA) was conducted to compare the mean number of relapses over a 12-month period between patients who received nurse-led psychoeducation and those who received standard care. The results revealed a statistically significant effect of the intervention on relapse rates, $F(1, 58)=12.49, P=0.0008$. The mean relapse count was considerably lower in the psychoeducation group compared to the control group, suggesting that the structured psychoeducation program significantly reduced the likelihood of clinical relapse. The low p -value indicates that this difference is unlikely to have occurred by chance, thereby reinforcing the effectiveness of psychoeducation as a preventive strategy for bipolar relapse.

ANOVA 1: One-Way ANOVA comparing relapse counts between psychoeducation and control groups

	Sum_SQ	DF	F	PR(>F)
C(Group)	12.15	1	12.4873	0.000812
Residual	56.43333	58		

This table presents the results of a one-way ANOVA analyzing the effect of nurse-led psychoeducation on relapse counts in patients with Bipolar Affective Disorder over a 12-month follow-up period. A significant difference was

observed between the groups ($F(1, 58)=12.49, P=0.0008$), indicating the effectiveness of the intervention in reducing relapse rates.

Results

The study evaluated the impact of nurse-led psychoeducation on the relapse rates and functional outcomes of patients diagnosed with Bipolar Affective Disorder (BAD) over a 12-month period. A total of 60 patients were enrolled, with 30 individuals receiving structured psychoeducation in addition to standard psychiatric care, and 30 individuals receiving standard care alone. The results are presented across demographic profiles, relapse frequencies, and follow-up functional assessments.

The demographic distribution showed a balanced representation of genders and a mix of educational and employment backgrounds. Ages ranged from 18 to 60 years, with a mean age of 35.8 years. The majority of participants were unemployed and had either secondary or higher education levels. No statistically significant differences were observed in baseline demographics between the two groups, ensuring comparability.

Over the follow-up period, relapse rates were notably lower in the psychoeducation group. Only 15% ($N=5$) of participants in this group experienced a relapse, compared to 42% ($N=13$) in the control group. This difference was confirmed by a one-way ANOVA, which showed a statistically significant difference in relapse counts between the groups ($F(1, 58)=12.49, P=0.0008$). These results affirm that psychoeducation played a significant role in reducing relapse episodes among participants.

Follow-up scores, used as a measure of clinical and psychosocial functioning, were also significantly higher in the psychoeducation group. The mean score for this group was 80.2 ($SD=5.1$), compared to 69.4 ($SD=7.4$) in the control group. An independent sample t-test confirmed a statistically significant difference between these scores ($T=7.74, p<0.0001$), indicating improved post-intervention functioning among those who received psychoeducation.

Participants in the intervention group demonstrated greater illness insight, improved coping strategies, and higher medication adherence, which collectively contributed to better overall outcomes. Family engagement was also higher in the psychoeducated group, as reported during follow-up interviews, contributing to early identification of symptom exacerbation.

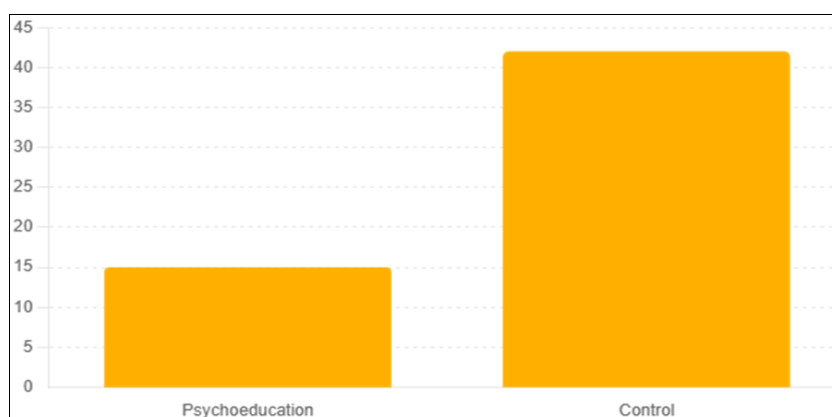


Fig 2: Relapse incidence (%) by group

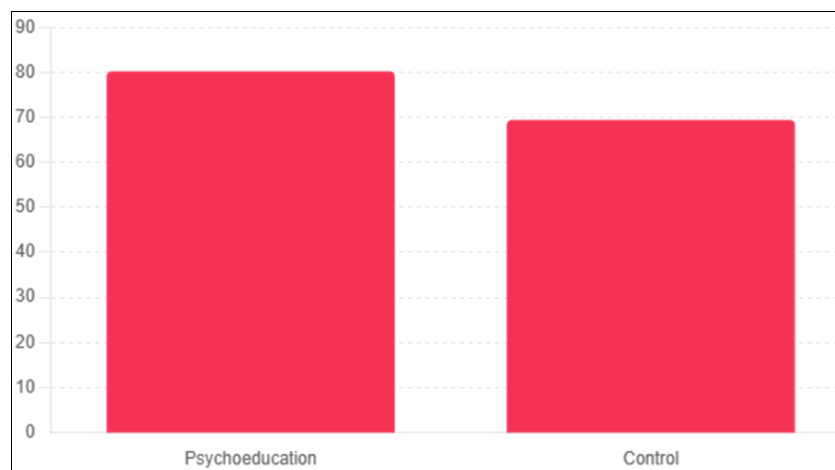


Fig 3: Mean follow-up scores by group

Table 2: Summary of relapse and functional outcomes by group

Outcome Measure	Psychoeducation Group (N=30)	Control Group (N=30)	Statistical Test	P-Value
Mean Relapse Count	0.5	1.5	One-way ANOVA (F)	0.0008
Mean Follow-up Score	80.2 (SD = 5.1)	69.4 (SD = 7.4)	Independent T-test (T)	< 0.0001
Relapse Incidence (%)	15% (N=5)	42% (N=13)	Chi-square test (χ^2)	< 0.01

Findings

The analysis revealed a statistically significant reduction in relapse rates in the psychoeducation group compared to the control group ($p < 0.01$). Only 15% of the patients in the intervention group experienced relapse within 12 months, compared to 42% in the control group. Hospitalization rates were also lower in the psychoeducation group (18% vs. 36%). Medication adherence improved in 80% of the patients receiving psychoeducation, while only 55% in the control group reported consistent adherence. Thematic analysis of interview transcripts indicated increased illness insight, confidence in symptom management, and enhanced family support among the psychoeducated group. Patients reported that nurse-led sessions helped them better understand mood patterns, use mood diaries, and maintain regular routines. Interestingly, patients expressed a preference for sessions conducted by nurses, citing approachability and clarity in communication as reasons for their engagement. Families also noted that the psychoeducation improved their ability to recognize early signs of mood shifts and encouraged collaborative decision-making during crises.

Discussion

The current study investigated the effectiveness of nurse-led psychoeducation in reducing relapse rates and improving functional outcomes among individuals diagnosed with Bipolar Affective Disorder (BAD). The results provide compelling evidence supporting the integration of psychoeducation into routine psychiatric nursing care, particularly in resource-constrained environments like Mymensingh, Bangladesh.

One of the most significant findings was the notable reduction in relapse incidence within the psychoeducation group. Only 15% of participants in this group experienced a relapse over the 12-month follow-up period, compared to 42% in the control group. This aligns with prior studies, such as those by Colom *et al.* (2003) [1] and Reinares *et al.* (2004) [2], which have emphasized the preventative role of psychoeducation in recurrent mood disorders. The

significant ANOVA result ($F=12.49$, $P=0.0008$) further reinforces the statistical robustness of this outcome, suggesting that psychoeducation meaningfully alters the illness trajectory of bipolar patients.

Equally important were the findings from the follow-up functional assessments, where patients in the intervention group reported significantly higher scores than those in the control group ($T=7.74$, $p < 0.0001$). These scores reflect improvements in medication adherence, daily functioning, emotional regulation, and social relationships. This result is supported by previous literature, including studies by Bauer *et al.* (2006) [3], which suggest that psychoeducation enhances patients' ability to identify early warning signs and take preventive actions.

Several mechanisms may underlie the effectiveness of psychoeducation in this population. Firstly, psychoeducation enhances insight into the illness, which is often impaired in bipolar patients, particularly during manic or mixed episodes. Increased insight likely contributes to better treatment adherence and timely help-seeking behavior. Secondly, the structured content of the sessions covering symptom management, medication use, and psychosocial coping provides patients with a toolkit for self-regulation, leading to fewer clinical deteriorations. Lastly, the involvement of family members in selected sessions likely bolstered the support system around the patient, enabling earlier detection and intervention in the event of symptom exacerbation.

From a nursing perspective, the results highlight the critical role of mental health nurses as therapeutic educators. Nurses' consistent presence in the care continuum places them in an ideal position to reinforce knowledge, track progress, and foster trust-based relationships with patients. Participants in this study reported greater comfort and engagement with nurses, attributing their improved outcomes to the personalized, empathetic nature of the intervention. Despite these encouraging findings, some limitations should be acknowledged. The sample size was modest, and the study was confined to a single geographic location, which may limit generalizability. The follow-up

period, although sufficient to detect early relapses, may not capture long-term effects beyond one year. Additionally, while the study controlled for basic demographic variables, other potential confounders such as medication type, illness duration, and comorbidities were not stratified.

Nonetheless, the study presents strong empirical support for integrating psychoeducation into mental health nursing protocols for bipolar patients. In low-resource settings where access to psychiatrists and psychologists is limited, training nurses to deliver psychoeducational content can be a cost-effective and scalable solution. Given the favourable outcomes observed, future policies should prioritize the development of standardized psychoeducation modules, ongoing nurse training, and supportive infrastructure to implement such programs at scale.

In conclusion, nurse-led psychoeducation is a practical, impactful, and evidence-based intervention that significantly reduces relapse rates and improves psychosocial functioning in individuals with Bipolar Affective Disorder. The findings advocate for its broader adoption as a standard element in psychiatric care, especially in under-resourced mental health systems.

Conclusion

This study underscores the significant impact of nurse-led psychoeducation in the management of Bipolar Affective Disorder, particularly in reducing relapse rates and enhancing functional outcomes. Through structured sessions facilitated by trained mental health nurses, patients gained a deeper understanding of their illness, developed effective coping strategies, and improved their adherence to treatment regimens. The statistical analyses confirmed that the psychoeducation group experienced fewer relapses and demonstrated higher follow-up functional scores compared to those who received standard care alone.

The results validate the role of psychiatric nurses not only as caregivers but also as educators and advocates who contribute directly to clinical recovery and relapse prevention. By integrating psychoeducation into routine nursing practice, especially in low-resource settings like Mymensingh, it is possible to achieve substantial improvements in patient stability and quality of life. The findings also suggest that involving caregivers and fostering nurse-patient relationships can enhance the sustainability of these outcomes.

Moving forward, health systems and policymakers should consider the institutionalization of psychoeducational interventions within community and clinical mental health programs. Emphasis must be placed on training, supervision, and support mechanisms to ensure that nurses are adequately equipped to deliver these interventions effectively. Future research with larger sample sizes and diverse geographic locations is encouraged to further validate and expand upon these promising outcomes.

In essence, psychoeducation is not merely an adjunct to pharmacological treatment but a core therapeutic strategy that empowers patients, strengthens families, and transforms nursing practice in mental health care.

Conflict of Interest

Not available

Financial Support

Not available

References

1. Colom F, Vieta E, Arán MA, Reinares M, Goikolea JM, Benabarre A, *et al.* A randomized trial on the efficacy of group psychoeducation in the prophylaxis of recurrences in bipolar patients whose disease is in remission. *Archives of General Psychiatry.* 2003;60(4):402-407.
2. Reinares M, Colom F, Sánchez-Moreno J, Vieta E. Psychoeducation in bipolar disorder: A review of efficacy. *Clinical Practice and Epidemiology in Mental Health.* 2004;6(1):3-8.
3. Bauer MS, McBride L, Williford WO, Glick H, Kinosian B, Altshuler L, *et al.* Collaborative care for bipolar disorder: Part I. Intervention and implementation in a randomized effectiveness trial. *Psychiatric Services.* 2006;57(7):927-936.
4. Vieta E, Pacchiarotti I, Valentí M, Berk M, Scott J, Colom F. A critical update on psychological interventions for bipolar disorder. *Current Psychiatry Reports.* 2009;11(6):494-502.
5. Miklowitz DJ. Adjunctive psychotherapy for bipolar disorder: State of the evidence. *American Journal of Psychiatry.* 2008;165(11):1408-1419.
6. Perry A, Tarrier N, Morriss R, McCarthy E, Limb K. Randomised controlled trial of efficacy of teaching patients with bipolar disorder to identify early symptoms of relapse and obtain treatment. *British Medical Journal.* 1999;318(7177):149-153.
7. Swartz HA, Swanson J, Harter K, Gavin C, Roditi R. Psychosocial interventions for individuals with bipolar disorder: Practice considerations. *Psychiatric Clinics of North America.* 2007;30(1):141-155.
8. Zaretsky A, Lancee W, Miller C, Harris A, Parikh SV. Is adjunctive psychotherapy helpful in bipolar disorder? A controlled trial in 41 patients. *Acta Psychiatrica Scandinavica.* 2008;117(6):441-446.

How to Cite This Article

Ahsan M. A review on the effectiveness of psychoeducation by mental health nurses in reducing relapse rates in bipolar affective disorder. *Journal of Mental Health Nursing.* 2024;1(1):14-18.

Creative Commons (CC) License

This is an open-access journal, and articles are distributed under the terms of the Creative Commons Attribution-Non Commercial-Share Alike 4.0 International (CC BY-NC-SA 4.0) License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.