

12-4-2024

Impact of Patient Psychoeducation on Medication Adherence in Bipolar Depression

Mary Nse Wellington
Walden University

Follow this and additional works at: <https://scholarworks.waldenu.edu/dissertations>



Part of the [Nursing Commons](#)

This Dissertation is brought to you for free and open access by the Walden Dissertations and Doctoral Studies Collection at ScholarWorks. It has been accepted for inclusion in Walden Dissertations and Doctoral Studies by an authorized administrator of ScholarWorks. For more information, please contact ScholarWorks@waldenu.edu.

Walden University

College of Nursing

This is to certify that the doctoral study by

Mary Wellington

has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

Review Committee

Dr. M. Terese Verklan, Committee Chairperson, Nursing Faculty

Dr. David Sharp, Committee Member, Nursing Faculty

Chief Academic Officer and Provost

Sue Subocz, Ph.D.

Walden University

2024

Executive Summary: Quality Improvement Initiative
Enhancing Medication Adherence Among Bipolar Depression Patients
Impact of Patient Psychoeducation on Medication Adherence in Bipolar Depression
by
Mary Wellington

Executive Summary Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Nursing Practice

Walden University

November 2024

Summary

The quality improvement (QI) project targeted patients with bipolar depression, aged 20–50 years, in an outpatient mental health setting who had the problem of nonadherence to medication. Medication nonadherence is a major concern in nursing practice that impacts clinical effectiveness, overall treatment outcomes, and healthcare cost implications. The project evaluated whether the outcome, timely refill rates of prescription medication, was impacted by the psychoeducation that was conducted outside the scope of the project. The project question was, “What is the impact of patient psychoeducation to improve timely refill rates among patients with bipolar depression aged 20–50 years in an outpatient mental health setting?” A comparative analysis of the medication refill rates before and after intervention was conducted to determine its effectiveness.

De-identified patient data from medical records were obtained from the office manager for the 3 months before and after the psychoeducation to determine patients’ medication refill rates as a reflection of their medication adherence. Results indicated a decrease in the number of patients who did not adhere to their medication from 8 per month before the intervention to 2 per month post-intervention. The main recommendations of the project include to streamline the refill process by allowing refills online or by phone and continue with patients’ medication adherence counseling on how to adhere to their medication regimen for 6 months to ensure timely refill rates. The project also promotes diversity, equity, and inclusion by tailoring interventions to meet the definite needs of the patient population with bipolar depression.

Background

The background of the QI project lies on medication nonadherence rates in patients with bipolar depression, as it is a problem that greatly affects the treatment outcomes and effectiveness. Bipolar depression is a type of chronic depressive disorder in which people experience both depressive and manic mood swings for which they need to take medications to level their mood swings regularly. However, literature has shown that about half of the patients do not take their medications as prescribed (Buizza et al., 2019). In the psychiatric outpatient facility where the project was conducted, 10 of the 30 patients did not refill their medication prescriptions on time.

The purpose of the project was to assess the impact of psychoeducation among patients with bipolar depression aged 20–50 years on medication refill rates in an outpatient mental health clinic. The practice focused question was, “What is the impact of patient psychoeducation to improve timely refill rates among patients with bipolar depression aged 20–50 years in an outpatient mental health setting?” Improved timely refill rates have a positive impact on relapse of symptoms, re-hospitalization, and poor psychosocial outcomes (Başkaya & Demir, 2022).

There is rich evidence from past research supporting the practice change. Foley et al. (2021) indicated that medication nonadherence among individuals with multimorbidity increases healthcare costs due to observed higher hospital and outpatient visit rates. Similarly, in patients diagnosed with bipolar depression, nonadherence to medications builds an economic toll through the prolonging of hospital stays. Uncontrolled bipolar disorder due to medication nonadherence can make it difficult to

exercise or participate in social activities (Khalaf et al., 2021). Stewart et al. (2023) noted that noncompliance with mood-stabilizers treatment is linked to increased admission rates and suicide attempts among patients with bipolar disorder. Moreover, Mohammed et al. (2024), found that noncompliance with medication can lead to more serious and frequent mood episodes, which in turn causes long-term disability and failure to adapt in society. Interventions such as patient psychoeducation, which equip patients with knowledge and skills for managing their condition nimbly, can give patients the power to manage their lives independently and better functionality outcomes (Rabelo et al., 2021).

With the provision of detailed information on bipolar depression management and emphasizing adherence to medications, patients have a greater chance of realizing prescription refill significance without delay (Rentala, 2021). The strength of evidence is rated high with most evidence evaluated as Level I and II, with few articles rated Level III. Overall, there is strong evidence to support practice change to ensure medication adherence among bipolar depression patients, with a variety of study types providing a thorough knowledge.

Project Development

The main outcome variable was the timely refill rates of prescription medication. Timely refill rates of prescription medication served as a proxy for medication adherence, hence these rates were used to evaluate the impact of psychoeducation among bipolar depression. Timely refill rates provided a measure of how well patients are adhering to their prescribed medication regimens. The changes in refill rates before and after the intervention were measured to assess the effectiveness of the intervention in improving

adherence. The medical records were examined weekly to track refill patterns and find evidence of timely medication refills. The timely refill rates of bipolar depression medication were tracked before and after the psychoeducation to measure the impact of the intervention.

When conducting this project aimed at improving timely refill rates, it was essential to obtain de-identified data from medical records to protect patient privacy while still gaining valuable insights. The data were obtained by the office manager and provided to me in an Excel file on a USB flash drive at the end of data collection. Data masking was used to remove specific fields and values that could directly identify individuals such as names, date of birth, telephone numbers, email addresses, social security numbers and medical record numbers. The time prior to the implementation of the evaluation include March, April, and May 2024 before the psychoeducational intervention was provided, whereas the post-evaluation period included June, July and August 2024.

The method of data analysis used in the evaluation was comparative statistics. The 3 months of retrospective data were compared to the 3 months of prospective data to determine the change in the medication refill rates. The comparative statistics approach allowed for a quantitative assessment of the changes in refill patterns and provided valuable insights into the effectiveness of the intervention. Analysis through comparative statistics was chosen to identify meaningful patterns and trends within and between retrospective and prospective datasets, ensuring a reliable analysis of the observed changes.

Results

Retrospective data showed that eight patients diagnosed with bipolar depression did not refill the medications on time (see Table 1). The common reason for not refilling is that they still had the medications due to skipping doses. The analysis found that the number of patients per month who did not refill their medication as indicated significantly reduced from eight before the education to only two after the education, showing that the patient psychoeducation had a tremendous impact on timely refill rates. The substantial decrease demonstrates the efficacy of the intervention in improving timely medication refill rates, thereby achieving the intended outcomes (Joas et al., 2020).

Table 1

Number of Patients who Did Not Refill Their Medications as Indicated

Outcome measure	Before education			After education		
	March	April	May	June	July	August
	Numbers					
Timely refill rates	8	8	7	5	4	2

The QI project had a significant impact on the organization. The intervention leads to improved treatment efficacy, prevention of treatment failures and better disease management (Bauer et al. 2019). Adhering to medication regimens as prescribed increases the likelihood of achieving desired treatment outcomes, reduces the risk of complications associated with the complications, reduces rehospitalization rates and guides evidence-based practice implementation. Findings that support efficient educational interventions facilitate the integration of evidence-based practices within the

organization and can help develop policies and resources to support the families and patients with bipolar disorder (Başkaya & Demir, 2022).

The project also has shortcomings that may have negatively impacted the results. Change implementation can be challenging and some barriers should be expected. The project limitations include generalizability, reliability of medical records documentation and the fact that the project had only 3 months of data post-intervention. The dependability of the chart documentation substantially limits the project's validity and the generalizability of the findings to a broader population beyond the facility and participants. The accuracy and completeness of documentation in the medical record may vary, leading to potential inconsistencies or missing data. It is important to ensure that the documentation is reliable and consistent across all cases to draw accurate conclusions. Medical record audits may not capture the full context of medication adherence or the nuances of patient interaction with healthcare providers. Factors such as patient behavior, environmental conditions, or team dynamics might not be fully reflected in the medical records, limiting the ability to assess the true impact of the psychoeducation. Another limitation is that the project had only 3 months of data post-intervention, which limited the ability to assess if the medication adherence rates would remain consistently high over a longer period.

Conclusion

Because the QI project is completed, it is possible to acknowledge the effectiveness of psychoeducation in the enhancement of medication adherence among patients with bipolar depression. The results highlighted the fact that structured

psychoeducation could meaningfully decrease nonadherence, which is a key determinant in recovery from bipolar disorder and minimization of relapses and rehospitalizations. Many similar studies as seen in the summary of evidence confirm the importance of psychoeducation in supporting patients diagnosed with bipolar depression to improve treatment efficacy in hospitals and better disease management in mental healthcare practice. Conducting the QI intervention helped not only to increase the refill rate but also to increase patients' involvement in the treatment process. Through integrated educational interventions, patients acquire knowledge and become active participants in the care process, which plays an important role in sustainable adherence (Jawad et al., 2018). Furthermore, the outcomes of this project imply that such an approach might be helpful in other outpatients' mental health settings, especially where patients fail to adhere to their medication regimen.

The main recommendations of the project include to streamline the refill process by allowing refills online or by phone and continue with patients' medication adherence counseling on how to adhere to their medication regimen for 6 months to ensure timely refill rates. Medication adherence counseling should be customized based on individual patient needs, considering factors such as cultural background, literacy level, and cognitive abilities. Additionally, family members or caregivers should be involved in the counseling process to provide additional support and encouragement.

The project also promotes positive social change, diversity, equity, and inclusion by addressing health disparities. Medication adherence often varies across different populations due to factors such as socioeconomic status, race, ethnicity, and cultural

beliefs. Addressing the disparities promotes health equity and reduces social inequalities. Additionally, the project substantially empowers individuals by educating them about their medications and their importance, which can empower them to take control of their health and lead to increased self-esteem, confidence, and a sense of agency (Rentala, 2021). The project also builds the community by fostering a sense of belonging and support among individuals with similar health conditions which can help to reduce social isolation and stigma. Furthermore, by raising awareness about the importance of medication adherence and the barriers that individuals may face, the project advocates for policy changes and systemic improvements in healthcare delivery (Rabelo et al., 2021). Lastly, the project promotes cultural sensitivity by considering the cultural differences and beliefs which help to ensure that medication adherence interventions are culturally appropriate and effective which promote inclusivity and respect for diversity.

References

- Başkaya, E., & Demir, S. (2022). Effect of treatment adherence training given to patients with bipolar disorder on treatment adherence, social functioning and quality of life: A pilot study. *Complementary Therapies in Clinical Practice*, 46, Article 101504. <https://doi.org/10.1016/j.ctcp.2021.101504>
- Bauer, M., Glenn, T., Alda, M., Bauer, R., Grof, P., Marsh, W., Monteith, S., Munoz, R., Rasgon, N., Sagduyu, K., & Whybrow, P. C. (2019). Trajectories of adherence to mood stabilizers in patients with bipolar disorder. *International Journal of Bipolar Disorders*, 7, Article 19. <https://doi.org/10.1186/s40345-019-0154-z>
- Buizza, C., Candini, V., Ferrari, C., Ghilardi, A., Saviotti, F. M., Turrina, C., Nobili, G., Sabauda, M., & de Girolamo, G. (2019). The long-term effectiveness of psychoeducation for bipolar disorders in mental health services. A 4-year follow-up study. *Frontiers in Psychiatry*, 10. <https://doi.org/10.3389/fpsyt.2019.00873>
- Foley, L., Larkin, J., Lombard-Vance, R., Murphy, A. W., Hynes, L., Galvin, E., & Molloy, G. J. (2021). Prevalence and predictors of medication non-adherence among people living with multimorbidity: A systematic review and meta-analysis. *BMJ Open*, 11(9). <https://doi.org/10.1136/bmjopen-2020-044987>
- Jawad, I., Watson, S., Haddad, P. M., Talbot, P. S., & McAllister-Williams, R. H. (2018). Medication nonadherence in bipolar disorder: A narrative review. *Therapeutic Advances in Psychopharmacology*, 8(12), 349–363. <https://doi.org/10.1177/2045125318804364>
- Khalaf, K., Johnell, K., Austin, P. C., Tyden, P., Midlöv, P., Perez-Vicente, R., & Merlo,

J. (2021). Low adherence to statin treatment during the 1st year after an acute myocardial infarction is associated with increased 2nd-year mortality risk—An inverse probability of treatment weighted study on 54 872 patients. *European Heart Journal – Cardiovascular Pharmacotherapy*, 7(2), 141–147.

<https://doi.org/10.1093/ehjcvp/pvaa010>

Joas, E., Bäckman, K., Karanti, A., Sparding, T., Colom, F., Pålsson, E., & Landén, M. (2020). Psychoeducation for bipolar disorder and risk of recurrence and hospitalization—a within-individual analysis using registry data. *Psychological medicine*, 50(6), 1043-1049 <https://doi.org/10.1017/s0033291719001053>

Mohammed, F., Geda, B., Yadeta, T. A., & Dessie, Y. (2024). Antipsychotic medication non-adherence and factors associated among patients with schizophrenia in eastern Ethiopia. *BMC Psychiatry*, 24(1), Article 108.

<https://doi.org/10.1186/s12888-024-05554-0>

Rabelo, J. L., Cruz, B. F., Ferreira, J. D. R., de Mattos Viana, B., & Barbosa, I. G. (2021). Psychoeducation in bipolar disorder: A systematic review. *World Journal of Psychiatry*, 11(12), 1407–1419. <https://doi.org/10.5498/wjp.v11.i12.1407>

Rentala, S. (2021). Efficacy of psychoeducation to improve medication adherence among bipolar affective disorder: A systematic review. *Indian Journal of Psychiatric Nursing*, 18(1), 55-60 DOI: 10.4103/iopn.iopn_61_20

Stewart, S.-J. F., Moon, Z., & Horne, R. (2023). Medication nonadherence: health impact, prevalence, correlates and interventions. *Psychology & Health*, 38(6), 726–765. <https://doi.org/10.1080/08870446.2022.2144923>