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Staff Education on Medication Adherence Teaching for Psychiatric Patients in the Outpatient Setting

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Executive Summary: Staff Education Project

Staff Education on Medication Adherence Teaching for Psychiatric Patients in the Outpatient Setting

by

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Summary

The purpose of this doctoral project was staff education, specifically addressing the practice gap of a lack of standardized staff education on medication adherence in the outpatient psychiatric care setting. The practice-focused question was, “Will staff education on medication adherence for psychiatric patients in the outpatient setting result in an increase in staff knowledge?” To provide staff with the information they needed to consistently deliver patient education that supported evidence, the project was created, conducted, and assessed as a structured staff education program.

Knowledge changes among the 10 participants were evaluated and measured using the mean difference in post- and pre-tests. Interventions with changes included the teach-back method (25), side effects of medications (20), reminders (35), effective communication (23), medication lists (25), and instructions to patients’ cultural and educational levels (25). The changes in the interventions showed an improved score significantly in all areas.

Knowledge gaps were successfully filled by a structured education program using evidence-based interventions, emphasizing the value of equity and inclusion for patients, and frequent training to ensure that all patients receive consistent, high-quality medication adherence education. The project is pertinent to nursing practice because standardized instruction guarantees consistent, evidence-based care, and nurses’ capacity to address medication adherence fosters professional growth and improved clinical outcomes. The project encouraged positive social change and better health outcomes by addressing obstacles such as cultural differences, linguistics, and health literacy.

Background

The practice gap was a lack of standardized patient teaching among the staff members regarding medication adherence practice in an outpatient psychiatric clinic. Lack of medication adherence results in poor outcomes for patients.

The project question was, “Will staff education on medication adherence for psychiatric patients in the outpatient setting result in an increase in staff knowledge?” The purpose of the project was to determine whether structured staff education on medication adherence in outpatient psychiatric care could increase staff knowledge and provide them with evidence-based strategies that would promote patient medication adherence.

Research indicates that to address obstacles like medication side effects, it is crucial to incorporate patient-held medication lists into standard care procedures since they can be helpful tools for talking about medication changes, possible side effects, and interactions (O’Donovan et al., 2022). Due to complicated regimens (Aremu et al., 2022), practical strategies like follow-ups, patient education, and reminder tools are necessary to improve medication adherence because they guarantee that patients take their medications as directed, which improves health outcomes. Follow-ups offer regular support and address adherence barriers; patient education increases knowledge and self-assurance in medication management; and reminder tools reinforce timely medication intake. In their article, Cross et al. (2020) indicate that these interventions can improve health-related quality of life, decrease adverse drug events, and reduce health service utilization, all contributing to better overall healthcare outcomes. They can also increase patients' engagement and knowledge about medications, confidence in managing them, and satisfaction with treatment. Staff should be trained to recognize common medication-related barriers that patients encounter and provide them with reminder tools, clear and concise medication education, and links to financial assistance programs. These strategies should address common medication-related barriers that patients face, such as side effects, complex medication schedules, forgetfulness, lack of understanding of the importance of the medication, and financial constraints.

Evidence-based tailored educational interventions, like the teach-back technique, improve communication skills, staff expertise, staff confidence, and patient involvement in their care. Talevski et al. (2020) noted that structured interventions like teach-back significantly improve patient adherence rates, engagement, and knowledge. More recently, research has shown that enhanced staff education regarding medication adherence leads to improved patient outcomes. An organized and well-communicated education program could increase staff knowledge and efficacy in medication adherence teaching. Effective communication techniques, such as demonstrating empathy and having clear, structured conversations that are essential for delivering health behavior change messages, are likely transferable to medication adherence education for patients in any healthcare setting (Albury et al., 2019).

Evidence-based practice (EBP)

> …which integrates the best available evidence in the relevant literature with patient preferences and values and the expertise of healthcare professionals (HCPs), improves the implementation of safe, high-quality healthcare for patients,

> lowers avoidable costs, and is essential in closing knowledge gaps and reducing health inequities (Santos et al., 2022).

Clear communication, patient education, and strong mechanisms for reporting and managing medication errors are essential components of a patient-centered medication safety framework that integrates patient perspectives, system-level support, and active patient engagement (Giles et al., 2019). According to Sullivan (2023)

> Outcomes-based standardization addresses variability in healthcare practices by establishing evidence-based standards that enhance care delivery across different settings and encourages standardized protocols and guidelines based on patient outcomes to ensure consistent, high-quality care.

Multiple databases were used, including MEDLINE, PsycINFO, EMBASE, MEDLINE, CINAHL, CINAHL Plus, BMJ Open, Cochrane, Google Scholar, and other pharmacy-related databases included in PLoS ONE, which also included systematic reviews that made use of PubMed and Web of Science and Walden University Library database. Levels of evidence used included Level I Systematic review of qualitative studies; Level I Systematic Review of Randomized Controlled Trials; Level I Systematic Review with Meta-analysis; Level I Systematic review, Level III Well-designed qualitative study; and Level III Qualitative study. Overall quality was high because of its robust analysis, clear methodology, and relevance to changing health-related behaviors. Because of the structured Cochrane methodology and evidence-based insights, as well as its statistical analysis and strong methodology, and its well-structured approach and indications, The overall quality of the other articles were moderate because they lacked rigorous meta-analytical methodologies and because of their emphasis on practical healthcare practices.

A total of 10 articles were used for the project, and out of them, seven had a level I with an overall quality rating as strong, there was one level III, and the remaining two were level IV. However, with the executive summary, six supporting evidence were level I indicating a strong rating and the remaining one was level IV.

A summary of the evidence showed that structured educational interventions significantly improved staff knowledge and patient outcomes related to medication adherence, supported by systematic reviews, meta-analyses, organizational guidelines, and internal data, with consistent findings across diverse healthcare settings. It also educated and informed staff members about the significant effects that medication adherence has on patient outcomes.

Project Development for Staff Education

Ten staff members with various degrees of patient education experience participated in the project: two registered nurses (RNs), including a clinical educator, two licensed practical nurses (LPNs), three care coordinators, two medical assistants, and a Nurse Practitioner (NP). The teach-back method, medication side effects, reminders, effective communication, cultural and educational considerations, and patient-centered medication lists were among the adherence strategies covered in interactive PowerPoint presentations. Seven staff members participated in live sessions, and three chose to study independently.

Pre- and post-assessments, which were anonymous to maintain confidentiality, measured staff knowledge gained about medication adherence in psychiatric patients. The creation of instructional materials, such as PowerPoint presentations, handouts, and pre/post-assessment tools that addressed subjects like medication lists, reminders, communication, cultural considerations, side effects, and the teach-back method was guided by evidence-based methodologies from literature reviews. Descriptive statistics were utilized to measure the results. A final report with suggestions for maintaining the program was created using the results and participant input and will be shared with organizational leadership.

In the collection and analysis of the data, staff confidence and knowledge on medication adherence topics, such as the teach-back method, medication lists, side effects, reminders, and cultural considerations, were assessed using multiple-choice questions in a pre-test assessment. PowerPoint presentations and reference materials were used in the educational sessions. Immediate knowledge gains were measured using a post-test assessment structurally identical to the pre-test.to assess knowledge retention. Improved knowledge was indicated by an increase in mean post-test scores relative to pre-test scores; comparable results were anticipated in the follow-up evaluation.

Results

The evaluation assessed the program’s efficacy and long-term applicability by measuring knowledge gains and relevance through multiple-choice pre-and post-tests. The mean score for each intervention was used for the pre-test and post-test, and the difference between the post and pre-test was the final score for the change. For instance, in the teach-back method, the pretest score was 60, the post-test was 85, and the change was 25; for medication side effects, the pretest score was 70, the post-test was 90, and the change was 20. For medication reminders, the pretest score was 55, the post-test was 80, and the change was 35; for effective communication, the pretest score was 65, the post-test was 88, and the change was 23; for patients' cultural and educational level, the pretest score was 50, the post-test was 75, and the change was 25; and for patient-centered medication lists the pretest score was 60, the post-test was 85, and the change was 25. Staff members expressed increased confidence in educating patients, demonstrating improved competency.

The changes in pre-and post-test scores showed that the educational intervention significantly increased staff knowledge about medication adherence. The most significant improvement was in medication reminders, while the least improvement was in medication side effects, indicating the need for more focused training. Other areas, including understanding patients' cultural and educational levels, medication lists, and the teach-back method, showed notable improvements and effective communication. The difference between the post-test and pre-test equaled the change.

Table 1

Pre-and-Post Assessment Mean Scores

Interventions	Pre-Assessment	Post-Assessment	Change
Teach-Back Method	60	85	25
Medication Side Effects	70	90	20
The use of Reminders	55	80	35
Effective Communication	65	88	23
Patients' Cultural and Educational Level	50	75	25
Patient-Centered Medication Lists	60	85	25

Figure 1

Pre-and-Post Assessment Knowledge Scores

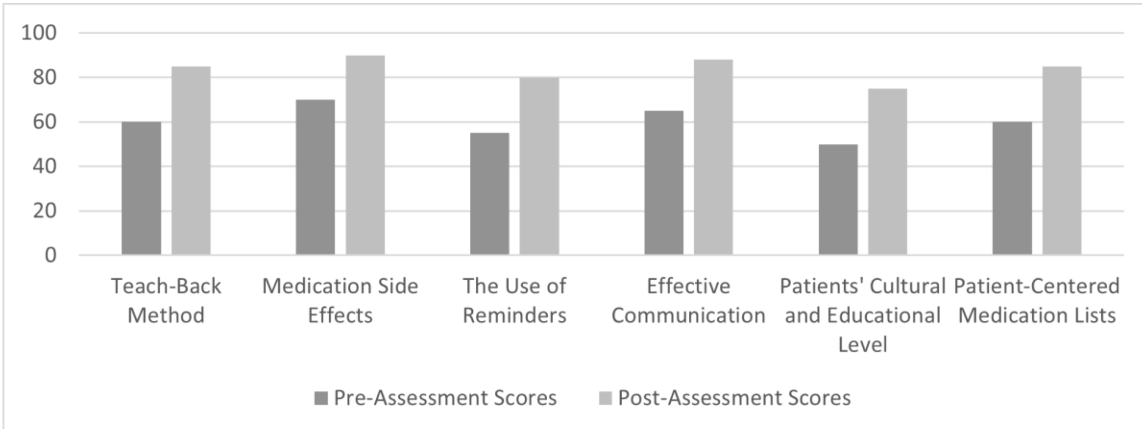
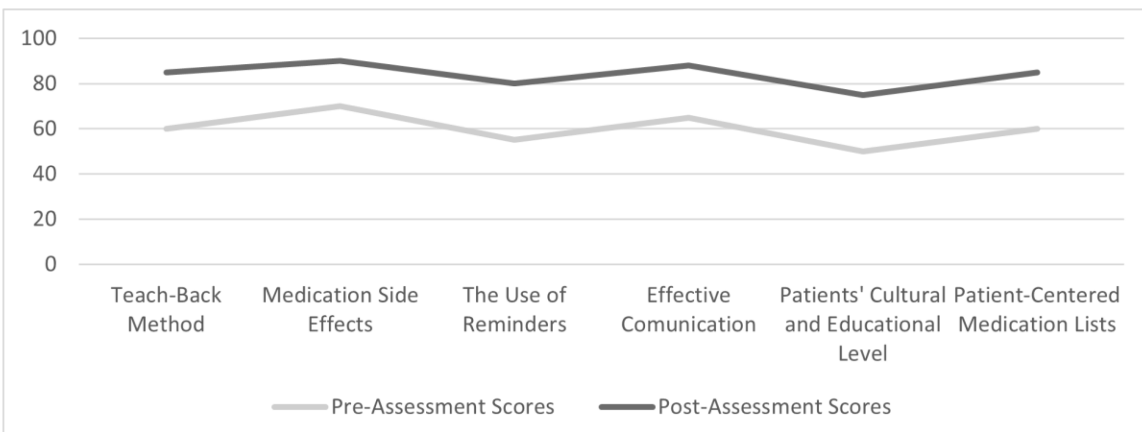


Figure 2

Pre-and-Post Assessment Knowledge Scores



The project improved staff knowledge and engagement, which aligned with the organization's goal of continuous education to promote better patient outcomes. By improving staff knowledge to promote patient adherence, the intervention helped the organization achieve its goal of fostering continuous improvement, which aligns with the facility’s mission to raise the standard of care.

Some of the project’s limitations were a small sample size that affected generalizability, a short-term assessment without long-term or patient outcome data, variability in participants’ preexisting knowledge, staff resistance to change, and logistical issues like a lack of a projector and staff time constraints.

By teaching medication adherence interventions, the project offers a scalable model for educational programs that promote improved patient outcomes and increased staff knowledge that could impact far beyond the facility. Its widespread adoption could lower hospital readmissions, improve health outcomes, and support standardized, evidence-based practices in psychiatric care globally.

Conclusion

Providing staff with evidence-based tactics, like the teach-back method and comprehension of medication lists, medication adherence education can promote enhanced patient adherence, communication, and improved health outcomes. This initiative fosters improvements in patient engagement that support the quality of patient care and the professional development of staff. Improved clinical outcomes, such as better symptom management and medication adherence, result from increased staff expertise. Education programs that support evidence-based practices enable nurses to handle complex adherence issues and maximize team-based care. They also serve as a model for incorporating staff education into quality improvement initiatives.

Future recommendations include developing comprehensive evaluation systems to track long-term effects on patient outcomes, incorporating medication adherence education into onboarding and continuing education guidelines, implementing mentorship programs for skill reinforcement, using digital tools for continuous learning and monitoring, and creating ongoing education plans with advanced training and refresher courses.

Enhancing staff knowledge builds trust, empowers patients, and lessens the financial and societal burdens of untreated mental illnesses. The increase in staff confidence supports care and improved patient engagement to provide quality mental healthcare to all cultures and socioeconomic backgrounds. Fostering inclusivity in nursing practice and extending the program to additional outpatient settings for increased impact are examples of broader implications.

References

Albury, C., Hall, A., Syed, A., Ziebland, S., Stokoe, E., Roberts, N., Webb, H., & Aveyard, P. (2019). Communication practices for delivering health behavior change conversations in primary care: A systematic review and thematic synthesis. *BMC Family Practice*, *20*(1). https://doi.org/10.1186/s12875-019-0992-x

Aremu, T. O., Oluwole, O. E., Adeyinka, K. O., & Schommer, J. C. (2022). Medication Adherence and Compliance: Recipe for improving patient outcomes. *Pharmacy*, *10*(5), 106. https://doi.org/10.3390/pharmacy10050106

Cross, A. J., Elliott, R. A., Petrie, K., Kuruvilla, L., & George, J. (2020b). Interventions for improving medication-taking ability and adherence in older adults prescribed multiple medications. *Cochrane Library*, *2020*(5). https://doi.org/10.1002/14651858.cd012419.pub2

Giles, S. J., Lewis, P. J., Phipps, D. L., Mann, F., Avery, A. J., & Ashcroft, D. M. (2019). Capturing patients' perspectives on medication safety: the development of a patient-centered medication safety framework. *Journal of Patient Safety*, *16*(4), e324–e339. https://doi.org/10.1097/pts.0000000000000583

O'Donovan, B., Kirke, C., Pate, M., Hugh, S. M. M., Bennett, K. E., & Cahir, C. (2022). 'Everyone should know what they're on': a qualitative study of attitudes towards and use of patient held lists of medicines among patients, carers and healthcare professionals in primary and secondary care settings in Ireland. *BMJ Open*, *12*(7), e064484. https://doi.org/10.1136/bmjopen-2022-064484

Santos, O. P. D., Melly, P., Hilfiker, R., Giacomino, K., Perruchoud, E., Verloo, H., & Pereira, F. (2022). Effectiveness of educational interventions to increase skills in evidence-based practice among nurses: *The EDITcare Systematic Review*. *Healthcare, 10*(11), 2204. https://doi.org/10.3390/healthcare10112204

Sullivan, R. (2023). Outcomes-based standardization: A new approach to an old problem. *Nurse Leader, 21*(5), 569–574. https://doi.org/10.1016/j.mnl.2023.04.004

Talevski, J., Shee, A. W., Rasmussen, B., Kemp, G., & Beauchamp, A. (2020). Teach-back: A systematic review of implementation and impacts. *PLoS ONE, 15*(4), e0231350. https://doi.org/10.1371/journal.pone.0231350