

12-2-2024

Increasing nursing staff knowledge on medication nonadherence among mental health patients

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Walden University

College of Nursing

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Walden University
2024

Executive Summary: Staff Education Project

Staff Education to Increase Nursing Staff Knowledge on Medication Adherence Among
Mental Health Patients

by

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Executive Summary Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Nursing Practice

Walden University

November 2024

Summary

Medication nonadherence is a challenge among patients with severe mental health disorders, increasing the patients' risk for exacerbations of psychosis and relapse, which may result in hospital emergency room visits and hospital admissions. In patients with schizophrenia, major depressive disorders, and bipolar disorders, the mean medication nonadherence is 49%. While no single strategy works, a combination of behavioral and educational strategies has been shown to improve patient adherence to their medication regimen. The purpose of the Doctor of Nursing Practice project was to increase healthcare professionals' knowledge of behavioral and educational strategies to improve medication adherence among patients with severe mental health illnesses. Five participants completed the 16-item pretest questionnaire and then attended 2 days of classroom instruction on medication adherence and compliance strategies. After the classroom instruction, all the participants completed the posttest questionnaire. Data collected from the pretest and posttest were compared using an Excel Pivot Chart and presented in a table, a bar chart, and a line graph. All of the participants gave correct responses to the 16 posttest questions compared to none of the participants on the pretest. The largest improvement was on Questions 7, 10, 11, and 15, with a four increase. While all participants gained knowledge, the findings indicated that additional education may be necessary to sustain staff knowledge. The project supports social change by educating the staff about strategies for improving medication adherence, as a benefit. Equity in health care delivery was supported by the project as staff members learned strategies to incorporate into their practices for the benefit of the diverse mental health patient population served by the clinic.

Background

Medication nonadherence is a practice gap that has been identified among mental health patients in the clinical organization where the Doctor of Nursing Practice (DNP) project was completed. This practice gap has been associated with the behavior of patients, for example, lack of knowledge and insight related to medication management, adverse effects of the medications, lack of social or family support, lack of proper education on the disease process, and illness-related clinical conditions (Semahegn et al., 2020). Medication nonadherence has prevented patients from identifying the full benefits of their treatment and it has negatively affected them. To maintain the patients' engagement and treatment, there was the need for improving nursing care to address the patients' doubts and concerns about their medication regimen (Chapman & Horne, 2013). The project question to be answered by the project was, "Does staff education improve knowledge about medication nonadherence and ways to address it among patients with mental health disorders?" The project question aligned with the needs of the organization and the requirements of the DNP capstone project as outlined in the staff education checklist. The purpose of the DNP project was to increase healthcare professionals' knowledge in a behavioral health clinic to improve medication adherence among mental health patients.

Staff Education Project Development

For a project to be completed successfully, generally five distinct project management phases (design/initiation phase, planning phase, implementation phase, monitoring and controlling phase, and closing of the project phase) must be completed (Dusin et al., 2023). The Johns Hopkins Nursing Evidence-Based Practice Process (JHNEBP) collapses these five phases into three phases: the practice question, evidence, and translation (PET) process (Dusin et al., 2023).

I had noticed the lack of patient adherence to their medications and worked with my onsite mentor and project team to develop the practice question to guide the literature search. The databases used in searching for the literature evidence to support the project were PubMed, Google Scholarly, CINAHL, Cochrane, and EBSCO. The key words that were used alone and in combination for the search were *mental health disorders, medication non-adherence, medication adherence, staff education and medication implementation, medication outcomes, therapies, and clinical interventions*. The JHNEBP Appendix D: Evidence Level and Quality Guide (The Johns Hopkins Hospital/Johns Hopkins University School of Nursing, 2017) was used to categorize the articles retrieved from the search (Johns Hopkins School of Nursing. (n.d.). Articles retained to support the project included two Level I articles, one Level II article, one Level III article, one Level IV article and two-Level V articles. I rated the strength of the evidence as good, and recommended a small pilot project to determine if the educational strategy identified was successful in improving the knowledge of staff members to educate patients and use strategies found in the literature review to be successful in helping patients adhere to their medications.

The evidence indicated that 50% of patients with serious mental health disorders (schizophrenia, major depressive disorders, and bipolar disorders) are nonadherent to their prescribed treatment regimen and are at increased risk of suicide attempt, psychiatric hospitalization, relapse, and negative social outcomes (Forma et al., 2020). The evidence described people who self-administered their medications as taking only half of the prescribed dose, stopping their medications entirely without informing their providers, and not taking their medications as prescribed (Wilhelmsen & Eriksson, 2019). Strategies to improve adherence to medications include educating staff to enable them to better address patient concerns about using medications, teaching patients about their disease process and the individual medications used to treat it, and encouraging patients to report side effects and other issues that make adherence difficult. Effective therapeutic communication between the healthcare professionals and the patients was also helpful in improving medication adherence. The evidence showed consistency in identifying the factors that contribute to medication nonadherence in patients with severe mental health disorders (Forma et al., 2020). The articles focused on creating awareness about and educating healthcare professionals on medication non-adherence to improve high quality care, increase positive outcomes, and enhance patient satisfaction. The identification of patients at increased risk for medication nonadherence, individualized and targeted care and interventions were described as appropriate in helping to reduce the significant burden of medication nonadherence in mental illness (Forma et al., 2020).

Five healthcare staff members participated in the pilot education that was conducted at the behavioral health clinical site in July 2024. The pretest and posttest questionnaires were handed to the participants when they walked into the room for the education presentation. The questionnaires were numbered so that the participant's pretest and posttest scores could be

compared without collecting participant individual identifiers. The participants completed the 16-item pretest questionnaire I developed and then attended 2 days of classroom instruction on medication adherence and compliance strategies. After the classroom instruction, all the participants completed the posttest questionnaire. Descriptive analysis was used to report the findings of the data collected (see Gray & Grove, 2020). Data were aggregated by hand due to the small sample size and presented in a table, a bar chart, and a line graph. Excel Software was used to organize the data in the table and two graphs (see Appocracy. (n.d.)).

Results

The data showed a comparison of the nursing staff knowledge of medication adherence among mental health patients between the results of the pretest and posttest. This is a summarized analysis of the findings. All scores on the posttest were five, indicating a significant rise from the comparatively low pretest scores (which range from 1 to 3). This implies that the educational intervention was very successful in raising knowledge in every area that the questions were evaluated. The majority of the questions indicate an improvement of three points, with a score difference ranging from two to four points. This steady rise shows that the intervention was generally successful in covering many subjects that the questions addressed. The largest improvement (a four-point gain) was seen in Questions 7, 10, 11, and 15 of the questionnaires, suggesting that the intervention had the greatest overall impact in these areas. These subjects may have been ones where, before the intervention, there were especially large knowledge gaps. All things considered, the intervention was successful in increasing the nursing staff's knowledge of medication adherence expertise, as seen by the significant improvement on all questions.

Table 1

Pretest and Posttest Scores for the Healthcare Team Educational Intervention on Increasing Knowledge on Medication Adherence

Questions	Pretest	Posttest	Difference
Q1	2	5	3
Q2	3	5	2
Q3	3	5	2
Q4	3	5	2
Q5	2	5	3
Q6	2	5	3
Q7	1	5	4
Q8	2	5	3
Q9	3	5	2
Q10	1	5	4
Q11	1	5	4
Q12	2	5	3
Q13	3	5	2
Q14	2	5	3
Q15	1	5	4
Q16	2	5	3

Figure 1

Pretest and Posttest Scores for the Healthcare Team Educational Intervention on Increasing Knowledge on Medication Adherence Among Mental Health Staff

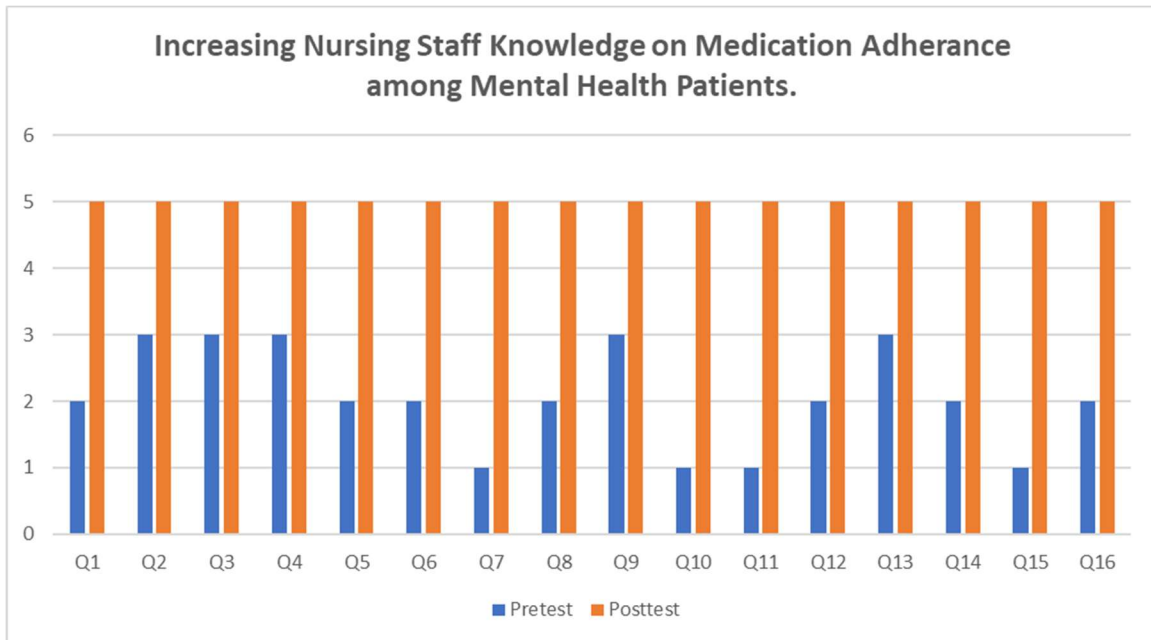
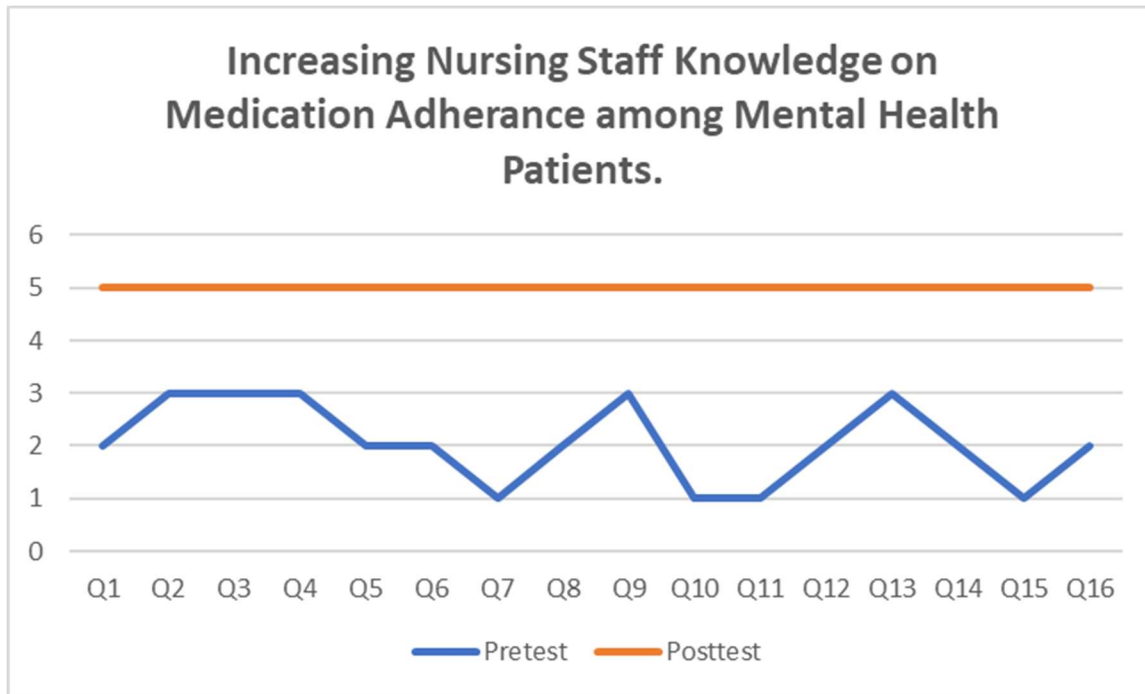


Figure 2

Pretest and Posttest Scores for the Healthcare Team Educational Intervention on Increasing Knowledge on Medication Adherence Among Mental Health Patients



Organizational Impact

This study will result in adopting the use of education to improve the knowledge of the nursing staff. To sustain these benefits, the organization may have to engage nursing educators to constantly reinforce and upgrade staff knowledge with capacity building initiatives. When mental health patients refuse to embrace a change, it affects the clinical outcomes and the financial outcome of the health system. The education program will contribute positively to improving the knowledge of healthcare professionals. This information is expected to promote active participation in patients' education and treatment plans as evidenced by increased medication adherence among mental health patients. Furthermore, the identification and evaluation of the patients' medication-taking behaviors on a regular basis will be a necessary component in the plan to improve patient outcomes and increase patient/family satisfaction to promote the mission and vision of the organization. The evidence-based practice team will continue to encourage self-report and reassessment of the patients' mental condition (see Lam & Fresco, 2015). As a result of the educational program, use of patient-centered care approaches such as motivational interviewing, counseling, shared decision making, and screening for readiness to change are expected to increase. Analysis of the answers on the pretest and posttest questionnaires found enhanced healthcare professionals' knowledge to monitor the efficacy of the medication and patient adherence to the therapeutic regimen to improve medication adherence (Jimmy & Jose, 2011).

Limitations

I encountered some difficulties with the project during the implementation phase. The number of healthcare participants was low compared to the initial number of participants approved. This information affected the collection of data and the validity and reliability of the pilot project. Due to the small sample size, the outcomes cannot be used for generalization but rather serve solely as pilot information that the organization can use in developing future education related to medication nonadherence.

Conclusions

Comparison of the pretest and posttest test data indicated that the educational intervention strategy increased knowledge of best practices to enhance effective communication between the nurses and the patients regarding medication adherence. Awareness of the issue of medication noncompliance among patients with severe mental health illnesses and knowledge about methods to increase medication adherence among mental health patients were results of the education. Proper health behaviors and self-medication management strategies were implemented as a result of the translation of evidence into clinical practices. Effective communication between the healthcare professionals and the patients on improving medication nonadherence had a positive effect on the participants. The healthcare professionals were encouraged to identify and report patient nonadherence levels and seek interventions to promote and support patient medication adherence. The improved knowledge and risk consciousness of the staff is expected to improve the education of patients and to support self-care and behaviors that enable adherence to medications as prescribed. The results of the project indicated that knowledge about medication adherence needs to be supported by the organization through continuing education. Nurses cannot effectively support the patients without the knowledge and skills to do so.

Positive social change may result from this project because both staff members and patients will be engaged in practices to support medication adherence in management of severe mental health illness. The clinic serves a diverse patient population; therefore, equity in health care delivery was served by the project in which staff nurses learned strategies to improve medication adherence among all of their patients.

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Appendix: Pretest and Posttest Questionnaire on Medication Adherence for Mental Health

Patients

1. What percentage of patients with poor adherence and severe mental health disorders have experienced high rates of disability, rehospitalization, and suicide?
 - (a). 35%
 - (b). 50%
 - (c). 70%
 - (d). 75%

2. What percentage of patients discontinue prescribed medications in treating mental illness within the first week after discharge?
 - (a). 25%
 - (b). 35%
 - (c). 60%
 - (d). 80%

3. Which of the following would an organization use to recommend medication schedules?
(Select all that apply)
 - (a). The time medication was administered
 - (b). The use of drug cards
 - (c). Special medication packages
 - (d). All of the above

4. Which of the following are reasons patients discontinue medications? (Select all that apply)

- (a). Lack of knowledge about the medications
 - (b). Lack of insight into their disease process
 - (c). Medication side effects
 - (d). Stigma of mental illness
 - (e). All of the above
5. Does forgetfulness contribute to medication nonadherence?
- (a). True
 - (b). False
6. Does medication nonadherence negatively affect mental health patients?
- (a). True
 - (b). False
7. Does medication adherence reduce mortality rate in mental health patients?
- (a). True
 - (b). False
8. Does raising awareness and the provision improve medication adherence in mental health patients?
- (a). True
 - (b). False
9. Which populations are at increased risk for medication nonadherence? (Select all that apply)
- (a). Poverty level
 - (b). Ethnicity minorities
 - (c). Disabled people

- (d). Older people
 - (e). All of the above
10. Which of the following devices are used to send a reminder for medication adherence?
(Select all that apply)
- (a). Emailed letters
 - (b). Text-messages
 - (c). Telephone calls
 - (d). Electronic monitoring
 - (e). All of the above
11. What type of intervention aims at improving medication adherence in mental health patients? (Select all that apply)
- (a). Educational intervention
 - (b). Behavioral intervention
 - (c). Family-based intervention
 - (d). Technological intervention
 - (e). All of the above
12. Mental health is NOT challenging to patients and family members?
- (a). True
 - (b). False
13. Medication nonadherence is common in ONLY mental health patients.
- (a). True
 - (b). False

14. Psychiatric disorders are a public health challenge that comprise of the total global disease burden?

(a). 13%

(b). 20%

(c). 40%

(e). 50%

15. Medication non-adherence is taking less than of prescribed doses.

(a). 55%

(b). 65%

(c). 80%

(d). 90%

16. What factors influence medication adherence among patients with severe mental disorders? (Select all that apply)

(a). Patient attitude towards mental disorder and treatment

(b). Inadequate aftercare

(c). Shortages of resource

(d). Financial and emotional support from family members

(e). All of the above

ANSWERS TO PRETEST/POSTTEST QUESTIONNAIRE**1. B****2. A****3. D****4. D****5. A****6. A****7. A****8. A****9. E****10. E****11. E****12. B****13. B****14. A****15. C****16. E**