7-4-2025

Staff Education Project: Staff Education to Improve Nurses' Knowledge, Self-Efficacy, and Motivation in Supporting Medication Adherence

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This is to certify that the doctoral study by

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has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
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Walden University
2025

Executive Summary: Staff Education Project

Staff Education to Improve Nurses' Knowledge, Self-Efficacy, and Motivation in Supporting Medication Adherence

by

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MS, Walden University, 2021

BS, American Sentinel University, 2020

Executive Summary Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Nursing Practice

Walden University

August 2025

Summary

Medication nonadherence among individuals with psychiatric disorders remains a significant barrier to recovery, ranging from 40% to 60%. Contributing factors include fear of side effects, stigma, cognitive limitations, and complex regimens. This staff education project addressed challenges through the implementation of a structured, evidence-based intervention to improve adherence-supportive practices among 14 outpatient psychiatric nurses. A preimplementation needs assessment revealed inconsistent application of adherence strategies and low staff confidence. The project's objective was to evaluate whether a structured education program could improve nurses' knowledge by 15%, confidence by 15%, and willingness by 3.5 points on a Likert scale to promote medication adherence. The staff education covered motivational interviewing, caregiver engagement, and the teach-back method. Pretests and posttests measured performance across knowledge, self-efficacy, and willingness. Results showed mean gains of 35.05% in knowledge, 25.38% in confidence, and 4.04 points in willingness. Evaluation data also confirmed high satisfaction with the training format, with 93% strongly agreeing that objectives were clear and 86% strongly agreeing that materials were helpful. The intervention's visual, workflow-aligned design enabled immediate use and improved communication. This project offers a scalable model that with follow up and customization has potential to enhance consistency; reduce care gaps; and promote positive social change by providing adherence support for all patients in psychiatric settings.

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Background

Medication nonadherence in individuals with psychiatric disorders remains one of the most persistent challenges in outpatient mental health care, contributing significantly to symptom relapse, increased hospitalization rates, and compromised long-term recovery (Vega et al., 2021). Nonadherence rates among this population are reported to range between 40% and 60%, with common contributing factors including fear of side effects, stigma, cognitive impairments, poor insight into illness, and complex medication regimens (Harvey et al., 2022; Lewis & Rodgers, 2022). The implications of nonadherence extend beyond individual outcomes, burdening healthcare systems with avoidable emergency visits, prolonged treatment episodes, and recurrent hospitalizations (Aljofan et al., 2023). For nurses, especially in outpatient psychiatric settings, promoting adherence is a clinical responsibility and a critical opportunity to build therapeutic relationships, reinforce patient autonomy, and support ongoing engagement with treatment plans (Alhassan et al., 2022; Lin et al., 2022).

However, despite the central role of nurses in adherence promotion, many clinical settings lack standardized education and structured tools to support consistent, evidence-based engagement with patients. A preliminary needs assessment conducted at the outpatient psychiatric clinic revealed inconsistent application of adherence interventions, with nurses reporting limited confidence in discussing side effects, assessing readiness for change, or guiding patients through personalized adherence plans. Furthermore, there was minimal integration of caregiver education or behavioral support strategies within routine care, contributing to fragmented adherence support. Organizational feedback,

including direct input from staff and leadership, emphasized the need for a unified educational framework to equip nurses with consistent, practical tools to engage patients and improve adherence outcomes. This gap in practice presented a clear opportunity to introduce a targeted staff education initiative aligned with evidence-based strategies and nursing best practices.

The purpose of this project was to evaluate whether implementing a structured staff education program would improve psychiatric nurses' knowledge, confidence, and motivation to apply evidence-based strategies for supporting medication adherence. The guiding project question addressed whether a structured education program enhance psychiatric nurses' knowledge by 15%, self-confidence by 15%, and willingness to promote medication adherence by 3.5 points on a 5-point scale in an outpatient setting. The eight reviewed studies provide consistent, good-quality evidence supporting the use of structured educational interventions to improve nurses' knowledge, self-efficacy, and support for medication adherence. I used a rating tool from the Johns Hopkins evidence-based practice model to appraise the literature.

Two Level I studies confirmed that psychoeducation significantly enhances adherence behaviors and nurse confidence (Abusubhiah et al., 2023; Kaur et al., 2023). Four Level II studies demonstrated that interactive workshops, flipped classrooms, and nurse-led psychoeducation improve knowledge and address patient-level adherence barriers (Dehghani et al., 2020; Deswal et al., 2020; Hsieh & Chen, 2020; Sheikhbardsiri et al., 2019). Level III evidence highlighted the influence of organizational culture and academic preparation on nurses' ability to sustain adherence behaviors (Ehrenbrusthoff et

al., 2022; Koota et al., 2018). Together, these findings support implementing structured education to equip psychiatric nurses for adherence promotion in outpatient settings. Common strategies across the studies included motivational interviewing, psychoeducation, caregiver engagement, simulation-based training, and the teach-back method. Despite variations in setting and sample sizes, the findings were consistent in showing that structured, interactive education programs led to measurable gains in adherence-supportive nursing behaviors. The overall strength of the evidence was good and consistent with low risk, supporting a system-level recommendation to implement structured education tailored to psychiatric care.

Staff Education Project Development

The project engaged 14 psychiatric registered and vocational nurses who were employed at an outpatient mental health clinic and had varying levels of experience with behavioral health. I involved the entire nursing team to promote consistent use of evidence-based adherence strategies, enhance collaboration, and reinforce a unified, patient-centered approach (Connor et al., 2023). Their active participation was expected to improve intervention fidelity, reduce variability in practice, and support long-term integration of adherence strategies into routine workflows. Although training was voluntary, strong leadership support fostered full engagement. The team's diverse clinical backgrounds enriched discussion during training, ensuring the content addressed both foundational concepts and real-world challenges in psychiatric care.

I conducted a structured training session to deliver the educational content. The session consisted of a 30-min, in-person PowerPoint presentation with case scenarios (see

Appendix A) and printed handouts (see Appendix B) focused on motivational interviewing, caregiver engagement, and the teach-back method. Participants completed a structured pretest (see Appendix C) and posttest (see Appendix D) to evaluate the impact of the staff education. The pretest consisted of three sections: 15 multiple-choice questions assessing knowledge, five 5-point Likert-scale items measuring self-efficacy, and an additional set evaluating willingness to apply adherence strategies. These assessed baseline proficiency in areas such as regimen simplification, shared decision making, and communication techniques. Following the educational session, participants completed a posttest identical in content and structure to the pretest. Percentage change was calculated using the formula [(Posttest − Pretest) ÷ Pretest] × 100, which revealed an average percentage change of 24.04% across the cohort.

I entered data from the pre- and posttest assessments into Microsoft Excel for analysis. Descriptive statistics, including means and standard deviations, were obtained to summarize changes in performance, whereas percentage difference and change were used to quantify improvement at the individual and cohort level. Participant perceptions of the training's clarity, relevance, and usefulness were gathered using a post training evaluation form (see Appendix E) administered at the conclusion of the session. This evaluation process supported a comprehensive understanding of the intervention's effectiveness in enhancing staff capacity to promote medication adherence.

Results

The implementation of a structured staff education initiative resulted in measurable improvements across all three evaluated domains: knowledge, confidence

(self-efficacy), and willingness to engage in adherence-focused care. All 14 psychiatric nursing staff completed both pretest and posttest assessments (see Table 1). I analyzed pretest scores across all three domains. Knowledge scores ranged from 7 to 9 out of 15, with a group mean of 8.36 (*SD* = 0.84), indicating modest baseline understanding of strategies such as motivational interviewing and teach-back. Posttest scores improved to a range of 9 to 13, with a mean of 11.29 (*SD* = 1.07), yielding a mean gain of 2.93 points (19.53% increase). Confidence scores ranged from 13 to 17 out of 25 on the pretest (*M* = 15.21, *SD* = 1.19) and increased to 17 to 21 on the posttest (*M* = 19.07, *SD* = 1.21), with a mean gain of 3.86 points (15.44% increase), suggesting enhanced self-efficacy following the intervention (see Figure 1). Willingness scores ranged from 3 to 3.8 on the pretest (*M* = 3.44) and rose to 3.6 to 4 posttest (*M* = 4.04), reflecting an improvement in stated intent to apply adherence strategies. Percentage change was calculated individually for each nurse (see Appendix F). The findings showed a 35.25% cohort-level improvement in knowledge. There was a notable percentage difference between pretest and posttest scores, with post knowledge intervention improvements ranging from 22% to 44% and confidence improving from 25% to 31%. This upward trend affirms the training's impact across all nurses.

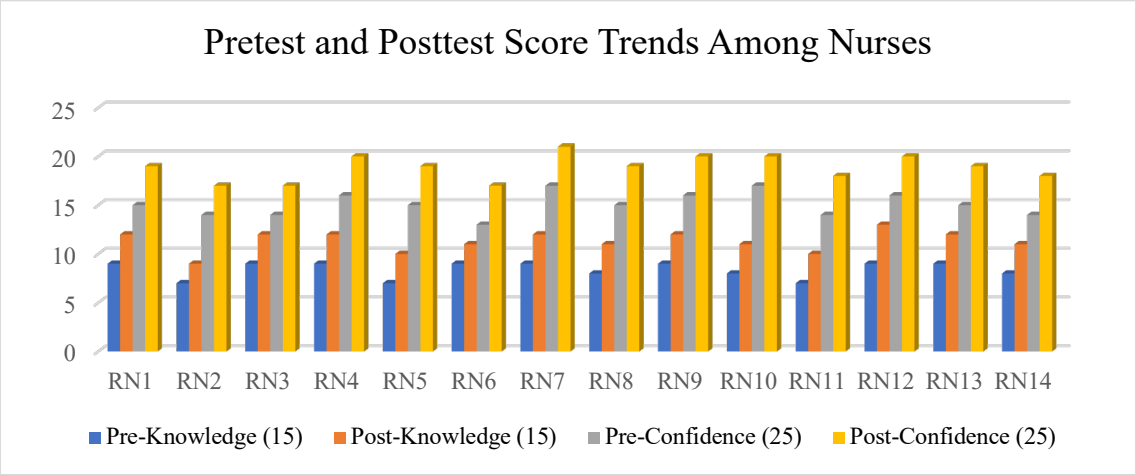
Table 1

Pre- and Post Education Percentage Scores Among Psychiatric Nursing Staff

Component	Pretest ***M***	Pretest ***SD***	Posttest ***M***	Posttest ***SD***	***M*** gain	***M*** % gain
Knowledge	8.36	0.84	11.29	1.07	2.93	35.05
Confidence	15.21	1.19	19.07	1.21	3.86	25.38

Figure 1

Pretest and Posttest Scores by Participant Compared to Maximum Score



All project objectives were met. Nursing staff exceeded the 15% increase in their knowledge and understanding of evidence-based strategies for medication adherence as the nursing staff demonstrated a 35.05% gain. Nursing staff confidence in promoting patient medication adherence increased by 25.38%, which exceeded the 15% objective. Willingness to participate in activities or discussions that promote patient medication adherence, exceeded the 3.5-point objective reaching achieving a minimal mean score of 4.04 on a 5-point Likert scale.

The training strengthened foundational knowledge, particularly concerning strategies such as motivational interviewing, teach-back, caregiver involvement, and medication regimen simplification. The outcomes align with multiple studies showing that brief, structured training significantly enhances nurse preparedness. Deswal et al. (2020) found a statistically significant increase in adherence-related knowledge following a targeted psychoeducation session, and Kaur et al. (2023) demonstrated improved nurse

attitudes and medication support behaviors after a structured, scenario-based education module. Participants with lower pretest scores showed the greatest gains, suggesting the training was especially beneficial for those with limited baseline knowledge, though contributing factors were not formally assessed (Hack-Polay et al., 2023). This trend aligns with evidence showing that scenario-based and visual learning tools enhance performance across experience levels, particularly among newer staff (Chicoine et al., 2022; Guerrero et al., 2024; Sheikhbardsiri et al., 2019).

A total of 93% (13 out of 14) participants strongly agreed that the education objectives were clearly defined, and 100% agreed or strongly agreed that the content was relevant to their role in promoting medication adherence. Additionally, 86% (12 out of 14) strongly agreed that the PowerPoint slides and handouts were helpful, and all participants affirmed the facilitator's expertise. Many noted that the interactive format and visual aids improved their understanding of patient-centered strategies such as motivational interviewing and teach-back. These findings align with prior studies showing that structured, context-relevant education enhances nurse confidence, communication, and self-efficacy (Abusubhiah et al., 2023; Koota et al., 2018; Sheikhbardsiri et al., 2019). The consistently strong evaluation results and posttest improvements affirm the effectiveness of targeted educational interventions in advancing adherence-supportive nursing practice

The project fostered team alignment around adherence strategies such as motivational interviewing, teach-back, and regimen simplification. Nurses reported increased confidence and role clarity, while visual handouts and workflow-integrated

resources supported usability and immediate application. These outcomes mirror findings from Deswal et al. (2020) and Kaur et al. (2023), who observed that structured education reduces care variability and improves nurse communication behaviors. Internally, this training promoted shared accountability, minimized practice gaps, and enhanced patient engagement by standardizing how nurses deliver adherence support. Over time, this kind of organizational consistency can potentially promote better communication between providers, minimize care gaps, and improve patient treatment follow-through. Limitations of the project include the absence of long-term follow-up to assess retention or sustained behavior change. The single-site focus limits generalizability, and the uniform training content may not have fully addressed the needs of more experienced nurses. Literature suggests that tiered learning and reinforcement sessions can improve longevity and depth of impact (Gholami et al., 2023; Suglo et al., 2022; Zhao et al., 2023).

Medication adherence challenges are prevalent across diverse psychiatric care settings, often stemming root issues: stigma, forgetfulness, cognitive symptoms, or lack of education (Chicoine et al., 2022). The structured training in this project offers a replicable, low-resource approach that could benefit similar teams working with complex patient populations. By focusing on education that is visual, concise, and grounded in day-to-day workflow, I successfully introduced tools that staff could apply immediately, without requiring extra systems or major workflow changes. These characteristics make the model particularly valuable for settings with limited resources or high patient volumes. The project also demonstrated how equitable, team-wide education promotes consistent messaging, patient engagement, and staff confidence, outcomes echoed in

studies by Abusubhiah et al. (2023) and Guerrero et al. (2024), who found that structured training significantly improved communication behaviors and role clarity. Standardized education also ensures that all nurses receive the same foundational preparation, promoting both fairness and quality in care delivery. The project supports social change by improving equity in nurse preparation; reducing stigma-related gaps in care; and enabling more inclusive, patient-centered adherence promotion across varied populations.

Conclusions

This staff education project strengthened the organization by improving nursing knowledge, confidence, and willingness to promote medication adherence in psychiatric outpatient care. Following the structured intervention, all 14 participating nurses demonstrated measurable gains in knowledge, self-efficacy, and willingness to implement adherence strategies. These improvements reduce variability in care, enhance communication across the team, and promote a more cohesive, relationship-centered practice. To sustain these outcomes, I recommend that stakeholders offer periodic booster sessions, tailor education to different experience levels, and incorporate adherence training into nurse onboarding. The project's workflow-aligned tools and accessible design support scalability to other outpatient settings. Importantly, by equipping nurses with strategies that address common barriers, such as stigma, cognitive limitations, and communication challenges, the initiative promotes more equitable and culturally responsive care. These results demonstrate how inclusive, nurse-driven education can reduce disparities and support long-term improvements in treatment adherence across diverse populations.

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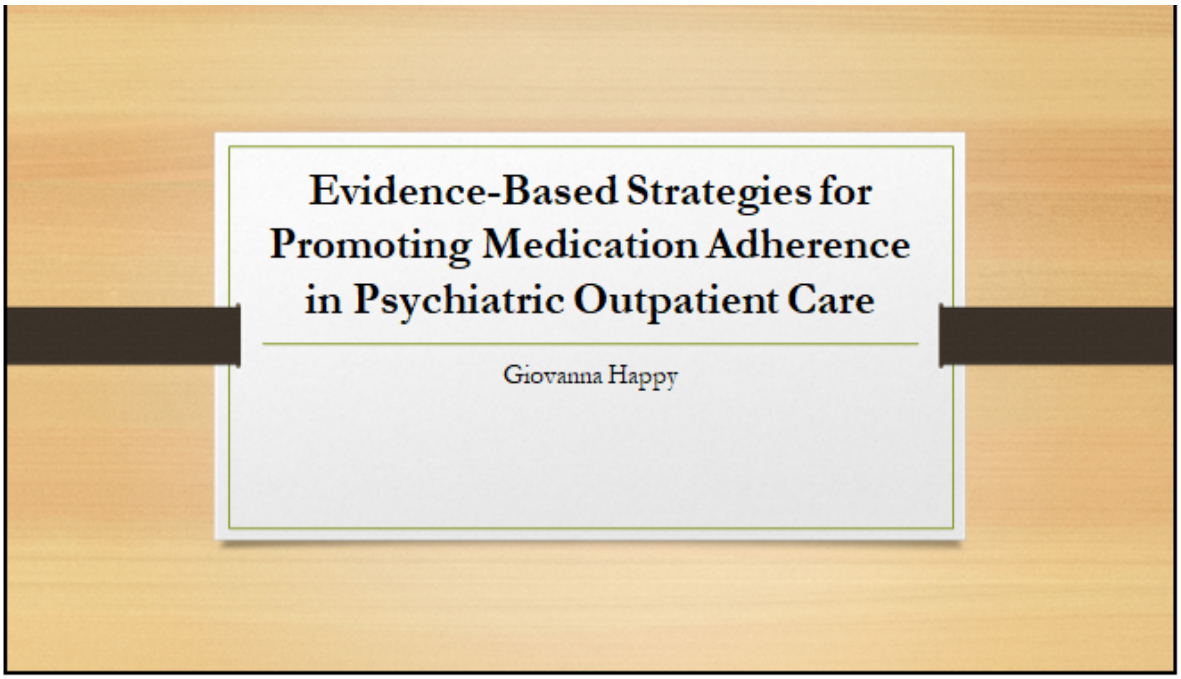
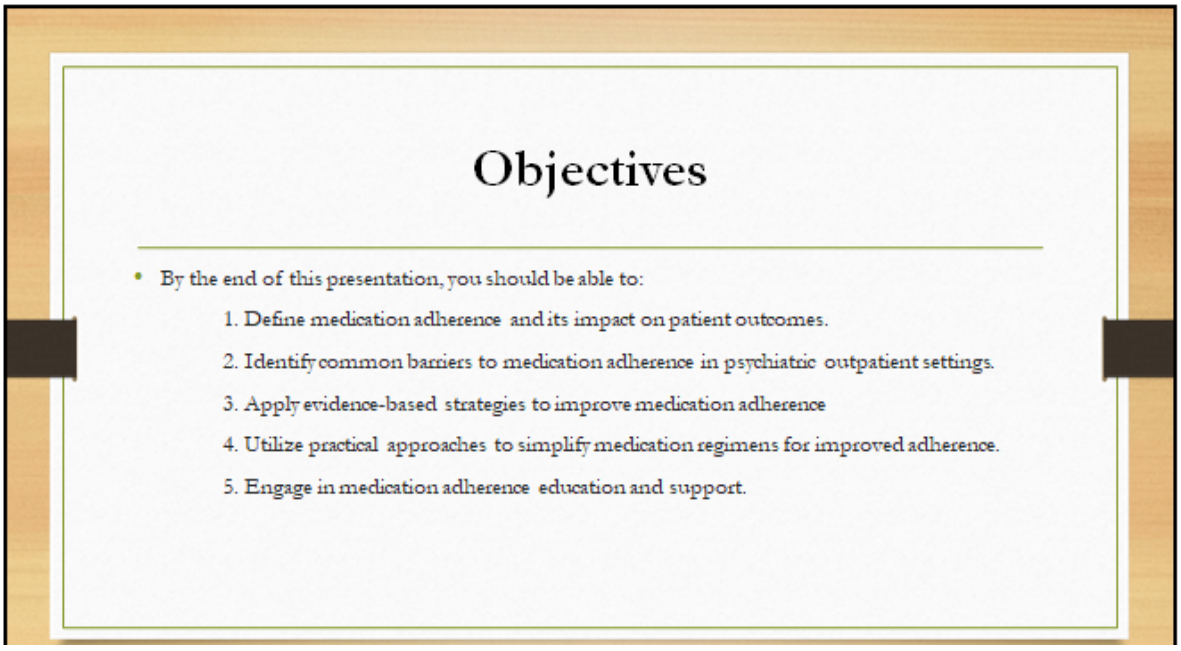
Appendix A: Educational PowerPoint





Practice Problem

★ 40-60% of psychiatric patients do not adhere to their medications (Lewis & Rodgers, 2022)

- Nonadherence leads to higher hospitalization rates, symptom relapse, and poorer long-term outcomes (Vega et al., 2021).
- Reasons for nonadherence include forgetfulness, medication side effects, stigma, and lack of insight.
- Nurses play a critical role in medication adherence through education, communication, and patient support.

Barriers to Medication Adherence among Psychiatric Patients

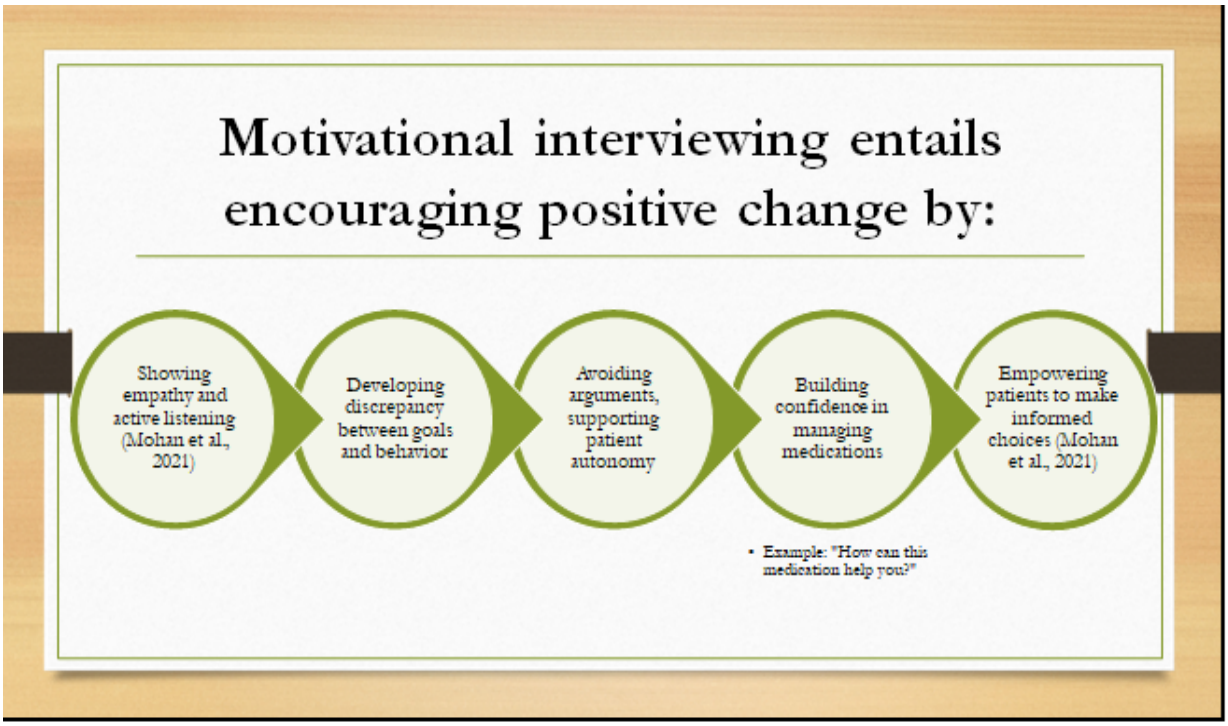
Forgetfulness:	• Patients with schizophrenia or bipolar disorder may struggle with memory
Fear of Side Effects:	• Some avoid medications due to weight gain or drowsiness.
Lack of Insight:	• Patients may not believe they need treatment.
Complex Regimens:	• Taking multiple medications at different times is challenging.
Low Health Literacy:	• Some struggle to understand prescriptions.
Stigma:	• Fear of being labeled "mentally ill" discourages adherence (Harvey et al., 2022).

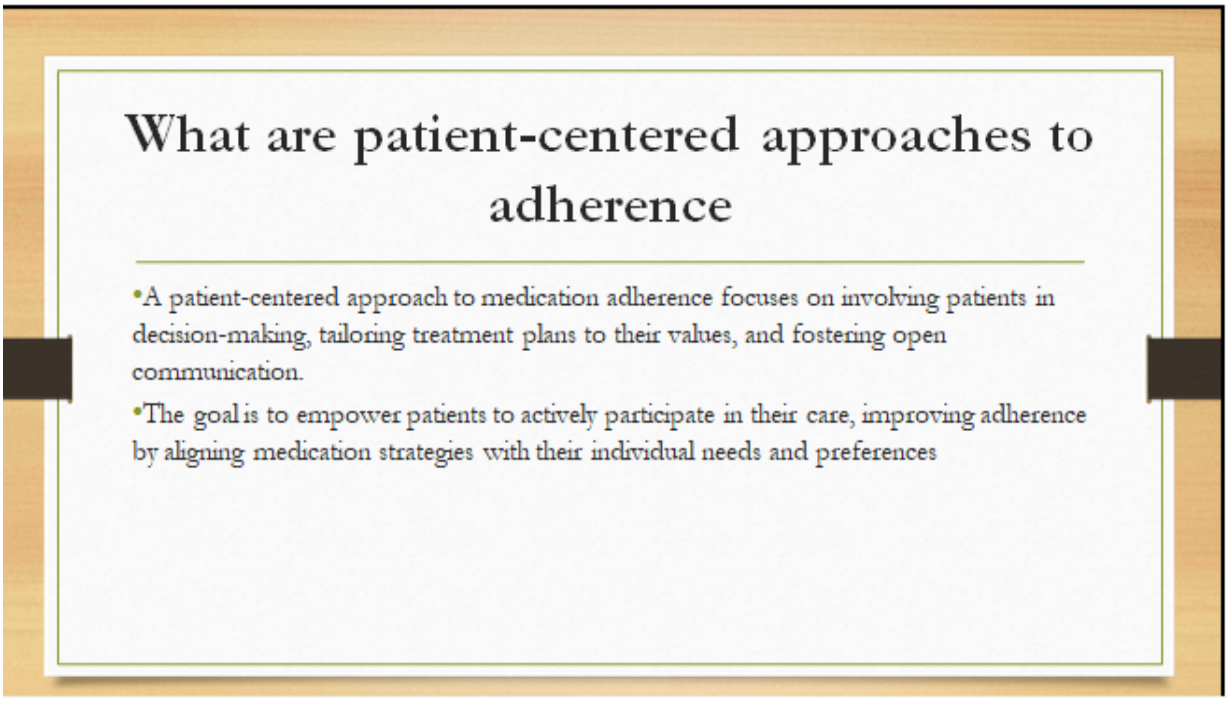
EBP strategies to boost adherence

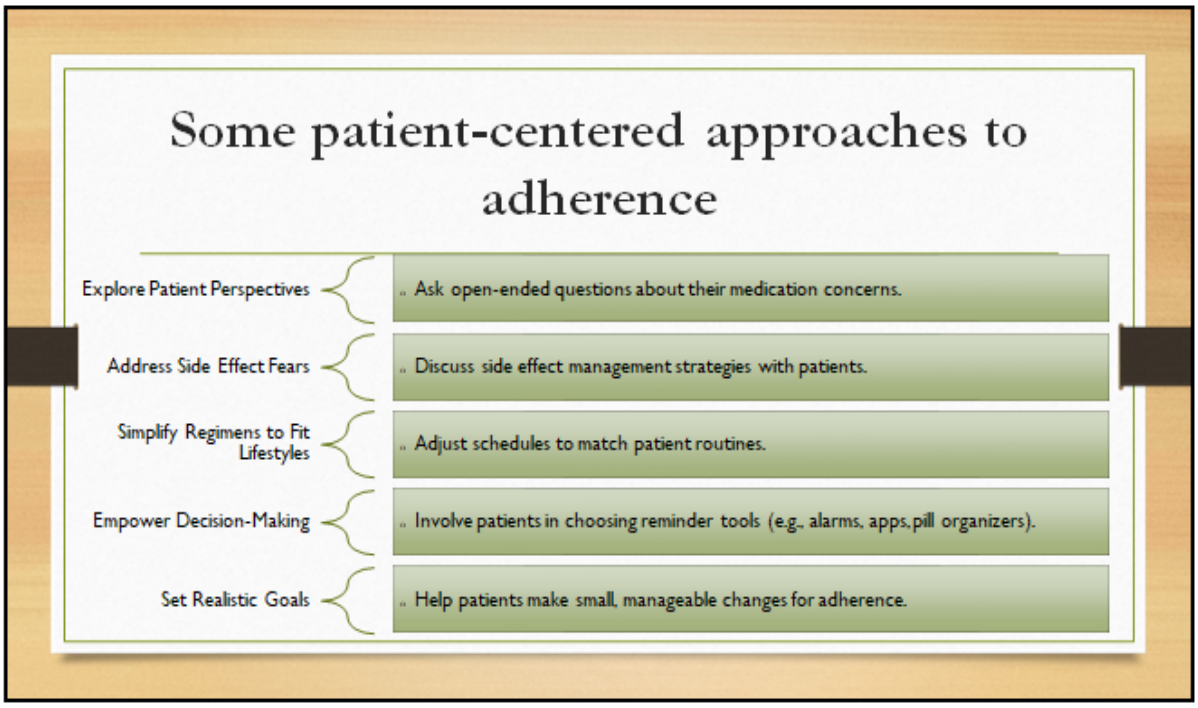
- Motivational interviewing (MI) for engagement (Mohan et al., 2021).
- Teach-back method to ensure understanding (Talevski et al., 2020).
- Simplify regimens with once-daily dosing.
- Medication synchronization for convenience (Vega et al., 2021).
- Involve caregivers in education and support (Li et al., 2025).
- Provide individualized patient education (Li et al., 2025).

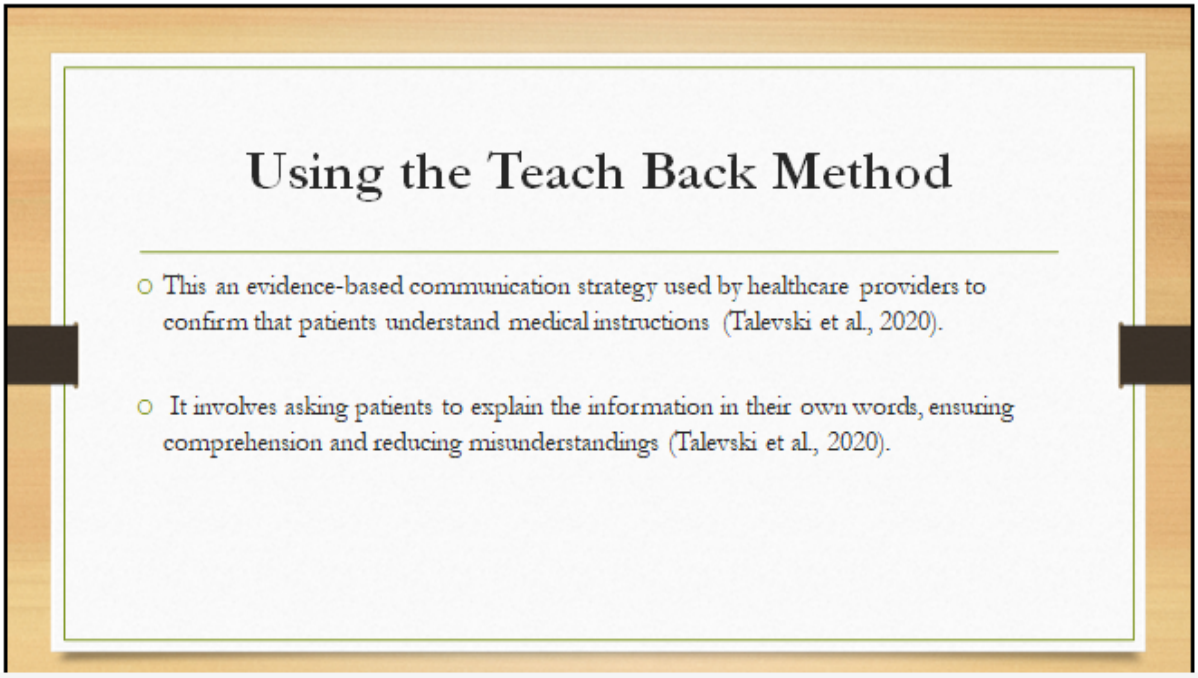
Medication Synchronization

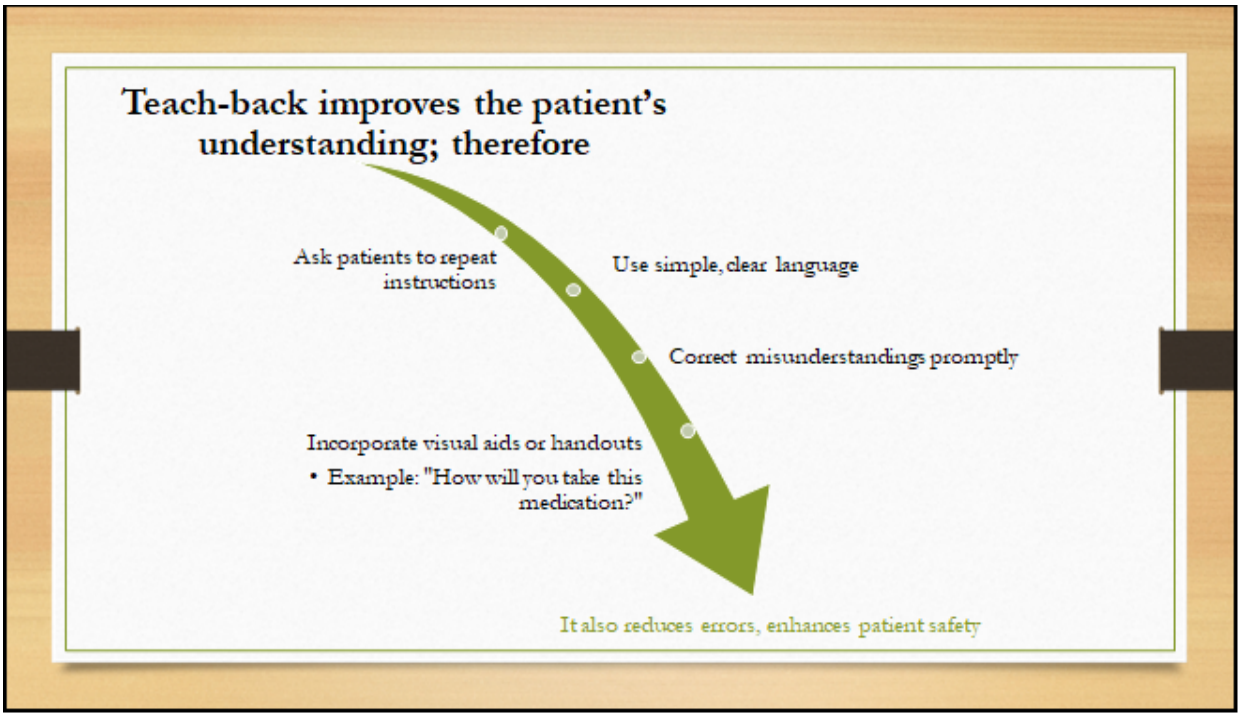
- This is a strategy that aligns the refill dates of multiple prescriptions so that a patient can pick up all their medications on the same day each month (Waghmare et al., 2023)
- It reduces missed doses, simplifies medication management, and improves adherence by minimizing trips to the pharmacy (Waghmare et al., 2023)
- Therefore :
  - Align refill dates for all medications
  - Educate patients on refill benefits
  - Collaborate with pharmacists for schedules
  - Set reminders for synchronized pickups
  - Involve caregivers for adherence support

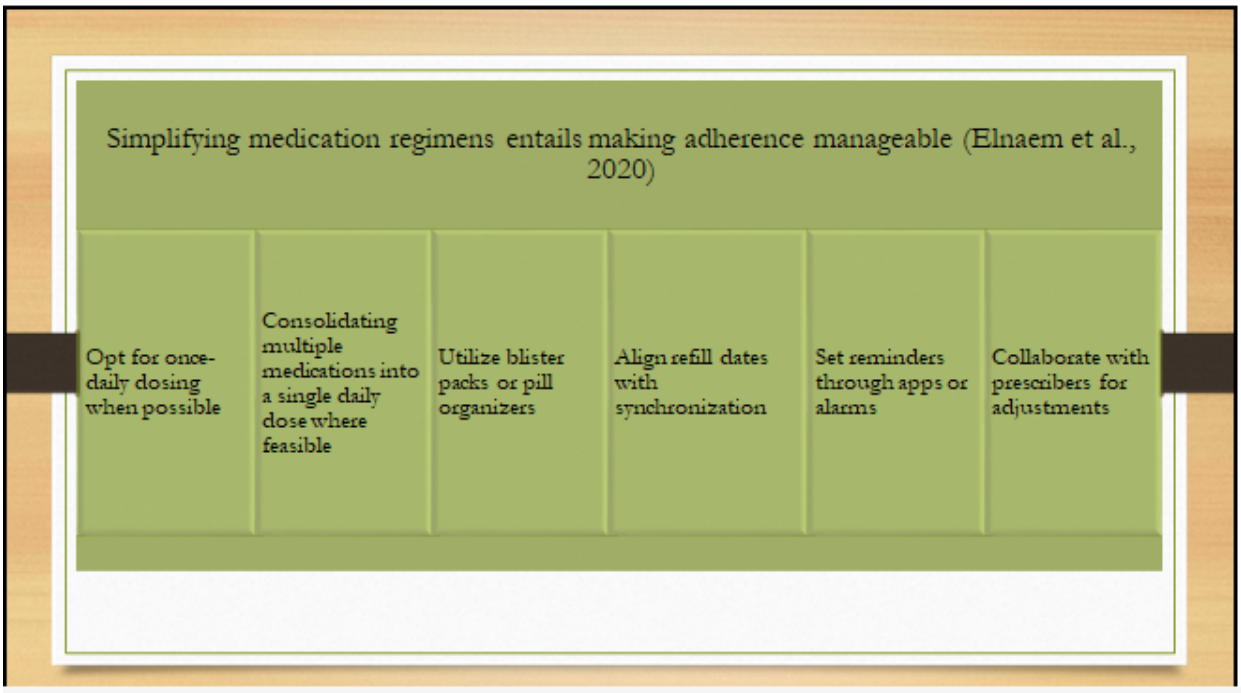

Motivational interviewing entails encouraging positive change by:
Showing empathy and active listening (Mohan et al., 2021)
Developing discrepancy between goals and behavior
Avoiding arguments, supporting patient autonomy
Building confidence in managing medications
Empowering patients to make informed choices (Mohan et al., 2021)
• Example: "How can this medication help you?"

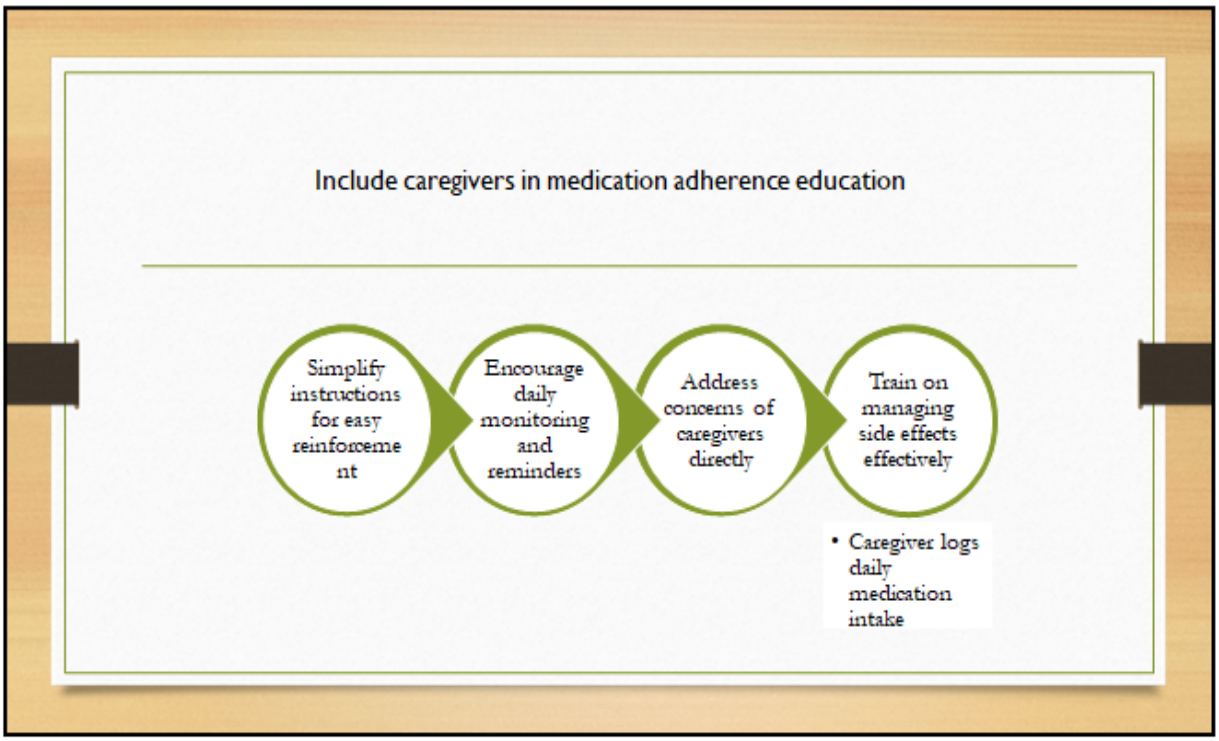

What are patient-centered approaches to adherence
•A patient-centered approach to medication adherence focuses on involving patients in decision-making, tailoring treatment plans to their values, and fostering open communication.
•The goal is to empower patients to actively participate in their care, improving adherence by aligning medication strategies with their individual needs and preferences

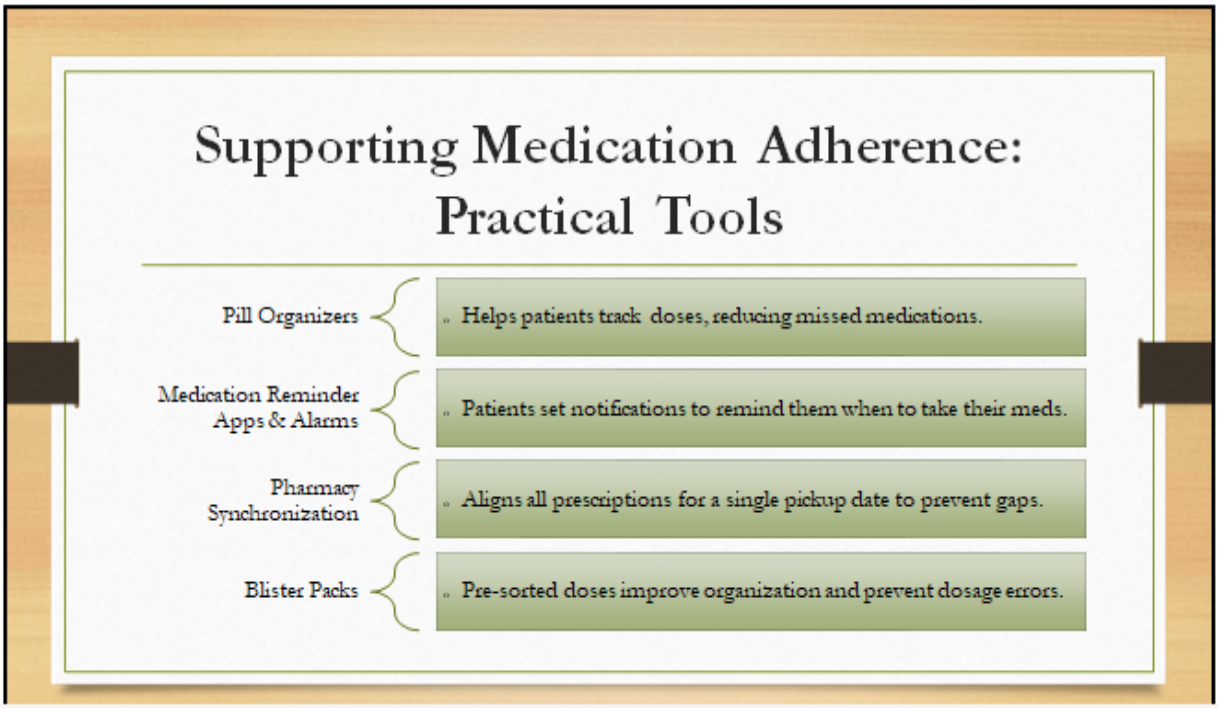

Some patient-centered approaches to adherence
Explore Patient Perspectives
Ask open-ended questions about their medication concerns.
Address Side Effect Fears
Discuss side effect management strategies with patients.
Simplify Regimens to Fit Lifestyles
Adjust schedules to match patient routines.
Empower Decision-Making
Involve patients in choosing reminder tools (e.g., alarms, apps, pill organizers).
Set Realistic Goals
Help patients make small, manageable changes for adherence.


Using the Teach Back Method
This an evidence-based communication strategy used by healthcare providers to confirm that patients understand medical instructions (Talevski et al., 2020).
It involves asking patients to explain the information in their own words, ensuring comprehension and reducing misunderstandings (Talevski et al., 2020).


Teach-back improves the patient's understanding; therefore
Ask patients to repeat instructions
Use simple, clear language
Correct misunderstandings promptly
Incorporate visual aids or handouts
• Example: "How will you take this medication?"
It also reduces errors, enhances patient safety


Simplifying medication regimens entails making adherence manageable (Elnaem et al., 2020)
Opt for once-daily dosing when possible
Consolidating multiple medications into a single daily dose where feasible
Utilize blister packs or pill organizers
Align refill dates with synchronization
Set reminders through apps or alarms
Collaborate with prescribers for adjustments


Include caregivers in medication adherence education
Simplify instructions for easy reinforceme nt
Encourage daily monitoring and reminders
Address concerns of caregivers directly
Train on managing side effects effectively
• Caregiver logs daily medication intake


Supporting Medication Adherence: Practical Tools
Pill Organizers
Helps patients track doses, reducing missed medications.
Medication Reminder Apps & Alarms
Patients set notifications to remind them when to take their meds.
Pharmacy Synchronization
Aligns all prescriptions for a single pickup date to prevent gaps.
Blister Packs
Pre-sorted doses improve organization and prevent dosage errors.

Supporting Medication Adherence: Practical Tools

Caregiver Support

- Caregivers can track medication schedules and offer reminders.

Address fear of side-effects

- Patient Education: Explaining possible side effects clearly.
- Show empathy and support.
- Confirm patient understanding of side effect management.

Key Takeaways & Next Steps

Your Role in Adherence:

- Nurses are critical in promoting adherence
- Employ Motivational Interviewing, Teach Back, teach-back, and regimen simplification.
- Empower patients and involve caregivers.
- Enhance communication and build trust.

Appendix B: Training Handout

Enhancing Nursing Knowledge, Self-Efficacy, and Confidence in Evidence-Based Strategies for Medication Adherence for Psychiatric Outpatient Nurses Handout

Developed by: Giovanna Happy, DNP Student

Why Is Medication Adherence Important?

- ✓ Medication adherence is essential for effective psychiatric treatment, symptom stability, and improved patient well-being.
- ✓ Following prescribed regimens prevents relapse, reduces hospitalizations, and enhances long-term health outcomes (Kaur et al., 2023).
- ✓ Nonadherence leads to worsening symptoms, increased healthcare costs, and higher risks of emergency interventions (Waghmare et al., 2023).
- ✓ It places a burden on healthcare systems, increasing readmissions and requiring costly long-term management.
- ✓ Nurses play a key role in identifying barriers, educating patients, and using evidence-based strategies to promote adherence

Common Barriers to Medication Adherence in Psychiatric Patients

- ✓ Forgetfulness: Patients may unintentionally miss doses due to cognitive impairment, memory difficulties, or daily distractions.
- ✓ Side Effects: For psychiatric patients, adverse effects like sedation or emotional blunting can lead to medication refusal, especially if they feel it affects their daily functioning.

- ✓ Lack of Insight: Many psychiatric conditions, including schizophrenia and severe mood disorders, are associated with anosognosia, a condition where patients lack awareness of their illness.
- ✓ Complex Regimens: Psychiatric patients are often prescribed multiple psychotropic medications and adjunct therapies, leading to confusion and missed doses.
- ✓ Stigma: Fear of being judged for taking psychiatric medications can discourage adherence.
    - ✓ Patients may avoid taking medications in public, refuse to disclose their mental health treatment to others, or perceive medication use as a sign of personal weakness.
    - ✓ Stigma can also be reinforced by family members or cultural beliefs that discourage psychiatric treatment.

Understanding the above barriers allows nurses to apply targeted interventions to address patient concerns and improve adherence through education, support, and tailored strategies.

Evidence-Based Strategies to Promote Adherence

1. Motivational Interviewing (MI)

- ✓ MI is a patient-centered counseling approach designed to enhance motivation and commitment to behavior change, including medication adherence.
- ✓ MI helps by encouraging self-reflection, reducing resistance, and fostering internal motivation, leading to higher adherence rates and better health outcomes (Mohan et al., 2023).

✓ Express empathy – Show understanding and acknowledge concerns without judgment, which helps build trust.

✓ Develop discrepancy – Help patients recognize the gap between their current behavior and personal health goals.

✓ Roll with resistance – Avoid confrontation and instead encourage open, non-judgmental discussions about their concerns.

✓ Support self-efficacy – Reinforce the patient's confidence in their ability to take control of their medication adherence (Mohan et al., 2023).

📌 Example: *"I hear that taking medication daily is challenging. What do you think would help you stay on track with your treatment?"*

2. Teach-Back Method

- ✓ The Teach-Back Method is a communication technique used to confirm that patients understand medication instructions by having them repeat the information in their own words.
- ✓ Patients often forget or misinterpret instructions about their medications, which can lead to missed doses or incorrect administration.
- ✓ Teach-Back ensures that patients fully comprehend when and how to take their medications, improving adherence and reducing preventable errors (Talevski et al., 2020).

✓ Improves patient comprehension and reduces misunderstandings.

✓ Encourages patient engagement, making them active participants in their care.

✓ Helps nurses assess gaps in knowledge and clarify misunderstandings before they lead to nonadherence.

📌 Example: *"Can you explain to me how you will take your medication at home to ensure I gave clear instructions?"*

3. Medication Synchronization (Med Sync)

- ✓ Med Sync is a process where all patient medications are aligned for the same refill date, allowing single pharmacy visits instead of multiple trips.
- ✓ Nonadherence often occurs when patients miss pharmacy visits or run out of medication at different times. Med Sync helps reduce missed doses, improve convenience, and promote consistency in medication-taking habits (Waghmare et al., 2023).

✓ Reduces pharmacy trips and ensures patients refill prescriptions on time.

✓ Supports patients managing multiple medications, simplifying complex regimens.

✓ Encourages routine and habit formation, improving long-term adherence.

📌 Best Practices:

✓ Work with pharmacists to synchronize all patient medications.

✓ Educate patients on how Med Sync improves consistency.

✓ Set automatic reminders for refill pickups.

4. Simplifying Medication Regimens

- ✓ Simplifying regimens reduces the burden on patients and improves treatment success (Elnaem et al., 2020).

✓ Use extended-release formulations to reduce dosing frequency.

✓ Consolidate multiple medications into a single pill when appropriate.

✓ Provide medication organization tools like pillboxes and digital reminders.

📌 Example: *A patient struggling with three separate daily doses may benefit from switching to a once-daily option.*

5. Engaging Caregivers in Adherence Support

- ✓ Caregivers play an essential role in reminding, encouraging, and assisting patients with medication management.
- ✓ Psychiatric patients may rely on family members or support persons to help them stay on track with their medication regimens.
- ✓ Engaging caregivers can reduce missed doses and provide emotional support (Kaur et al., 2023).

✓ Educate caregivers about medication regimens and side effect management.

✓ Provide caregivers with tools such as medication calendars and reminders.

✓ Foster open discussions to improve patient-caregiver communication.

📌 Example: *"Caregivers can help by setting up a medication schedule and checking in on patients regularly to support adherence."*

By integrating the above-described evidence-based strategies into daily practice, nurses can enhance medication adherence, improve patient outcomes, and reduce preventable hospitalizations.

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Appendix C: Pretest Questionnaire

Assessment of Nursing Staff Knowledge, Confidence, and Willingness to Promote Medication Adherence through Evidence-Based Strategies

Instructions

Welcome to the pretest assessment for this educational program. Your responses will help to evaluate your baseline knowledge, confidence, and willingness to promote medication adherence.

- Create a six-digit identification number on this test that you will remember as you will need to use it again following the presentation. Do not use consecutive numbers. Use a unique string of numbers (e.g., 357834). Only place the number on the top right space of the test – not your name or any other personal information.
- Read each question carefully. For the multiple-choice questions, circle the correct option. For Likert scale questions, place an 'X' in the box corresponding to your response.
- Your responses are confidential and will only be used to evaluate the educational project.
- After completing the pretest, return it to the designated collection point.

Section 1: Knowledge Assessment (15 Multiple-Choice Questions)

1. What is the primary goal of motivational interviewing in promoting medication adherence?

    A) Directly advising patients to take their medications

    B) Exploring and resolving ambivalence

    C) Highlighting the risks of nonadherence without offering support

    D) Dismissing patient concerns about medications

2. How does the teach-back method ensure patient understanding?

    A) By testing patient memory without context

    B) By asking patients to repeat instructions in their own words

    C) By focusing exclusively on side effects

    D) By simplifying medication regimens

3. Which of the following is not a barrier to medication adherence?

    A) Forgetfulness

    B) Lack of understanding about treatment goals

    C) Fear of side effects

    D) Willingness to observe medication doses and dosages

4. How can medication regimens be simplified to support adherence?

    A) Avoiding patient input during medication decisions

    B) Increasing medication frequency for better monitoring

    C) Consolidating multiple medications into a single daily dose where feasible

    D) Adding additional medications without explanation

5. How does caregiver involvement support medication adherence?

    A) Providing reminders and emotional support to encourage adherence

    B) Making medication decisions without consulting the patient

    C) Ensuring the patient follows the regimen without discussing side effects

    D) Completely taking over medication administration with no patient input

6. What is the purpose of using motivational interviewing in nursing practice?

    A) To dictate a treatment plan to the patient

    B) To collaboratively help patients explore reasons for change

    C) To ensure patients follow instructions without questioning

    D) To highlight the risks of treatment nonadherence

7. Which of the following is an example of a patient barrier to medication adherence?

    A) Fear of side effects leading to intentional nonadherence

    B) Receiving clear medication education from healthcare providers

    C) Struggling with complex medication schedules

    D) Difficulty understanding the purpose of prescribed medications

8. Which of the following tools can help patients remember their medication schedules? (select all that apply)

    A) Caregiver involvement to support adherence

    B) Alarm reminders to prompt timely medication intake

    C) Pill organizers to visually track doses

    D) Customized medication calendars tailored to the patient's schedule

9. What is an effective method for addressing a patient's fear of medication side effects?

    A) Dismissing their concerns to reduce anxiety

    B) Educating them on how to manage side effects if they occur

    C) Avoiding discussions about side effects

    D) Advising them to stop taking medications immediately if they experience side effects

10. What role does the teach-back method play in patient education?

    A) Confirms patient understanding of instructions

    B) Tests the patient's literacy level

    C) Focuses only on medication adherence without clarifications

    D) Eliminates the need for follow-up

11. What is the goal of a patient-centered approach to medication adherence?

    A) To ensure that patients strictly follow instructions without questioning

    B) To collaborate with patients to develop adherence strategies that align with their values and goals

    C) To reduce the role of the patient in the decision-making process

    D) To focus exclusively on clinical outcomes

12. How can motivational interviewing support patients resistant to taking medications? (select all that apply)

    A) By directly confronting and correcting their beliefs

    B) By helping them identify their own reasons for adherence

    C) By providing them with strict instructions to follow

    D) By focusing only on their barriers without offering solutions

13. What is an example of simplifying a medication regimen?

    A) Opting for once-daily dosing when possible

    B) Increasing the number of medications to improve effectiveness

    C) Prescribing medications at different times of the day

    D) Avoiding discussions with patients about their regimens

14. Why is involving caregivers in medication adherence important?

    A) They can monitor and remind patients to take medications

    B) They can provide emotional and logistical support

    C) They can help patients address barriers to adherence

    D) All of the above

15. What should nurses do if patients express ambivalence about taking medications?

    A) Use motivational interviewing techniques to explore their concerns

    B) Insist that patients follow the prescribed regimen without discussion

    C) Ignore the ambivalence to avoid conflict

    D) Emphasize the consequences of nonadherence without addressing their concern

Section 2: Confidence Assessment (Likert Scale)

#	Confidence Statement	5 Strongly Confident	4 Confident	3 Neutral	2 Not Confident	1 Strongly Not Confident
1	I feel confident explaining evidence-based strategies for medication adherence to patients.					
2	I feel confident addressing patient concerns about side effects of medications.					
3	I feel confident using the teach-back method to confirm patient understanding.					
4	I feel confident discussing medication adherence barriers with patients.					
5	I feel confident recommending tools like pill organizers or reminders to support adherence.					

Rate your confidence to implement strategies that promote medication adherence on a scale of 1-5 where: 1 = Strongly Not Confident, 2 = Not Confident, 3 = Neutral, 4 = Confident, 5 = Strongly Confident

Section 3: Willingness Assessment (Likert Scale)

Rate your willingness to promote medication adherence through various strategies and practices using a scale of 1 – 5, where: 1 = Strongly Not Willing, 2 = Not Willing, 3 = Neutral, 4 = Willing, 5 = Very Willing:

#	Willingness Statement	5 (Very Willing)	4 (Willing)	3 (Neutral)	2 (Not Willing)	1 (Strongly Not Willing)
1	I am willing to incorporate motivational interviewing into my patient interactions.					
2	I am willing to discuss medication adherence at every patient visit.					
3	I am willing to advocate for simplified medication regimens with prescribing providers.					
4	I am willing to educate caregivers to support patient adherence.					
5	I am willing to collaborate with other healthcare providers to promote adherence strategies.					

Appendix D: Posttest Questionnaire

Assessment of Nursing Staff Knowledge, Confidence, and Willingness to Promote Medication Adherence through Evidence-Based Strategies

Instruction

Welcome to the posttest assessment for the educational program. Your responses will help to evaluate your knowledge, confidence, and willingness to promote medication adherence after the presentation.

- Use the unique six-digit identification number you created during the pretest. Place the number on the top right space of the test only and not your name or any other personal information.
- Read each question carefully. For the multiple-choice questions, circle the correct option. For Likert scale questions, place an 'X' in the box corresponding to your response.
- Your responses are confidential and will only be used to evaluate the educational project.
- After completing the pretest, return it to the designated collection point.

Section 1: Knowledge Assessment (15 Multiple-Choice Questions)

1. What is the primary goal of motivational interviewing in promoting medication adherence?

    A) Directly advising patients to take their medications

    B) Exploring and resolving ambivalence

    C) Highlighting the risks of nonadherence without offering support

    D) Dismissing patient concerns about medications

2. How does the teach-back method ensure patient understanding?

    A) By testing patient memory without context

    B) By asking patients to repeat instructions in their own words

    C) By focusing exclusively on side effects

    D) By simplifying medication regimens

3. Which of the following is not a barrier to medication adherence?

    A) Forgetfulness

    B) Lack of understanding about treatment goals

    C) Fear of side effects

    D) Willingness to observe medication doses and dosages

4. How can medication regimens be simplified to support adherence?

    A) Avoiding patient input during medication decisions

    B) Increasing medication frequency for better monitoring

    C) Consolidating multiple medications into a single daily dose where feasible

    D) Adding additional medications without explanation

5. How does caregiver involvement support medication adherence?

    A) Providing reminders and emotional support to encourage adherence

    B) Making medication decisions without consulting the patient

    C) Ensuring the patient follows the regimen without discussing side effects

    D) Completely taking over medication administration with no patient input

6. What is the purpose of using motivational interviewing in nursing practice?

    A) To dictate a treatment plan to the patient

    B) To collaboratively help patients explore reasons for change

    C) To ensure patients follow instructions without questioning

    D) To highlight the risks of treatment nonadherence

7. Which of the following is an example of a patient barrier to medication adherence?

    A) Fear of side effects leading to intentional nonadherence

    B) Receiving clear medication education from healthcare providers

    C) Struggling with complex medication schedules

    D) Difficulty understanding the purpose of prescribed medications

8. Which of the following tools can help patients remember their medication schedules? (select all that apply)

    A) Caregiver involvement to support adherence

    B) Alarm reminders to prompt timely medication intake

    C) Pill organizers to visually track doses

    D) Customized medication calendars tailored to the patient's schedule

9. What is an effective method for addressing a patient's fear of medication side effects?

    A) Dismissing their concerns to reduce anxiety

    B) Educating them on how to manage side effects if they occur

    C) Avoiding discussions about side effects

    D) Advising them to stop taking medications immediately if they experience side effects

10. What role does the teach-back method play in patient education?

    A) Confirms patient understanding of instructions

    B) Tests the patient's literacy level

    C) Focuses only on medication adherence without clarifications

    D) Eliminates the need for follow-up

11. What is the goal of a patient-centered approach to medication adherence?

    A) To ensure that patients strictly follow instructions without questioning

    B) To collaborate with patients to develop adherence strategies that align with their values and goals

    C) To reduce the role of the patient in the decision-making process

    D) To focus exclusively on clinical outcomes

12. How can motivational interviewing support patients resistant to taking medications? (select all that apply)

    A) By directly confronting and correcting their beliefs

    B) By helping them identify their own reasons for adherence

    C) By providing them with strict instructions to follow

    D) By focusing only on their barriers without offering solutions

13. What is an example of simplifying a medication regimen?

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14. Why is involving caregivers in medication adherence important?

    A) They can monitor and remind patients to take medications

    B) They can provide emotional and logistical support

    C) They can help patients address barriers to adherence

    D) All of the above

15. What should nurses do if patients express ambivalence about taking medications?

A) Use motivational interviewing techniques to explore their concerns

B) Insist that patients follow the prescribed regimen without discussion

C) Ignore the ambivalence to avoid conflict

D) Emphasize the consequences of nonadherence without addressing their concern

Section 2: Confidence Assessment (Likert Scale)

Rate your confidence to implement strategies that promote medication adherence on a scale of 1-5 where: 1 = Strongly Not Confident, 2 = Not Confident, 3 = Neutral, 4 = Confident, 5 = Strongly Confident

#	Confidence Statement	5 Strongly Confident	4 Confident	3 Neutral	2 Not Confident	1 Strongly Not Confident
1	I feel confident explaining evidence-based strategies for medication adherence to patients.					
2	I feel confident addressing patient concerns about side effects of medications.					
3	I feel confident using the teach-back method to confirm patient understanding.					
4	I feel confident discussing medication adherence barriers with patients.					
5	I feel confident recommending tools like pill organizers or reminders to support adherence.					

Section 3: Willingness Assessment (Likert Scale)

Rate your willingness to promote medication adherence through various strategies and practices using a scale of 1 – 5, where: 1 = Strongly Not Willing, 2 = Not Willing, 3 = Neutral, 4 = Willing, 5 = Very Willing:

#	Willingness Statement	5 (Very Willing)	4 (Willing)	3 (Neutral)	2 (Not Willing)	1 (Strongly Not Willing)
1	I am willing to incorporate motivational interviewing into my patient interactions.					
2	I am willing to discuss medication adherence at every patient visit.					
3	I am willing to advocate for simplified medication regimens with prescribing providers.					
4	I am willing to educate caregivers to support patient adherence.					
5	I am willing to collaborate with other healthcare providers to promote adherence strategies.					

Appendix E: Education Evaluation Form

Education Evaluation Form For participants in the Medication Adherence Staff Education Program

Date: _____

Location: _____

By: Giovanna Happy, DNP Student

Instructions: Please indicate your level of agreement with the following statements by selecting the appropriate response.

Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1. The staff education objectives were clearly defined.	☐	☐	☐	☐	☐
2. The staff education encouraged active participation and discussion.	☐	☐	☐	☐	☐
3. The content was relevant to my role in medication adherence.	☐	☐	☐	☐	☐
4. The information was well-organized and easy to follow.	☐	☐	☐	☐	☐
5. The staff education materials (slides, handouts) were helpful.	☐	☐	☐	☐	☐
6. This staff education will improve my confidence in promoting medication adherence.	☐	☐	☐	☐	☐
7. The facilitator demonstrated expertise in the topic.	☐	☐	☐	☐	☐
8. The staff education duration was sufficient to cover the key concepts.	☐	☐	☐	☐	☐
9. The staff education environment was conducive to learning.	☐	☐	☐	☐	☐
10. The staff education increased my ability to support patient adherence.	☐	☐	☐	☐	☐

Open-Ended Questions:

1. What was the most valuable part of this staff education?

2. What areas of the staff education could be improved?

3. How do you plan to implement what you learned into your daily practice?

4. What additional education or resources would help you support medication adherence?

5. Do you have any additional comments or feedback regarding the staff education?

Thank you for your feedback!

Your input is valuable in improving future staff education sessions.

Appendix F: Pretest and Posttest Results

Participant	Knowledge			Confidence		
	Pre (15)	Post (15)	% Increase	Pre (25)	Post (25)	% Increase
RN1	9	12	33.33	15	19	26.67
RN2	7	9	28.57	14	17	21.43
RN3	9	12	33.33	14	17	21.43
RN4	9	12	33.33	16	20	25
RN5	7	10	42.87	15	19	26.67
RN6	9	11	22.22	13	17	30.77
RN7	9	12	33.33	17	21	23.53
RN8	8	11	37.5	15	19	26.67
RN9	9	12	33.33	16	20	25
RN10	8	11	37.5	17	20	17.64
RN11	7	10	42.86	14	18	28.57
RN12	9	13	44.44	16	20	25
RN13	9	12	33.33	15	19	26.67
RN14	8	11	37.5	14	18	28.57
M	8.36	11.29	35.25	15.07	18.86	25.26