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Staff Education to Enhance Psychiatric Medication Adherence in Psychiatric Care

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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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Executive Summary: Staff Education Project

Staff Education to Enhance Psychiatric Medication Adherence in Psychiatric Care

by

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Summary

Medication non-adherence affects 49% of psychiatric patients and contributes to poor outcomes and increased hospitalizations. At the project site, 40% of patients demonstrated suboptimal adherence and 12 medication-related incidents occurred. Nursing staff lacked specialized training in motivational interviewing and comprehensive adherence assessment. This project developed and implemented an evidence-based educational program to enhance nursing competencies in psychiatric medication adherence counseling.

Seven nursing staff members (5 registered nurses, 2 licensed practical nurses) participated in a 90-minute session incorporating the four-domain assessment framework, motivational interviewing techniques, and psychoeducational strategies. The ADDIE framework guided program development with interactive discussions, case-based learning, and role-play activities. Participants completed 20-item knowledge tests, 15-item confidence scales, and 15-item competency assessments pre and post-intervention.

Knowledge scores increased from 59% to 94% with a cohort average of 59.3% proportional gain. Confidence ratings improved from 2.8 to 4.2 out of 5.0, representing a 50% increase. Competency ratings increased from 2.5 to 4.0 out of 5.0, representing a 60% increase. Wilcoxon signed-rank test results confirmed statistical significance ($W = 0$, $p < .05$). All participants rated the program excellent and intended to change practice behaviors.

The intervention enhanced nursing competencies in psychiatric medication adherence support. Recommendations include ongoing training, standardized protocols in the electronic health record, and program expansion to other facilities.

Background

Medication non-adherence in psychiatric populations represents a pervasive challenge affecting patient outcomes and healthcare quality. Approximately 49% of patients with psychiatric conditions demonstrated medication non-adherence, with rates reaching 56% in schizophrenia and 44% in bipolar disorder (Semahegn et al., 2020). These elevated non-adherence rates stem from unique barriers in psychiatric populations, including anosognosia (lack of insight into illness), cognitive impairments that interfere with medication management, and stigma that prevents open discussion of mental health treatment. The high prevalence and distinctive challenges of psychiatric medication non-adherence create an urgent need for specialized nursing interventions that address these complex factors.

The project site identified medication adherence as a critical quality concern requiring immediate intervention. Facility data revealed that 40% of patients demonstrated suboptimal adherence patterns, and 12 medication-related incidents occurred due to inadequate patient understanding during the assessment period. These incidents included symptom exacerbation from missed doses, premature medication discontinuation when patients felt improved, and errors resulting from confusion about complex regimens. The facility's quality metrics demonstrated that current nursing practices failed to adequately support patients in maintaining psychiatric medication adherence.

Nursing staff lacked the specialized competencies necessary to address psychiatric medication adherence effectively. While nurses administered medications safely and provided basic education, they received no systematic training in motivational

interviewing, comprehensive barrier assessment, or psychoeducational strategies specific to psychiatric populations (Berardinelli et al., 2024; Lin et al., 2022). The absence of standardized protocols meant that adherence counseling varied widely based on individual nurse experience rather than evidence-based best practices, leaving a substantial portion of patients without adequate adherence support.

Project Question and Purpose

The question that guided this project was: In adult patients with psychiatric conditions, does provider education improve medication adherence compared to standard practice? This project aimed to enhance nursing staff's knowledge and competencies in psychiatric medication adherence assessment and counseling techniques. The purpose was to develop and implement an evidence-based educational program that would improve nursing staff's ability to conduct comprehensive adherence assessments, apply motivational interviewing techniques, and deliver psychoeducational interventions tailored to psychiatric populations.

Evidence Supporting Practice Change

Structured nursing education incorporating motivational interviewing, comprehensive assessment frameworks, and psychoeducational strategies demonstrates significant improvements in nursing competencies for psychiatric medication adherence support. According to Berardinelli et al. (2024), nurses trained in motivational interviewing techniques achieve better therapeutic engagement and patient adherence outcomes compared to those using directive advice-giving approaches. As noted by Lin et al. (2022), systematic evaluation of individual behaviors, social support, clinical factors, and health system factors enabled nurses to identify more modifiable barriers and

deliver targeted interventions. Deng et al. (2022) demonstrated that nurses equipped with structured assessment frameworks show superior ability to uncover root causes of non-adherence and develop individualized intervention plans. These findings highlight proper training directly impacts nursing staff's capacity to address the multifaceted nature of psychiatric medication non-adherence rather than focusing narrowly on patient knowledge deficits.

The effectiveness of comprehensive nursing education extends beyond knowledge acquisition to encompass sustained clinical application and patient outcomes. As demonstrated by Inwanna et al. (2022), nurses who receive training in psychoeducational interventions combined with behavioral strategies achieve better long-term adherence outcomes than those providing education alone. More so, Chow et al. (2024) suggested that implementation of family involvement strategies that balance support with patient autonomy strengthens adherence by creating a supportive social environment without undermining patient decision-making. Furtherer, Laranjeira and Querido (2022) note that nurses trained in therapeutic relationship-building demonstrate enhanced ability to create trust-based interactions that enable honest disclosure of medication concerns and barriers.

Strength of Evidence

The evidence supporting structured nursing education for psychiatric medication adherence is built on a strong foundation of high-quality research across multiple levels. Systematic reviews and meta-analyses demonstrate the effectiveness of motivational interviewing and comprehensive assessment training in improving nursing competencies and patient adherence outcomes (Berardinelli et al., 2024; Laranjeira & Querido, 2022; Semahegn et al., 2020). This evidence is further strengthened by qualitative studies with

good quality ratings that validate the effectiveness of structured nursing education across diverse psychiatric populations and healthcare contexts (Deng et al., 2022; Issac et al., 2025; Lin et al., 2022). The overall strength of evidence is enhanced by the consistency of findings across different research methodologies and settings, with systematic reviews examining interventions to promote medication adherence in schizophrenic populations consistently emphasizing the importance of incorporating active learning strategies, using comprehensive assessment frameworks, and integrating motivational interviewing as a core competency.

Staff Education Project Development

The educational intervention included seven nursing staff members employed at the project site's behavioral health treatment center. Participants comprised registered nurses (n = 5) and licensed practical nurses (n = 2), representing the primary providers responsible for delivering psychiatric medication management and patient education. Professional experience among participants ranged from 2 to 18 years in psychiatric nursing, and nurses from various shifts within the facility participated to ensure the intervention addressed the needs of all staff involved in psychiatric medication adherence support.

The educational program consisted of one intensive 90-minute session incorporating multiple learning modalities (see Appendix A). The program began with a PowerPoint presentation (see Appendix B) including a comprehensive review of psychiatric medication adherence challenges, the four-domain assessment framework, and evidence-based counseling strategies. The ADDIE framework guided implementation, emphasizing systematic knowledge creation and application cycles.

Each session component used adult learning principles through interactive discussions, practical applications, and case-based learning scenarios to cater to different learning styles and maximize participant engagement.

The knowledge assessment tool consisted of a 20-question pretest and posttest designed to evaluate staff understanding of psychiatric medication adherence prevalence rates, the four-domain assessment framework, motivational interviewing principles, psychiatric-specific barriers, the five key nursing strategies, psychoeducational intervention components, family involvement approaches, and cultural considerations in adherence counseling (see Appendix C). All participants also completed a 15-item confidence rating scale and a 15-item competency self-assessment scale (see Appendix D) using 5-point Likert scales. Each participant created a unique self-generated identifier to enable paired analysis while maintaining anonymity. Data collection occurred immediately before the educational session (pretest) and following the session's conclusion (posttest), with strict protocols maintained for data security and participant anonymity throughout the project.

Data Analysis Plan

The analysis plan used both descriptive and nonparametric statistical methods to evaluate the educational intervention's effectiveness. Pre and posttest scores from the seven participants were compared using unique identifiers to maintain anonymity. Descriptive statistics calculated the percentage of correct responses, mean confidence ratings, mean competency ratings, and overall knowledge gain for each participant and the cohort. Knowledge gain was calculated using proportional increase to account for varying baseline scores. A Wilcoxon signed-rank test was selected for statistical analysis

because the sample size was less than 25 participants, with the significance level set at $p < .05$ to determine if improvements in knowledge, confidence, and competency were statistically significant.

Results

The educational intervention's effectiveness was evaluated through comprehensive pre and posttest assessment measuring knowledge acquisition, confidence development, and perceived competency gains. Seven nursing staff members from the behavioral health treatment center participated in the 90-minute educational session and completed all assessment components. Data analysis employed descriptive statistics to characterize performance changes and Wilcoxon signed rank test nonparametric testing to establish statistical significance.

Descriptive Statistics

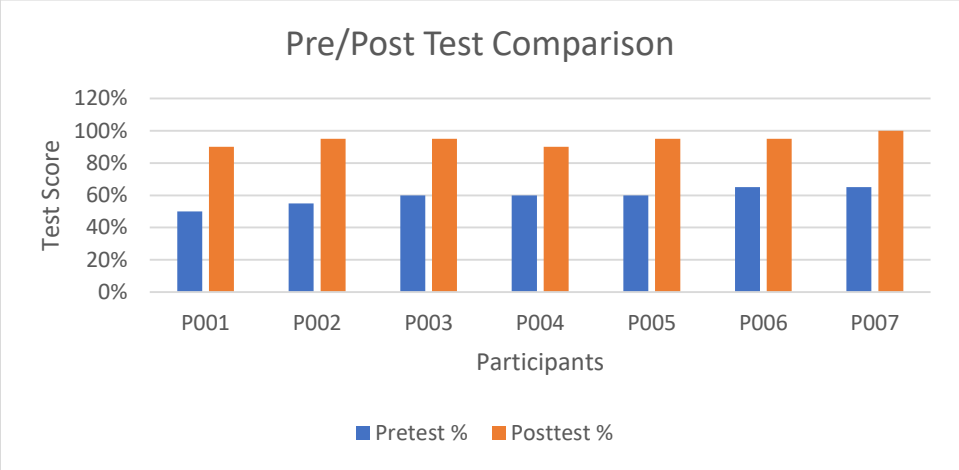
The participants (N = 7) included five registered nurses and two licensed practical nurses working across different shifts at the behavioral health treatment center. Baseline knowledge assessment revealed substantial gaps in understanding evidence-based adherence strategies. Pretest scores ranged from 50% to 65%, with a mean of 59%, indicating participants possessed basic awareness but lacked comprehensive understanding of psychiatric medication adherence assessment and counseling techniques (see Figure 1).

Posttest results demonstrated substantial improvement across all participants. Scores ranged from 90% to 100%, with a mean of 94% (see Figure 1). The 35 percentage point increase in mean scores reflects substantial knowledge acquisition during the 90-minute educational session. Figure 1 illustrates the comparison between pretest and

posttest arithmetic means, showing the marked improvement in participant performance. The standard deviation of 0.6 indicates consistent high performance across all participants following the intervention.

Figure 1

Comparison of Pretest/Posttest



Knowledge gain for individual participants was calculated using proportional increase: [(Posttest % - Pretest %) / Pretest %] × 100. Individual gains ranged from 46% to 80%, with a cohort average of 58% (see Table 1). The participant with the lowest baseline score (50%) achieved the highest proportional gain (80%), while those starting at 65% still demonstrated gains of 46% and 54%. These results indicate the educational intervention effectively improved understanding regardless of participants' initial knowledge levels. The substantial gains across all participants demonstrate the program successfully addressed gaps in psychiatric medication adherence assessment and motivational interviewing competencies.

Table 1

Pretest and Posttest Scores and Knowledge Gain

Total # questions = 20	Pretest score	Pretest correct responses	Posttest score	Posttest correct responses	Knowledge gain (%)
Participant #1	10.0	50.0%	18.0	90.0%	80.0
Participant #2	11.0	55.0%	19.0	95.0%	73.0
Participant #3	12.0	60.0%	19.0	95.0%	58.0
Participant #4	12.0	60.0%	18.0	90.0%	50.0
Participant #5	12.0	60.0%	19.0	95.0%	58.0
Participant #6	13.0	65.0%	19.0	95.0%	46.0
Participant #7	13.0	65.0%	20.0	100.0%	54.0
Average	11.9	59.0%	18.9	94.0%	59.3

Note. Knowledge gain calculated as proportional increase: [(Posttest % - Pretest %) / Pretest %] × 100

Confidence ratings demostrated parallel improvements across the 15 measured activities. Participants rated their confidence using a five-point Likert scale ranging from "not at all confident" to "extremely confident." Pretest confidence averaged 2.8 out of 5.0, indicating moderate uncertainty about performing specialized adherence counseling activities. Following the educational session, mean confidence increased to 4.2 out of 5.0, representing a 50% proportional increase. The three areas showing greatest improvement were using motivational interviewing techniques (1.6-point increase), conducting comprehensive four-domain adherence assessments (1.5-point increase), and addressing anosognosia in patients with limited illness insight (1.7-point increase).

Competency self-assessments followed similar patterns. Using a five-point Likert scale from "not competent" to "highly competent," participants rated their perceived

ability to apply 15 specific adherence counseling skills. Pretest competency averaged 2.5 out of 5.0, reflecting participants' recognition of gaps between their current abilities and desired competency levels. Posttest ratings increased to 4.0 out of 5.0, a 60% proportional increase from baseline. The most substantial improvements occurred in applying motivational interviewing principles (1.8-point increase), exploring patient ambivalence without creating defensiveness (1.6-point increase), and conducting comprehensive four-domain assessments (1.7-point increase). These gains align with content areas that received intensive focus during the educational session.

Wilcoxon Signed-Rank Test

Statistical testing verified that observed improvements exceeded chance variation. The Wilcoxon signed-rank test compared paired pretest and posttest knowledge scores for all seven participants. This nonparametric test was selected because the sample size fell below 25 participants, making it more appropriate than parametric alternatives. The analysis yielded a W-value of 0, which falls below the critical value of 2 required for significance at $p < .05$ with seven participants. This result confirms the probability of observing such substantial score improvements by chance alone is less than 5%, providing strong evidence that the educational intervention produced genuine learning effects rather than random fluctuations in participant performance.

Evaluation of the Education Program

Participant feedback revealed unanimous satisfaction with the educational intervention (see Appendix E). Each of the seven nurses rated the program quality as excellent, indicating strong approval of the content delivery and educational approach. Beyond satisfaction measures, every participant expressed definite intention to modify

their clinical practice based on the session content. Qualitative feedback provided additional insights into participant experiences. One RN commented that the program "gave me specific phrases to use with patients who don't think they need medications anymore." Another participant noted "practicing motivational interviewing with a partner made me realize I was being too directive before." A third participant wrote that "the four-domain checklist will help me not miss important barriers when talking with patients." The consistent theme across written comments emphasized practical applicability and immediate implementation potential in clinical settings.

Limitations

Several constraints affect interpretation of these findings. The seven-participant sample, while appropriate for the single-site pilot, restricts generalization to larger nursing populations or different psychiatric treatment settings. Self-reported confidence and competency measures captured participant perceptions but did not verify actual clinical skill application with patients. Direct observation using validated assessment tools would provide objective performance data to complement self-assessment findings. The immediate posttest design measured short-term knowledge retention but provided no data on sustained learning or long-term practice changes. Follow-up assessment at three and six months would determine whether initial gains persist and translate into consistent clinical application. These limitations suggest directions for future research while acknowledging the project's value as an initial intervention study.

Conclusions

Psychiatric medication non-adherence contributes substantially to treatment struggles among the 10.4 million adults in the United States experiencing serious mental

illness. Nurses represent the largest healthcare workforce and maintain the most frequent patient contact, positioning them as essential change agents in adherence support. This educational intervention demonstrated that structured training enhances nursing capabilities in addressing psychiatric medication adherence. The project site now has nursing staff equipped with evidence-based assessment techniques and counseling approaches that target the complex barriers patients face.

Patient outcomes stand to improve as nurses apply motivational interviewing principles, conduct systematic four-domain assessments, and deliver culturally sensitive psychoeducation, which translates to fewer medication-related incidents, decreased psychiatric symptom relapse, and reduced emergency department utilization. Sustaining these improvements requires deliberate organizational commitment through quarterly refresher workshops, formal mentorship pairing newly hired nurses with experienced psychiatric staff, and documentation templates embedded in the electronic health record. This project validates that targeted education transforms nursing practice by giving staff practical tools to address systemic barriers patients encounter and provides a replicable model for other psychiatric facilities seeking to strengthen their nursing workforce's adherence support capabilities.

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Appendices

Appendix A

Educational Program Teaching Plan

Teaching Plan

Program Outcome:

After completing the educational program, participants' knowledge of psychiatric medication adherence assessment and counseling techniques will be increased, as evidenced by pretest/posttest evaluation.

Presentation Title: Enhancing Psychiatric Medication Adherence Through Evidence-Based Nursing Assessment and Counseling

Total Time: 90 minutes (one session)

Audience: Seven nursing staff members (5 RNs, 2 LPNs)

Objectives

1. Identify the scope and impact of medication non-adherence in psychiatric populations
2. Describe barriers unique to psychiatric medication adherence
3. Conduct comprehensive adherence assessments using the four-domain framework
4. Apply the five key nursing strategies for medication adherence support
5. Implement motivational interviewing techniques in adherence counseling
6. Integrate family involvement and psychoeducation into care plans

Session Structure

Pre-Session Activities (15 minutes before start):

- Participant arrival and sign-in

- Distribution of materials
- Completion of pretest (Parts A, B, C, D)

Session Timeline:

- **Introduction (5 min):** Welcome, program overview, learning objectives
- **Understanding Psychiatric Medication Non-Adherence (10 min):** Prevalence rates, impact on outcomes, unique barriers, project site data
- **Four-Domain Assessment Framework (15 min):** Individual behaviors, social support, clinical factors, health system factors; small group case study analysis
- **Five Key Nursing Strategies (10 min):** Establishing relationships, assessment, education, feedback, building resources
- **Break (5 min)**
- **Motivational Interviewing Techniques (20 min):** Core principles, key techniques, exploring ambivalence; paired role-play practice
- **Family Involvement and Cultural Considerations (10 min):** Family engagement strategies, cultural adaptations
- **Practical Application (5 min):** Integration into clinical practice, documentation, resources
- **Q&A and Wrap-Up (5 min)**
- **Posttest (7 min):** Parts A, B, C
- **Program Evaluation (3 min)**

The session incorporates PowerPoint presentations to deliver key content, combined with interactive elements including case-based discussions, small group analysis, and role-play

exercises to engage learners. The pre/post-tests align with the stated learning objectives to assess knowledge gain, confidence, and perceived competency.

Learning Objective	**Detailed Course Content**	**Sources of Evidence**	**Delivery Method(s)**	**Assessment Tools and Method(s)**
Identify the scope and impact of medication non-adherence in psychiatric populations	Prevalence rates: 49% overall, 56% schizophrenia, 44% bipolar disorder; Impact on symptom management, hospitalizations, quality of life; Project site data: 40% suboptimal adherence, 12 medication-related incidents	Semahegn et al., 2020; Issac et al., 2025	PowerPoint presentation with interactive discussion	Pre/post-test questions 1, 8, 11
Describe barriers unique to psychiatric medication adherence	Anosognosia (lack of insight); Cognitive impairments affecting medication management; Stigma preventing open discussion; Side effects impacting adherence	Issac et al., 2025; Berardinelli et al., 2024	PowerPoint presentation; Case study discussion	Pre/post-test questions 4, 14, 17
Conduct comprehensive adherence assessments using systematic protocols	Four-domain framework: Individual behaviors, social support, clinical factors, health system factors; Systematic assessment process; Identifying modifiable barriers	Johnson & Lee, 2023; Chow et al., 2024	PowerPoint presentation; Small group case analysis; Four-domain assessment checklist	Pre/post-test questions 2, 15; Confidence scale items 1, 6; Competency scale item 6
Apply five key nursing	Strategy 1: Establishing	Martinez et al., 2023;	PowerPoint presentation;	Pre/post-test questions 5,

strategies for medication adherence support	therapeutic relationships; Strategy 2: Conducting comprehensive assessment; Strategy 3: Providing patient education; Strategy 4: Giving feedback; Strategy 5: Building supportive resources	Anderson et al., 2023	Interactive discussion of current practices	19, 20; Competency scale item 1
Implement motivational interviewing techniques in adherence counseling	Four core principles: Express empathy, develop discrepancy, roll with resistance, support self-efficacy; Key techniques: Open-ended questions, affirmations, reflective listening; Exploring patient ambivalence without confrontation	Berardinelli et al., 2024; Thompson & Davis, 2024	PowerPoint presentation; Demonstration; Paired role-play practice with feedback	Pre/post-test questions 3, 7, 9, 13, 16; Confidence scale items 4, 5; Competency scale items 2, 3, 4, 5
Integrate family involvement and psychoeducation into care plans	Family involvement benefits and strategies; Balancing support with patient autonomy; Psychoeducation components: purpose, timeline, side effects, consistency; Cultural considerations in family engagement	Chow et al., 2024; Williams et al., 2024	PowerPoint presentation; Group discussion	Pre/post-test questions 6, 10, 18; Confidence scale item 8; Competency scale items 8, 9

Appendix B

PowerPoint Presentation

PSYCHIATRIC MEDICATION ADHERENCE: ASSESSMENT AND COUNSELING FOR NURSING STAFF

Educational Intervention: Avery Road Treatment Center

Principal Investigator: Emmanuel Nusta, DNP Student

Learning Objectives

By the end of this session, participants will be able to:

1. Identify the scope and impact of medication non-adherence in psychiatric populations
2. Describe barriers unique to psychiatric medication adherence (Issac et al., 2025)
3. Conduct comprehensive adherence assessments using systematic protocols
4. Apply five key nursing strategies for medication adherence support
5. Implement motivational interviewing techniques in adherence counseling (Berardinelli et al., 2024)
6. Integrate family involvement and psychoeducation into care plans (Chow et al., 2024)

The Problem at Avery Road Treatment Center

- **Current State:**
  - 40% of patients demonstrate suboptimal medication adherence patterns
  - 12 medication-related incidents attributed to inadequate patient understanding
  - Adherence rates fall substantially below mental health care benchmarks
  - Inconsistent monitoring without systematic assessment protocols
- **National Context:**
  - 49% non-adherence rate across psychiatric populations (Semahegn et al., 2020)
  - 56% non-adherence in schizophrenia (Issac et al., 2025)
  - 44% non-adherence in bipolar disorder (Issac et al., 2025)

Consequences of Non-Adherence

- **Patient Impact:**
  - Symptom exacerbation
  - Increased risk of relapse (Loots et al., 2021)
  - Higher hospitalization rates
  - Elevated suicide risk (Issac et al., 2025)
  - Reduced quality of life
- **System Impact:**
  - Increased emergency department visits
  - Higher readmission rates
  - Extended treatment episodes
  - Elevated healthcare costs
  - Safety incidents

Barriers Unique to Psychiatric Medication Adherence

- **Cognitive and Illness-Related Barriers:**
  - Lack of insight related to mental health condition (Issac et al., 2025)
  - Cognitive symptoms affecting understanding and memory
  - Anosognosia (inability to recognize illness)
  - Impaired executive function
- **Medication-Related Barriers:**
  - Side effects (weight gain, metabolic effects, sedation)
  - Complex medication regimens
  - Delayed therapeutic effects

Barriers Unique to Psychiatric Medication Adherence

- **Psychosocial Barriers:**
  - Stigma associated with mental illness (Issac et al., 2025)
  - Social isolation
  - Limited family or social support
  - Financial constraints
- **Health System Barriers:**
  - Fragmented care coordination
  - Limited access to mental health services
  - Inadequate patient education (Deng et al., 2022)

Comprehensive Adherence Assessment Framework

- **Individual Behaviors:**
  - Patient understanding of medication purpose
  - Beliefs about medications
  - Self-efficacy for medication management
  - Current medication-taking patterns
- **Social Support:**
  - Family involvement and understanding
  - Peer support networks
  - Living situation stability
  - Caregiver capacity

Comprehensive Adherence Assessment Framework

- **Clinical Factors:**
  - Symptom severity and stability
  - Side effect experiences
  - Substance use patterns
  - Medical comorbidities
- **Health System Factors:**
  - Access to medications and appointments
  - Quality of therapeutic relationships (Deng et al., 2022)
  - Care coordination
  - Financial barriers

Five Key Nursing Strategies

1. Establishing Therapeutic Relationships
2. Comprehensive Assessment
3. Patient and Family Education
4. Providing Feedback
5. Building Supportive Resources

Strategy 1 - Establishing Therapeutic Relationships

- **Key Elements:**
  - Build trust through consistent, non-judgmental interactions
  - Demonstrate genuine interest in patient experience
  - Use active listening techniques
  - Validate patient concerns and experiences (Deng et al., 2022)
  - Maintain confidentiality and respect boundaries
- **Why It Matters:**
  - Therapeutic relationships enable honest disclosure of adherence challenges
  - Patients are more likely to engage in problem-solving with trusted providers
  - Relationship quality predicts adherence outcomes (Berardinelli et al., 2024)

Strategy 2 - Comprehensive Assessment

- **Assessment Components:**
  - Current medication regimen and dosing schedule
  - Actual medication-taking patterns
  - Knowledge about medications (purpose, expected effects, side effects)
  - Beliefs and attitudes about medications
  - Side effect experiences (Issac et al., 2025)
  - Barriers to adherence (practical, psychological, social)
  - Support systems and resources
  - History of adherence patterns
- **Assessment Approach:**
  - Create private, comfortable setting
  - Use open-ended questions
  - Avoid judgmental language
  - Assess regularly throughout treatment course

Strategy 3 - Patient and Family Education (Psychoeducation)

- **Education Content:**
  - Purpose and expected benefits of each medication
  - Timeline for therapeutic effects
  - Common and serious side effects
  - What to do if side effects occur
  - Importance of consistent medication taking
  - Risks of abrupt discontinuation
  - Addressing myths and misconceptions (Inwanna et al., 2022)
- **Family Involvement:**
  - Include family in education when patient consents (Chow et al., 2024)
  - Teach family members to support adherence without controlling
  - Address family misconceptions about psychiatric medications
  - Provide resources for family education

Strategy 4 - Providing Feedback

- **Types of Feedback:**
  - Connect medication adherence to symptom patterns
  - Highlight improvements observed since starting medications
  - Discuss connections between missed doses and symptom changes
  - Provide objective data when available (mood charts, symptom scales)
- **Feedback Principles:**
  - Be specific and concrete
  - Focus on observations rather than judgments
  - Help patients recognize cause-and-effect relationships
  - Encourage patient self-monitoring

Strategy 5 - Building Supportive Resources

- **Individual-Level Resources:**
  - Medication reminder systems (alarms, pill organizers, apps)
  - Simplified medication schedules when possible
  - Connection to pharmacy services
  - Financial assistance programs
- **Social Resources:**
  - Family and friend support networks
  - Peer support groups
  - Community mental health services
  - Care coordination (Deng et al., 2022)
- **System Resources:**
  - Follow-up appointment scheduling
  - Telephonic follow-up interventions (Peterson, 2025)
  - Care manager involvement
  - Integration with other healthcare providers

Motivational Interviewing for Medication Adherence

- **Core Principles:**
  - Express empathy
  - Develop discrepancy
  - Roll with resistance
  - Support self-efficacy
- **Key Techniques:**
  - Open-ended questions
  - Affirmations
  - Reflective listening
  - Summarizing
- **Application to Adherence:**
  - Explore ambivalence about medications
  - Elicit patient's own reasons for taking medications
  - Avoid argumentation about adherence
  - Support patient autonomy in decision-making (Zomahoun et al., 2017)

Motivational Interviewing in Practice

- **Instead of:** "You need to take your medications every day or you'll end up back in the hospital."
- **Try:** "Tell me about your experience with your medications. What are some benefits you've noticed? What concerns do you have?"
- **Instead of:** "If you don't like the side effects, we can try a different medication."
- **Try:** "It sounds like the side effects are really bothering you. How are they affecting your daily life? What would you like to be different?"
- *(Laranjeira & Querido, 2022)*

Addressing Common Adherence Challenges

- **Challenge: "I feel better, so I don't need medications anymore"**

Response: Validate feeling better, explore what "better" means, discuss maintenance treatment, use analogy of chronic medical conditions

- **Challenge: "The side effects are worse than my symptoms"**

Response: Validate distress from side effects, assess impact on functioning, collaborate on solutions (Issac et al., 2025)

- **Challenge: "I don't think I really have a mental illness"**

Response: Accept lack of insight without confrontation, focus on functional goals, discuss medications as tools rather than labels

- **Challenge: "I can't afford my medications"**

Response: Address immediately as a solvable problem, connect to financial assistance programs, explore generic options

Cultural Considerations in Adherence Counseling

- **Cultural Factors Affecting Adherence:**
  - Beliefs about mental illness and treatment
  - Stigma variations across cultures (Issac et al., 2025)
  - Family involvement expectations
  - Communication style preferences
  - Health literacy and language barriers
  - Religious or spiritual beliefs about medications
- **Culturally Responsive Approaches:**
  - Assess cultural beliefs without assumptions
  - Involve family according to cultural norms
  - Use professional interpreters when needed
  - Respect religious and spiritual perspectives
  - Adapt education materials for cultural relevance (Inwanna et al., 2022)

Documentation and Communication

- **Document:**
  - Adherence assessment findings
  - Identified barriers (Issac et al., 2025)
  - Patient and family education provided
  - Interventions implemented
  - Patient response
  - Plan for follow-up
- **Communicate:**
  - Share adherence concerns with treatment team
  - Coordinate with prescribers about adherence challenges
  - Involve care managers for complex situations
  - Ensure continuity across care settings

The Evidence Supporting This Approach

- **Strong Evidence:**
  - Face-to-face nursing interventions significantly improve adherence rates (Berardinelli et al., 2024)
  - Motivational approaches are most effective strategy (Zomahoun et al., 2017)
  - Therapeutic relationships predict adherence outcomes (Deng et al., 2022)
  - Comprehensive assessment addressing multiple domains is essential (Semahegn et al., 2020)
  - Family involvement strengthens interventions (Chow et al., 2024)
- **Implementation Results:**
  - Evidence-based nursing improved medication adherence from 19.7% to 40.0% (Wen et al., 2025)
  - Structured education programs improve nursing knowledge and confidence
  - Systematic approaches lead to sustained improvements (Loots et al., 2021)

Resources and Support

- **Available Resources:**
  - **Adherence assessment templates** - Based on four-domain framework (Semahegn et al., 2020)
  - **Patient education materials** - Evidence-based content
  - **Family education handouts** - Family involvement strategies (Chow et al., 2024)
  - **Motivational interviewing quick reference guide** - MI techniques
  - **List of medication financial assistance programs**
- **Key Resources with Links:**
  - WHO Global Strategic Directions for Nursing 2021-2025: https://www.who.int/publications/i/item/9789240033863
  - SAMHSA Medication-Assisted Treatment Resources: https://www.samhsa.gov/medication-assisted-treatment
  - National Alliance on Mental Illness (NAMI) Education Programs: https://www.nami.org/support-education
- **Ongoing Support:**
  - Monthly case discussions on complex adherence situations
  - Peer consultation opportunities
  - Refresher training sessions
  - Clinical supervision for challenging case

Summary and Key Takeaways

- **Key Points:**
  - Psychiatric medication non-adherence affects 49% of patients (Semahegn et al., 2020)
  - Comprehensive assessment addresses individual, social, clinical, and system factors
  - Five key strategies provide a framework for adherence support (Lin et al., 2022)
  - Motivational interviewing is the most effective approach (Berardinelli et al., 2024)
  - Therapeutic relationships form the foundation for all interventions (Deng et al., 2022)
  - Family involvement strengthens outcomes (Chow et al., 2024)
  - Evidence supports the effectiveness of structured nursing education (Wen et al., 2025)
- **Your Role:** Nurses are essential in supporting psychiatric medication adherence through systematic assessment, patient education, motivational counseling, and resource coordination.

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Appendix C
Pre-Test and Post-Test Knowledge Assessment

Pre/Post-Test
Psychiatric Medication Adherence Assessment and Counseling Educational Intervention

Thank you for agreeing to participate in this educational intervention on psychiatric medication adherence assessment and counseling. Please create a unique ID that is only known to you. You will not be asked to share this ID with anyone, nor should you share your ID with anyone. The ID will only be used to match your pretest with your posttest. Please do not provide any additional information outside of the questions being asked. All information collected is anonymous and will be reported in the aggregate.

Unique ID: _____

Date: _____

PART A: KNOWLEDGE ASSESSMENT

Instructions: Please answer the following questions to the best of your ability by selecting the most appropriate answer.

1. According to recent meta-analysis, what percentage of patients with psychiatric conditions demonstrate medication non-adherence? a. 25% b. 35% c. 49% d. 65% e. I am not sure
2. Which of the following represents the comprehensive four-domain framework for assessing psychiatric medication adherence? a. Physical, mental, emotional, and spiritual factors b. Individual behaviors, social support, clinical factors, and health system factors c. Cognitive, behavioral, affective, and environmental factors d. Patient, provider, medication, and system factors e. I am not sure
3. What is the primary purpose of motivational interviewing in psychiatric medication adherence counseling? a. To persuade patients to comply with their medication regimen b. To document patient refusal of treatment for legal purposes c. To strengthen a person's motivation and commitment to change through collaborative conversation d. To educate patients about medication side effects only e. I am not sure
4. Which barrier to medication adherence is uniquely significant in psychiatric populations? a. Difficulty swallowing pills b. Lack of insight related to mental health condition (anosognosia) c. Cost of medications d. Transportation to pharmacy e. I am not sure
5. According to experienced mental health nurses, what is the FIRST key strategy for supporting medication adherence? a. Providing patient education b. Building supportive resources c. Establishing therapeutic relationships d. Conducting comprehensive assessment e. I am not sure
6. True or False: Psychoeducational interventions without accompanying behavioral components are effective in improving medication adherence in psychiatric populations. a. True b. False c. I am not sure
7. Which counseling approach has been identified as the MOST effective strategy for improving medication adherence in psychiatric populations? a. Directive

advice-giving b. Written instructions only c. Motivational approaches with face-to-face interventions d. Group education sessions without individual follow-up e. I am not sure

8. What medication adherence rate was achieved in the observation group receiving evidence-based nursing interventions in recent research? a. 19.7% b. 25.0% c. 30.0% d. 40.0% e. I am not sure
9. Which of the following is NOT one of the four core principles of motivational interviewing? a. Express empathy b. Develop discrepancy c. Provide direct advice d. Support self-efficacy e. I am not sure
10. What role does family involvement play in psychiatric medication adherence interventions? a. Family involvement should be avoided to protect patient privacy b. Family involvement has no impact on adherence outcomes c. Family involvement strengthens interventions and improves patient outcomes d. Only immediate family members should be involved e. I am not sure
11. According to research, what percentage of medication adherence is considered the cut-off for defining non-adherence? a. Less than 60% of prescribed doses b. Less than 70% of prescribed doses c. Less than 80% of prescribed doses d. Less than 90% of prescribed doses e. I am not sure
12. True or False: Telephonic follow-up interventions have been shown to be effective for improving medication adherence through emotional support and side effect management. a. True b. False c. I am not sure
13. When a patient expresses lack of insight about having a mental illness, what is the most appropriate nursing response? a. Argue with the patient about their diagnosis b. Document non-compliance and discontinue counseling c. Accept lack of insight without confrontation and focus on functional goals d. Refuse to discuss medications until patient accepts diagnosis e. I am not sure
14. Which of the following barriers to medication adherence is related to health system factors? a. Cognitive symptoms affecting memory b. Stigma associated with mental illness c. Side effects causing weight gain d. Fragmented care coordination and limited access to services e. I am not sure
15. According to the five key nursing strategies, what should be done AFTER establishing a therapeutic relationship? a. Provide immediate education b. Build supportive resources c. Conduct comprehensive assessment d. Give feedback on medication use e. I am not sure
16. What is the recommended approach when a patient reports distressing side effects from psychiatric medications? a. Minimize their concerns and emphasize medication importance b. Immediately tell them to stop the medication c. Validate their concerns, assess the impact, and collaborate on solutions d. Document the concerns without taking further action e. I am not sure
17. Cultural considerations in adherence counseling include all of the following EXCEPT: a. Beliefs about mental illness vary across cultures b. All cultures view mental illness the same way c. Stigma variations exist across different cultures d. Family involvement expectations differ by culture e. I am not sure
18. Which intervention component has been shown in systematic reviews to improve medication adherence when combined with psychoeducation? a. Psychoeducation

alone is sufficient b. Behavioral components and supportive services c. Written materials only d. Medication reminders only e. I am not sure

19. What is the primary focus when providing feedback to patients about their medication adherence? a. Criticizing non-adherent behavior b. Connecting medication adherence to symptom patterns and observable improvements c. Threatening consequences of non-adherence d. Comparing patients to others who are more adherent e. I am not sure
20. According to evidence-based practice, therapeutic relationships in psychiatric medication adherence: a. Are less important than medication education b. Should be formal and maintain professional distance c. Predict adherence outcomes and enable honest disclosure d. Are only necessary for severely ill patients e. I am not sure

Appendix D

Confidence Rating Scale and Competency Self-Assessment Scale

CONFIDENCE RATING SCALE

Instructions: Please rate your current level of confidence in performing each of the following activities related to psychiatric medication adherence assessment and counseling. Use the scale below:

1 = Not at all confident
2 = Slightly confident
3 = Moderately confident
4 = Very confident
5 = Extremely confident

Activity	**Confidence Rating (Circle one)**
1. Conducting a comprehensive assessment of psychiatric medication adherence using the four-domain framework (individual behaviors, social support, clinical factors, health system factors)	1 2 3 4 5
2. Identifying barriers to medication adherence that are unique to psychiatric populations (e.g., lack of insight, cognitive symptoms, stigma)	1 2 3 4 5
3. Establishing therapeutic relationships with patients who have psychiatric conditions to facilitate discussions about medication adherence	1 2 3 4 5
4. Using motivational interviewing techniques to address patient ambivalence about taking psychiatric medications	1 2 3 4 5
5. Applying open-ended questions and reflective listening when discussing medication adherence with psychiatric patients	1 2 3 4 5
6. Validating patient concerns about medication side effects without being judgmental	1 2 3 4 5
7. Providing psychoeducation to patients about their psychiatric medications (purpose, effects, side effects, importance of adherence)	1 2 3 4 5
8. Involving family members appropriately in medication adherence education and support	1 2 3 4 5
9. Providing feedback to patients that connects medication adherence to their symptom patterns and improvements	1 2 3 4 5
10. Identifying and mobilizing supportive resources (medication reminders, telephonic follow-up, care coordination) to improve adherence	1 2 3 4 5
11. Addressing lack of insight in patients who do not recognize they have a mental illness requiring treatment	1 2 3 4 5
12. Collaborating with patients to develop solutions when they report distressing medication side effects	1 2 3 4 5

13. Assessing cultural factors that may influence a patient's beliefs about psychiatric medications and treatment	1 2 3 4 5
14. Documenting comprehensive adherence assessments including identified barriers, interventions, and patient responses	1 2 3 4 5
15. Communicating medication adherence concerns effectively with the interdisciplinary treatment team	1 2 3 4 5

Total Confidence Score: _____ / 75

COMPETENCY SELF-ASSESSMENT SCALE

Instructions: Please rate your current level of competency in performing each of the following mental health-specific counseling skills. Use the scale below:

1 = Not competent (I cannot perform this skill)
2 = Minimally competent (I can perform this skill with significant assistance)
3 = Moderately competent (I can perform this skill with some assistance)
4 = Competent (I can perform this skill independently)
5 = Highly competent (I can perform this skill independently and teach others)

Counseling Skill	**Competency Rating (Circle one)**
1. Applying the five key nursing strategies for medication adherence (establishing relationships, assessment, education, feedback, building resources) in a systematic sequence	1 2 3 4 5
2. Using the core principles of motivational interviewing (express empathy, develop discrepancy, roll with resistance, support self-efficacy)	1 2 3 4 5
3. Exploring patient ambivalence about psychiatric medications without arguing or being confrontational	1 2 3 4 5
4. Eliciting the patient's own reasons for taking medications rather than imposing external motivations	1 2 3 4 5
5. Shifting from directive advice-giving to collaborative exploration when discussing medication concerns	1 2 3 4 5
6. Conducting a comprehensive adherence assessment that addresses all four domains (individual, social, clinical, system)	1 2 3 4 5
7. Identifying specific modifiable barriers to adherence and developing targeted interventions	1 2 3 4 5
8. Delivering psychoeducation that addresses medication purpose, timeline for effects, side effects, and importance of consistency	1 2 3 4 5
9. Teaching family members to support medication adherence without controlling or creating conflict	1 2 3 4 5
10. Providing specific, concrete feedback that helps patients recognize connections between adherence and outcomes	1 2 3 4 5
11. Responding therapeutically when patients express lack of insight about having a mental illness	1 2 3 4 5
12. Addressing the common adherence challenge: "I feel better so I don't need medications anymore"	1 2 3 4 5

13. Addressing the common adherence challenge: "The side effects are worse than my symptoms"	1 2 3 4 5
14. Adapting adherence counseling approaches to respect cultural beliefs and preferences	1 2 3 4 5
15. Building a comprehensive support system for patients including individual, social, and system-level resources	1 2 3 4 5

Total Competency Score: _____ / 75

Appendix E

Education Program Evaluation Form

Education Program Evaluation Form

Psychiatric Medication Adherence Educational Program Evaluation

Please take a few minutes to provide feedback on today's educational program. Your responses are anonymous and will help improve future educational offerings.

1. Overall, how would you rate the quality of this educational program?

☐ Excellent
☐ Very Good
☐ Good
☐ Fair
☐ Poor

2. How relevant was the content to your clinical practice?

☐ Extremely relevant
☐ Very relevant
☐ Moderately relevant
☐ Slightly relevant
☐ Not at all relevant

3. As a result of this program, do you intend to change your practice behaviors related to psychiatric medication adherence counseling?

☐ Yes, definitely
☐ Yes, probably
☐ Undecided
☐ Probably not
☐ Definitely not

4. What did you find MOST valuable about this educational program?

_____
_____

5. What suggestions do you have for improving this educational program?

_____
_____

Thank you for your participation and feedback!