

The Effectiveness of Targeted Education on Improving Nurses’ Self-Efficacy in Caring for Psychiatric Patients on Medical Surgical Units

Rachel Shirey MSN John Chovan, PhD, DNP Joy Shoemaker, DNP Chai Sribanditmongkol PhD

Otterbein University, Westerville, Ohio

Introduction

- **Purpose:** Improve care for psychiatric patients on medical-surgical units
- **Aim:** Improve clinical practice and self-efficacy among nurses providing care for psychiatric patients on medical-surgical units
- An organizational assessment was conducted on a medical-surgical unit to determine management and staff’s perception of psychiatric care on the unit.
- Five major areas of concern were noted including: medication administration, suicidal patients, identifying behaviors, how to approach a situation that requires immediate action, and identifying different mental illnesses.

Significance

- **Mental illness:** Any mental, emotional or behavioral disorder (U.S. Department of Health and Human Services [HHS], n.d.)
- **Self-efficacy:** One’s belief in one’s ability to complete a task (Bandura, 1977).
- Factors influencing self-efficacy in nursing (Avery et al., 2020)
 - Level of preparedness
 - Education
 - Mentoring
 - Frequency of exposure
- Psychiatric patients may be hospitalized in non-psychiatric facilities.
- Patients with mental illness account for approximately 4% of patients on adult medical-surgical units (Foye et al., 2020).
- Patients require increased complexity of care including:
 - Closer observation
 - Additional medications
 - More interventions
- Non-psychiatric nurses report a lack of knowledge and self-efficacy regarding caring for patients with mental illness due to insufficient education and training (Blair et al., 2018).
- Patients with mental illness on medical-surgical units are more susceptible to adverse outcomes and are less likely to receive evidence-based treatment (Reeves et al., 2018).

Results

Pre-Intervention Self-Assessment

	Valid	Mode	Median	Mean	Std. Deviation	Variance	Minimum	Maximum
Participant 1	16	8.000	8.000	8.000	1.633	2.667	4.000	10.000
Participant 2	16	8.000	8.500	8.500	1.317	1.733	5.000	10.000
Participant 3	16	9.000	9.000	8.750	1.238	1.533	5.000	10.000

Post-Intervention Self-Assessment

	Valid	Mode	Median	Mean	Std. Deviation	Variance	Minimum	Maximum
Participant 1	16	9.000	9.000	9.125	0.885	0.783	7.000	10.000
Participant 2	16	4.000	5.500	6.000	1.992	3.733	4.000	9.000
Participant 3	16	9.000	9.000	8.500	1.211	1.467	5.000	10.000

Quiz Scores

Participant	Pre-Education	Post-Education
1	17	17
2	20	22
3	16	18

Demographics

Variable	Value (N = 3)
Age n (%)	
25-34	1 (33)
35-49	2 (67)
Race n (%)	
White	2 (67)
Asian	1 (33)
Gender n (%)	
Female	3 (100)
Male	0 (0)
Primary Shift n (%)	
Days	3 (100)
Nights	0 (0)
Length of time as a nurse, mean (SD), y	6.3 (2.31)
Length of time on the unit, mean (SD), y	4.17 (2.36)

Note: N – participants; SD – standard deviation; y – years

Data Analysis

Quiz

- The mean quiz score increased by 1 point (4%) following the educational session.

Post Intervention Self-Assessment Compared to the Pre-Intervention Self-Assessment

Participant 1

- The minimum score increased by 3.000 while the maximum score remained the same.
- The mean score increased by 1.125.
- The standard deviation decreased by 0.748.
- The median score increased by 1.000.

Participant 2

- The minimum and maximum scores decreased by 1.000.
- The mean score decreased by 2.500.
- The standard deviation increased by 0.615.
- The median score decreased by 3.000.

Participant 3

- The minimum and maximum scores remained the same.
- The mean score decreased by 0.250.
- The standard deviation decreased by 0.027.
- The median score remained the same.

Demographics

- All participants were females and work primarily dayshift.
- The mean number of years worked as a nurse is 6.3 years.
- The mean number of years working on the unit is 4.17
- 33% were between the ages of 25-34
- 67% were between the ages of 35-49
- 33% of participants identified as Asian
- 67% of participants identified as White

Problem Statement

Acute care nurses perceive their ability to care for psychiatric patients to be less than their ability to care for medical patients.



Abstract

- **Introduction:** Psychiatric patients on medical-surgical units require complex care and may be more challenging to care for than medical patients.
- **Methods:** A quasi-experimental design with a single-group, pre-post method, and a convenience sample of 3 nurses employed on a medical-surgical unit located in a suburban hospital was utilized.
- **Implications for Practice:** Improving nurses’ self-efficacy may lead to improved quality of care and improved patient outcomes.
- **Results:** The self-assessment scores were inconclusive. The posttest score average was higher than the pre-test score average.
- **Recommendations:** Clearer instructions and greater advertisement are recommended.

Design

- **Theoretical Framework:** Albert Bandura’s Theory of Self-Efficacy
- **Conceptual Framework:** Plan Do Study Act model for quality improvement
- Quality improvement project
- Quasi-experimental design
- Single group
- Pre-test – posttest method
- Convenience sample

Methodology

- Voluntary participation with informed consent
- **Instruments:** Nursing Care Self-Efficacy Scale (NCSES) and a 25-question quiz on 5 categories - Medication administration, Identifying behaviors, Acute events, Suicide, Diagnosis
- **Data Collection:** demographics obtained through education session survey, pre- and post-intervention NCSES and quiz

Intervention

Educational Presentation

- Medication administration, identifying behaviors, acute events, suicide, and diagnosis
- PowerPoint presentation and video clips
- Time at the end for Q&A
- Estimated time: 1-2 hours

Simulation

- Live actor simulation of a potential patient situation
- Medication administration, identifying behaviors, acute events, suicide, and diagnosis
- Debriefing at the end
- Estimated time: 1 hour

Objectives & Outcomes

1. Determine the self-efficacy of nurses on medical-surgical units regarding acute inpatient psychiatric care.
 - a. Outcome: Self-efficacy of nurses on medical-surgical units regarding acute inpatient psychiatric care was determined using a pre-and post-intervention quiz and assessment.
2. Use evidence-based practice guidelines to provide education on mental illness and psychopharmacology via an educational presentation and simulated situation.
 - a. Outcome: An educational session was developed using evidence-based guidelines to provide education on mental illness and psychopharmacology.
3. Compare the pre- and post- implementation findings after six weeks using the Nursing Care Self-Efficacy Scale (NCSES) and a quiz to test the nurses’ actual knowledge.
 - a. Outcome: On average, posttest quiz scores were greater than pre-test scores, and NCSES scores were inconclusive.
4. Using a SWOT analysis format, provide project conclusions, identified barriers, and recommendations for continuation to the participants, key stakeholders, and leaders.
 - a. Outcome: Conclusions and recommendations were made based on the results of the pre-and post-intervention quizzes and self-assessments. This information and identified barriers can be found below.

Conclusions

- The data is limited due to the small sample size
- The posttest scores indicate some increase in knowledge following the educational sessions
- With a larger and more diverse participant population, more conclusive data on the effectiveness of the targeted education may be attainable.
- Data from the self-efficacy assessment is unreliable and inconclusive due to the nurses admitting to not realizing that the focus of the self-assessment was on caring for psychiatric patients in the medical setting.

Recommendations

- Increased support from hospital leadership, more extensive advertisement, and improved compensation, such as being paid hourly, may improve participation in future studies.
- Explain the expectations of the assignments in greater detail and bolding keywords in the self-assessment instructions.
- To improve nurses’ knowledge and self-efficacy in caring for psychiatric patients on medical-surgical units, the project leader recommends incorporating psychiatric education into annual education.

References

