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Fall Prevention in an Acute Inpatient Crisis Stabilization Unit

Kerenge Ayuk Ako-Ebot
Walden University

Walden University

College of Nursing

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Kerenge Ayuk Ako-Ebot

has been found to be complete and satisfactory in all respects,

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Review Committee

Dr. Corinne Romano, Committee Chairperson, Nursing Faculty

Dr. Caroline Combs, Committee Member, Nursing Faculty

Chief Academic Officer and Provost

Sue Subocz, Ph.D.

Walden University

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Executive Summary: Staff Education Project

Fall Prevention in an Acute Inpatient Crisis Stabilization Unit

by

Kerenge Ayuk Ako-Ebot

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Summary

The type of project was a staff education designed to increase staff knowledge through the implementation of an evidence-based fall prevention program tailored to an acute inpatient crisis stabilization unit. The practice problem was a lack of standardization in fall prevention. The project question was the following: Does staff education on fall prevention measures increase staff knowledge in an acute crisis stabilization unit? A total of 22 health care professionals, including registered nurses, certified nursing assistants, mental health technicians, and physical and occupational therapists, participated in the educational presentation. Pretest and posttest data showed a significant improvement in staff knowledge and attitude regarding fall prevention; descriptive statistics were used to analyze the findings. The mean pretest score was 32.29%, which increased to 95.45% in the posttest. This strongly supports the effectiveness of the intervention. Key recommendations include expanding the program to other units and tracking long-term effectiveness. The project has important implications for nursing practice, demonstrating the value of structured education and tailored intervention. The project also promotes positive social change by fostering inclusivity and improving care quality, aligning with broader goals of diversity, equity, and inclusion.

Background

Falls in inpatient mental health acute crisis stabilization units represent a significant concern due to the unique combination of cognitive impairments, medication side effects, and environmental hazards. Despite the presence of existing fall prevention protocols, these incidents remained prevalent, indicating a critical practice gap in addressing specific risk factors in psychiatric patients in the local setting. The reason for the gap was a lack of a standardized approach to fall prevention. Traditional fall prevention measures often fail to account for nontraditional risks such as polypharmacy, reduced mobility, and unpredictable behaviors, particularly in psychiatric patients. The current fall prevention strategies did not adequately address these unique risks, necessitating a change in practice to tailor fall prevention for this patient population. The project question was the following: Does staff education on fall prevention measures increase staff knowledge in an acute crisis stabilization unit? The purpose of the project was staff education aimed at fall reduction in a crisis stabilization unit.

The evidence supporting the change was found in a literature search using search engines such as PubMed, PsycINFO, CINAHL Cochrane Library, Scopus, and Google Scholar that yielded 11 articles: one Level I article, two Level II articles, four Level III articles, one Level IV article, and three Level V articles. Xu et al. (2024) demonstrated the effectiveness of process management programs in reducing falls in hospitalized neuropsychiatric patients by addressing modifiable risk factors. Maloney et al. (2022) found that staff education on the effects of medications and their role in fall prevention significantly reduced fall rates in older psychiatric patients. Transformational leadership models (e.g., Ystaas et al., 2023) emphasized the importance of inspiring staff through

education and alignment with organizational goals to implement changes effectively. The Heater Davis fall assessment tool has been proven to identify patients at high risk for falls, ensuring timely interventions tailored to individual needs (Jones et al., 2022).

Staff education was developed utilizing the analyze, design, develop, implement, and evaluate model as an evidence-based framework (University of Washington, Bothell., n.d.). The pre- and posttests were developed to measure the effects of the education on staff knowledge. Descriptive statistics were used to analyze the change from pretest to posttest scores. In all questions, improvement was noted from pre- to posttest scores.

Staff Education Project Development

The project involved 22 health care professionals including registered nurses, certified nursing assistants, mental health technicians, and physical and occupational therapists. All participants were directly involved in patient care in psychiatric inpatient settings. The procedure used for the staff education project involved a pre- and posttest. A live 50-minute education presentation on fall prevention was presented to staff who provide direct patient care in an acute inpatient stabilization unit. Two sessions of live education were conducted during shift changes for the day and night shifts and the second one for the evening shift. To enhance engagement, the modules incorporated case studies providing practical tools for staff to apply in real-world scenarios. Pre- and posttest data were collected in an envelope to maintain confidentiality. The evaluation conducted after the training was a posttest with the same questions as the pretest, aimed at improving staff knowledge by 80% or more, administered to evaluate the impact of the educational initiative. The implementation of this structured staff education project significantly enhanced staff knowledge and confidence in fall prevention practices to promote overall

patient safety and care quality. Feedback from participants was used to refine the modules and training sessions further, ensuring their continued relevance and effectiveness.

Results

Table 1 shows the statistical results and reveals a significant improvement in scores from pretest to posttest, highlighting the effectiveness of the intervention. The mean pretest score was 32.29, which increased to 95.45 in the posttest, demonstrating a clear enhancement in staff knowledge on fall prevention. Additionally, the standard deviation (*SD*) of pre/post test scores was 5.75, suggesting more variability in how participants improved after the intervention. The mean score increased significantly from 32.29 to 95.45, showing an absolute mean difference. This improvement is substantial compared to the *SD* (5.75) because the increase is approximately 11 times the *SD*, suggesting a strong effect of the intervention. The relatively smaller coefficient of variation for the posttest scores (6.02%) suggests that the posttest performance was more consistent across participants. The large difference in mean relative to the *SD* indicates a meaningful improvement in scores due to the intervention. The *t* statistic of 51.54, coupled with the *p* value of 1.35 x 10-23 (essential 0), and the extremely high *t* statistic and near-zero *p* value indicate a statistically significant difference between the pretest and posttest scores. This strongly supports the effectiveness of the educational intervention. The postimplementation results demonstrate a notable improvement in individuals, reflecting the effectiveness of the intervention, which is shown in Table 2.

Table 1

Results of Statistical Analysis

Statistic	Value

t	51.54
p	0
M prestest scores	32.29
M posttest scores	95.45
SD pre/posttest	5.75

Table 2

Postimplementation Results

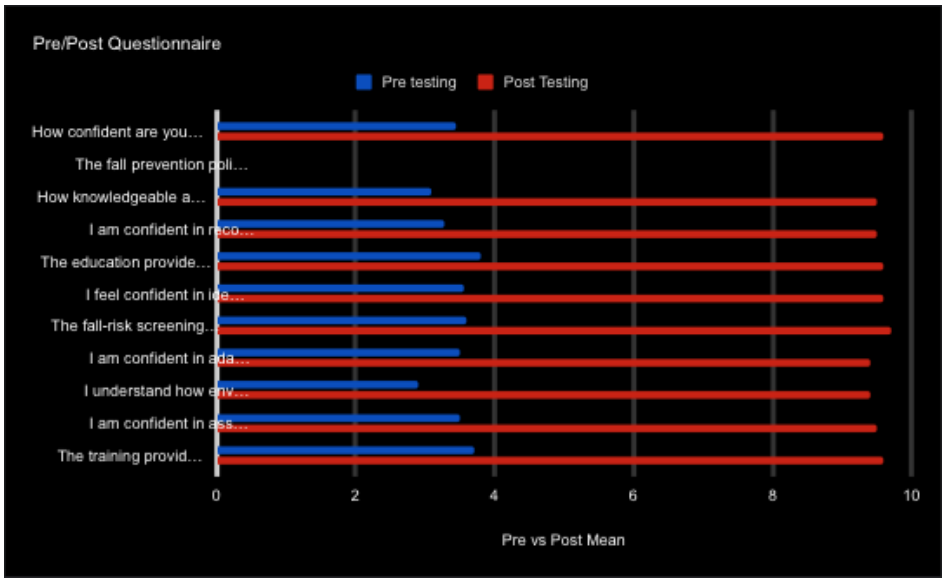
Pre/posttest item	Pretest *M*	Posttest *M*
1. How confident are you in your ability to follow a structured fall prevention process tailored to the needs of a mental health stabilization unit?	3.45	9.6
2. The fall prevention policies currently in place are effective in reducing falls in the mental health setting.	Pilot	Pilot
3. How knowledgeable are you about the relationship between psychiatric medications and fall risks in patients?	3.09	9.5
4. I am confident in recognizing and managing fall risks associated with patients on psychiatric medications.	3.27	9.5
5. The education provided has enhanced my understanding of medication-induced fall risks and how to mitigate them.	3.81	9.6
6. I feel confident in identifying fall risks in patients who are not traditionally categorized as high-risk, such as younger or ambulatory psychiatric patients.	3.55	9.6
7. The fall-risk screening tools used in this unit are effective in identifying non-traditional high-risk patients.	3.6	9.7
8. I am confident in adapting fall prevention strategies to meet the unique needs of diverse psychiatric patients.	3.5	9.4
9. I understand how environmental factors, such as clutter, lighting, and furniture placement, contribute to fall risks in this unit.	2.9	9.4
10. I am confident in assessing how staffing levels and shift assignments impact the implementation of fall prevention strategies.	3.5	9.5
11. The training provided has improved my knowledge of environmental and staffing considerations in fall prevention.	3.7	9.6

The reduced variability in scores (see Figure 1) suggests that the intervention not only enhanced outcomes but also promoted uniformity across participants, which may translate into higher efficiency and reliability for the organization. This improvement

may foster increased confidence among participants, contributing to a positive ripple effect within the organization. Despite these successes, the project had certain limitations, such as constraints in sample size, participant diversity, and available resources. These limitations could affect the generalizability of the results or the scalability of the intervention. Sample size may limit the generalizability of the findings, and resource constraints could restrict the full potential of the intervention.

Figure 1

Graphical Representation of Pre- and Posttests of Fall Prevention in an Inpatient Acute Mental Health Stabilization Unit



The significance of this project extends beyond the local site. By providing a model of effective intervention to enhance performance and consistency, the findings offer valuable insights for similar applications in other contexts. The results may contribute to broader knowledge and practices, demonstrating how innovative approaches

can address performance challenges effectively. This project underscores its potential to influence organizational strategies and improve outcomes on a larger, even global, scale.

Conclusions

This project may impact the organization by improving individual performance and fostering greater consistency in the application of fall prevention practices. The increased efficiency and reliability may contribute to enhanced organizational knowledge and credibility while boosting participant confidence. This positive shift may create a foundation for sustained growth and operational success. Recommendations include expanding the intervention to larger and more diverse populations to strengthen generalizability of results, implementing follow-up assessments to track long-term effectiveness, and incorporating additional resources to address potential limitations. Enhancing training and support mechanisms for participants may amplify the intervention's impact.

Implications for nursing practice include the importance of structured interventions to improve outcome and consistency in care delivery. The findings support evidence-based practices that enhance professional competency and patient care quality. In terms of positive social change, the project may be used to create equitable opportunities for skill development and performance improvement across shifts. The project underscores the value of inclusivity by promoting interventions that benefit diverse groups, fostering equity in access to resources and outcomes. These efforts align with broader goals of diversity, equity, and inclusion, reinforcing the organization's commitment to fostering a supportive and fair environment.

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