

11-12-2025

Staff Education on Fall Prevention in the Emergency Department

Linda Odoh
Walden University

Follow this and additional works at: <https://scholarworks.waldenu.edu/dissertations>



Part of the [Nursing Commons](#)

This Dissertation is brought to you for free and open access by the Walden Dissertations and Doctoral Studies Collection at ScholarWorks. It has been accepted for inclusion in Walden Dissertations and Doctoral Studies by an authorized administrator of ScholarWorks. For more information, please contact ScholarWorks@waldenu.edu.

Walden University

College of Nursing

This is to certify that the doctoral study by

Linda C. Odoh

has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

Review Committee

Dr. Julibeth Lauren, Committee Chairperson, Nursing Faculty

Chief Academic Officer and Provost
Sue Subocz, Ph.D.

Walden University
2025

Executive Summary: Staff Education Project
Staff Education on Fall Prevention in the Emergency Department
by
Linda C. Odoh

MS, Walden University, 2024

BS, Bloomfield College, 2006

Executive Summary Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Nursing Practice

Walden University

November 2025

Summary

This DNP staff education project was an initiative focused on improving fall-related knowledge among faculty members. The practice problem identified at the local project site was the frequent rate of patient falls. Analysis established the role of staff in the inefficient implementation of best practices and to the staff's limited knowledge regarding the application of existing fall prevention strategies.

The practice-focused question for this project was, In the emergency department setting, how does a fall prevention education program compared to pre-implementation practices, affect staff knowledge of fall prevention strategies within three months? The purpose of the project was to improve staff knowledge of fall risk factors and prevention strategies via education. Evidence from personal communications with the unit manager and colleagues highlighted the gap between knowledge and application of fall prevention strategies. This evidence facilitated the implementation of a staff education initiative.

Results indicated improvements in staff knowledge of fall prevention strategies and risk factors, as was evidenced using a pre- and post-knowledge assessment. The implications to the staff and organization included the need for regular training towards the improvement of strategies focused on fall management. The conclusion of this project is that education can improve outcomes by improving faculty knowledge and implementation of best practices. The future recommendation is that training should be distributed online to accommodate faculty members with inflexible schedules. Potential implications of this project on nursing practice entail improved patient outcomes, staff competence, and job satisfaction. This project has the potential to positively impact social change as this knowledge attained can be applied in other units within the facility.

Background

This is a staff education project aimed at training staff members on strategies to reduce falls in the emergency department (ED) unit. Patient falls are a cause of concern in healthcare facilities. Patients can have minor injuries such as lacerations, sprains, strains, and contusions or major injuries such as fractures and head injuries. Falls can also lead to anxiety and fear. Some falls are fatal (Morris et al., 2022). Other consequences of falls include depression, mobility challenges, loss of independence, and increased economic burden on the healthcare system (Odasso et al., 2021).

The gap in practice at the DNP site was a frequent rate of patient falls, which resulted from inadequate knowledge and implementation of practices from the staff and this staff education project aims at addressing this gap. Most of the staff members demonstrated inconsistent use of existing fall prevention strategies. This indicated a need for a change, as it affected the patient outcomes and performance of the unit. Fall prevention is a multi-factorial approach that requires assessing and changing the processes, systems, and individuals (Shankar et al., 2020). The Centers for Disease Control and Prevention (CDC) developed the Coordinated Care Plan to Prevent Older Adult Falls. The project is a framework that providers, practices, and systems can use to manage patient fall risk. It provides practical suggestions that can be implemented within the organization to determine its readiness to address falls. This includes training of staff on diverse issues such as the importance of fall prevention, changes to the workflow, screening patients for fall risk, performing assessments, using the electronic health record fall prevention tools, and providing refresher-training sessions at regular intervals (CDC, 2021).

The practice-focused question for this project was: In the emergency department setting, how does a fall prevention education program compared to pre-implementation practices, affect staff knowledge of fall prevention strategies within three months? The aim of the project is to improve staff knowledge of fall risk factors and prevention strategies through education, to improve fall prevention behaviors, to promote compliance with prevention bundles. The main goal was to ensure that all the staff members at the unit received training aimed at ensuring they implemented measures that would lead to a reduction in the number of falls. This would constitute behavior change, a willingness to learn, and efforts in collaborating with others to enact these changes.

The evidence that supported this project was from personal communication with the unit manager and other colleagues at the unit who highlighted the problem and discussions with colleagues. The manager indicated a need to find a solution to the problem. Other colleagues at the unit noted that a gap exists in applying the strategies they knew could help in reducing fall rate and that they were not consistent in practice.

The literature indicates the mortality rate for falls in adults aged 65 and older is increasing. The high rate of injuries and mortality related to falls has led to a rise in medical costs as they contribute to \$50 billion in medical costs each year as reported by Goldberg et al. (2020). EDs report about three million annual visits related to patient falls among the geriatric population (Goldberg et al., 2020). Morris et al. (2020) add that about 30% of falls in hospitals lead to injuries.

Research also indicates that falls can be prevented with evidence-based patient and staff education (Odasso et al., 2021). Effective strategies for reducing falls involve the use of multidisciplinary interventions from different professionals. Training and

education is part of the continuous professional development of the practitioners, and it is linked to change in behavior and improved knowledge and skills (Albasha et al., 2024). In addition, research has shown the importance of including knowledge and practice of fall prevention strategies in performance reviews and of providing feedback to staff as part of effective fall prevention strategies. Moreover, healthcare facilities should be willing to restructure resources to ensure effective implementation of the fall prevention strategies. This includes providing for expert consultations from specialists on fall prevention (Turner et al., 2022).

The evidence in the literature that supports this change in practice include publications that have consistently demonstrated the importance of training staff members as an effective strategy in reducing patient falls (Odasso et al., 2021; Schoberer et al., 2022). There is no single cause for patient falls and neither can the problem be solved using one approach. Staff training and education are effective in multifactorial interventions (Gulka et al., 2020; Shanker et al., 2020). Therefore, training staff is one of the effective approaches that should be considered in a fall prevention program. The articles mentioned the importance of providing regular training sessions at intervals. The sessions can be brief but meet the requirements of the training program. Researchers have highlighted the importance of ensuring that there is flexibility (Gulka et al., 2020; Montero-Odasso et al., 2021; Schoberer et al., 2022). This can be achieved by providing online and in person training, ensuring that the participating staff members have a choice.

Evidence for the project was obtained through a detailed search in several databases including PubMed, CINAHL, and MEDLINE using keywords and search terms. Sixteen peer-reviewed journal articles were reviewed for inclusion in this project.

Four articles were Level I, one article was Level II, eight articles were Level III, and three articles were Level V. The available quality and level of evidence was determined by using the John Hopkins Nursing Evidence Practice Tool and it indicates strong evidence to support this project.

Staff Education Project Development

The staff participants in the project included nurses and other staff at the ED. Initially, 30 participants from the ED started the project. The number of those who completed dropped to 25. Three of the participants were unit leaders and the remaining were staff members on the unit.

The procedure used to develop this project involved conducting thorough research to identify evidence-based practices that could be used for the project. This included publications containing different levels of evidence. Each publication selected had scientific credibility. The evidence it contained could be relied on and used within the clinical setting. The practice changes were feasible and could be applied within the organization without incurring many resources. I spoke with various colleagues, management, and the preceptor before starting the project. Their participation was necessary to confirm whether the problem I had identified was relevant to the unit and the organization. Discussions with these stakeholders confirmed the need for staff training.

I was responsible for developing the pre and post knowledge assessment and the training materials. The knowledge assessment tool was designed to capture any differences before and after undergoing the training project. The training materials included handouts which were given to the participants after the session. I prepared the PowerPoint presentation to be used for training. I worked with the preceptor and the

nurse unit manager, an advanced practice nurse specializing in emergency medicine. The emergency nurse practitioner provided clear direction in reviewing the content of the assessments. This nurse practitioner has experience in emergency medicine, has worked in other sectors of nursing, and was the subject matter expert for the project. The information included an identification of fall risk factors in the ED and the strategies that can be used to prevent or reduce falls. The staff education was in person. It was necessary to create more than one session to cater to the different staff schedules to optimize attendance. There were three sessions each lasting 45–60 minutes, and the participants selected the session that was most appropriate for them.

The process of collecting pre and post knowledge assessment data involved using a list of questions used for both the pre and post knowledge assessment (See Appendix A). Initially, 30 participants completed the pre knowledge assessment. Only 25 were able to complete the post-knowledge assessment. It was important to provide for anonymity and this was achieved by using a unique alphanumeric code. They were informed these assessments were confidential and to refrain from including any personal identifiers such as name or initials on the paper assessments. The assessments contained the code and the participants returned them using a physical drop box after the training session.

The data were evaluated through a comparative analysis of the pre and post knowledge assessment. There participants had answered a pre-knowledge assessment of five questions aimed at identifying what they knew about fall prevention strategies and the fall risk factors prior to the training. The post knowledge assessment was identical to the pre-knowledge assessment and was administered immediately following the training.

Results

The results of the pre and post knowledge assessment indicated improvement in staff knowledge on fall prevention strategies and risk factors. Thirty participants completed the pre knowledge assessment, whereas five did not participate in any of the education sessions, and therefore did not complete post-knowledge assessments. The number of staff who completed both the pre and post knowledge assessment was 25, which are included in this project. Based on the post knowledge assessment data (see Table 1 and Figure 1), there was a significant change indicating improvements in knowledge gained. Most participants demonstrated an interest in learning, and this was captured in the results of the post knowledge assessment.

Table 1

Comparative Analysis of Pre and Post Knowledge Assessment

Question	Pre-knowledge assessment (%)	Post-knowledge assessment (%)	Improvement comparison (%)
1	68	96	41
2	64	92	44
3	76	96	26
4	80	92	15
5	88	100	14
Average	75	95	20

There was notable change in the overall pre and post knowledge assessment scores from 75% to 95%, respectively, a difference of 20%. This demonstrates that the training was effective in improving the knowledge that the participants had.

Figure 1

Comparison of Pre- and Post-Knowledge Assessment Scores (%)

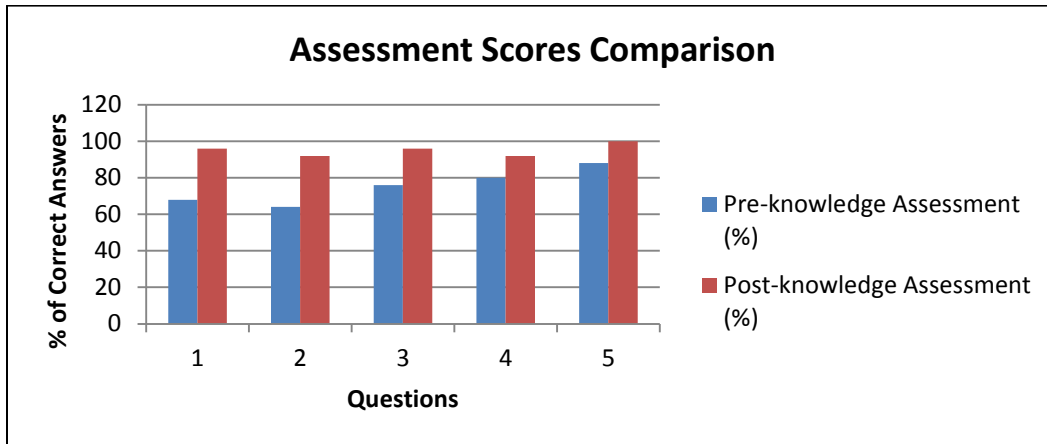
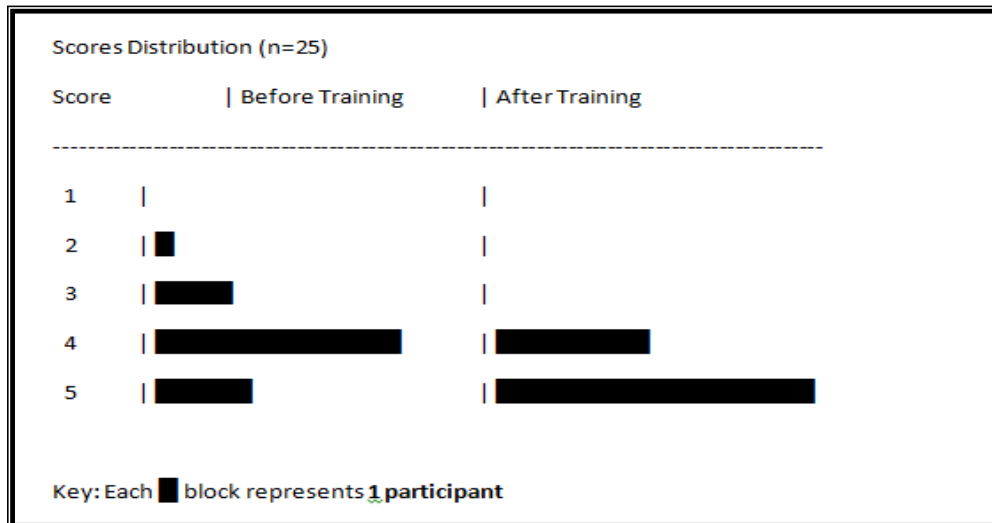


Figure 2 shows the distribution score chart, indicating knowledge before training versus after training.

Figure 2

Distribution Scores Chart — Knowledge Scores Before vs. After Training



Based on Figure 2, there was an increase in the number of higher scores of above 4, demonstrating changes in knowledge gained. Almost all participants improved by at least one point. This shows that the training had a positive impact in improving knowledge on the implementation of fall prevention interventions.

The impact of this project to the organization is the experience gained through implementation of a staff training project and improvement in knowledge and competence through staff training. The results indicated an improvement in knowledge of the fall risk factors and of the strategies that can be used to prevent falls based on participant feedback and response on post knowledge assessment. The project was influential in identifying a need for regular training among the staff members. There is need to ensure that staff members have the required training and knowledge of the practices established by the facility to manage patient falls.

The limitation of this project was that it only focused on the ED, the number of participants was few, and training was only delivered in person. Initially, there were plans to conduct virtual training as this would provide greater flexibility for the staff members who might not have been able to attend the training in person. During the course of the project, five participants had to drop out because of personal commitments. The training could benefit staff members in other departments. The project can be undertaken using a larger number of participants. The project has importance beyond the local project site as it can be applied in other departments/units and the lessons learned from its implementation can be applied using other training approaches.

Conclusions

The impact of this DNP project on the project site was the experience gained through conducting the training sessions, which identified the need to adjust the site to incorporate technology for online training. A future recommendation for the organization is to ensure that training is available virtually to accommodate the staff members who may have inflexible schedules. This will require working with the information and

technology department to develop an effective and suitable approach for online content and training. Research has demonstrated the importance of online training in improving knowledge and skills of the healthcare providers, enhancing engagement, and empowering them and giving them confidence from the knowledge gained (Ramsden et al., 2022). Therefore, online training should be considered. The organization should also consider ensuring that staff members from other departments get a chance to learn more about fall prevention.

The potential implications of this project for nursing practice include better patient outcomes since applying the knowledge gained can reduce falls, and this can prevent injuries. Moreover, staff members become more competent as they get training, and this increases their levels of confidence to work. There is greater job satisfaction if the staff members are given a chance to improve their skills and competencies. Research has demonstrated the positive impact of a professional identity development program in improving job satisfaction among nurses. It is a significant approach in improving intrinsic motivation among the staff members (Niskala et al., 2020). The real or potential impact of this project to effect positive social change concerns the knowledge gained in training, as it can be applied elsewhere. The project can be used as training for other staff in other departments.

References

- Albasha, N., Curtin, C., McCullagh, R., Comally, N., & Timmons, S. (2024). Staff perspectives on fall prevention activities in long-term care facilities for older residents: Brief but often staff education is key. *PLoS One*, *19*(9), Article e0310139. <https://doi.org/10.1371/journal.pone.0310139>
- Centers for Disease Control and Prevention. (2021). *Coordinated care plan to prevent older adult falls*. <https://www.cdc.gov/steady/pdf/Steady-Coordinated-Care-Plan.pdf>
- Goldberg, M. E., Marks, J. S., Resnik, J. L., Long, S., Mellott, H., & Merchant, R. C. (2020). Can an emergency department-initiated intervention prevent subsequent falls and health care use in older adults? A randomized controlled trial. *Annals of Emergency Medicine*, *76*(6), 739–750. <https://doi.org/10.1016/j.annemergmed.2020.07.025>
- Gulka, H. J., Patel, V., Arora, T., McArthur, C., & Iaboni, A. (2020). Efficacy and generalizability of falls prevention interventions in nursing homes: A systematic review and meta-analysis. *Journal of the American Medical Directors Association*, *21*(8), 1024–1035. <https://doi.org/10.1016/j.jamda.2019.11.012>
- Montero-Odasso, M. M., Kamkar, N., Pieruccini-Faria, F., Osman, A., Sarquis-Adamson, Y., Close, J., & Masud, T. (2021). Evaluation of clinical practice guidelines on fall prevention and management for older adults: A systematic review. *JAMA Network Open*, *4*(12), Article e2138911. <https://doi.org/10.1001/jamanetworkopen.2021.38911>

- Morris, E. M., Webster, K., Jones, C., Hill, A. M., Haines, T., McPhail, S., & Cameron, I. (2022). Interventions to reduce falls in hospitals: A systematic review and meta-analysis. *Age and Ageing*, 51(5). <https://doi.org/10.1093/ageing/afac077>
- Niskala, J., Kanste, O., Tomietto, M., Miettunen, J., Tuomikoski, A., Kyngas, H., & Mikkonen, K. (2020). Interventions to improve nurses' job satisfaction: A systematic review and meta-analysis. *Journal of Advanced Nursing*, 76(7), 1498–1508. <https://doi.org/10.1111/jan.14342>
- Ramsden, R., Colbran, R., Christopher, E., & Edwards M. (2022). The role of digital technology in providing education, training, continuing professional development and support to the rural health workforce. *Health Education*, 122(2), 126–149. <https://doi.org/10.1108/HE-11.2020.0109>
- Schoberer, D., Breimaier, H. E., Zuschnegg, J., Findling, T., Schaffer, S., & Archan, T. (2022). Fall prevention in hospitals and nursing homes: Clinical practice guideline. *Worldviews on Evidence-Based Nursing*, 19(2), 86–93. <https://doi.org/10.1111/wvn.12571>
- Shankar, K. N., Lin, F., Epino, H., Temin, E., & Liu, S. (2020). Emergency department falls: A longitudinal analysis of revisits and hospitalizations between patients who fall and patients who did not fall. *BMJ Open*, 10(12), Article e041054. <https://doi.org/10.1136/bmjopen-2020-041054>
- Turner, K., Staggs, S. V., Potter, C., Cramer, E., Shorr, R., & Mion, C. L. (2022). Fall prevention practices and implementation strategies: Examining consistency across hospital units. *Journal of Patient Safety*, 18(1), 236–242. <https://doi.org/10.1097/PTS.0000000000000758>

Appendix A: Pre- and Post-Knowledge Assessment

Identification Code:

Date:

Fall Prevention Knowledge Assessment

1. Which of the following statements is true?

- a. Falls have a multi-factorial etiology; therefore, fall prevention initiative should utilize multicomponent interventions.
- b. The risk of a patient falling in the emergency department will be reduced if non-slip socks are used.
- c. Falling is normal for all adults, including older ones.
- d. Fall risk assessment is solely associated with a reduced risk of falls in emergency department patients.

2. Which of the following is NOT a common fall risk factor for emergency department patients?

- a. Regular rounding.
- b. Mobility problems.
- c. Sedating medications.
- d. Cognitive impairment.

3. When should a fall risk assessment be completed?

- a. On patient arrival.
- b. Before discharge.
- c. Only if a fall occurs.
- d. During shift change.

- 4. Which is an example of a visual identifier for fall risk?**
- a. Patient chart.
 - b. Yellow wristband.
 - c. Blood pressure cuff.
 - d. Medication label.
- 5. How often should rounding be performed for patients at high risk of falls?**
- a. Every 1 to 2 hours.
 - b. Once per shift.
 - c. Upon request.
 - d. Every 5 hours.