

Type: EVIDENCE BASED PRACTICE

Subject: Issues of Nursing especially: Preventing/Reducing Falls

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School: Chamberlain University

Title: Evidenced-based Practice and Applied Nursing Research

Instructions: see word document attachments for instructions.

Important notes: hello, for this paper i just need all the questions/points answered or addressed. in the attachment i uploaded the whole instructions for this paper. i included some of the articles you might use as a resource, you may use other scholarly articles you might find as long as it's not more than 5 years old. i also added a word document sample paper (this is paper is from a friend of mine who previously took this course) you can use this paper as a guide to complete this paper. please let me know if you have additional questions. thank you

Evidenced-Based Practice and Applied Nursing Research

Student's Name

Institutional Affiliation

Course Number: Course Name

Instructor

Date Due

Falls Prevention among Older Adults in Acute Care Setting

Impact of the Clinical Practice on the Patients and the Organizations

Falls remain a considerable public health challenge despite being recognized globally. The rate of falls ranges from 3 to 11 falls per 1000bed days, with approximately 25% of hospital falls resulting in injuries, fear of falling, and soft-tissue injuries (Heng et al., 2020). de Jong et al.(2020) also state that about 23% to 42% of fall cases cause physical harm like head injuries and hip fractures, increasing healthcare costs. The most at-risk population is hospitalized older adults because of co-morbidities, ill health, medications, pain, anesthetics, muscle weakness, and polypharmacy (Ximenes et al., 2022). For instance, unsupervised patients diagnosed with cognitive impairment or dementia risk falling because of their limited ability to decide about their mobility requirements. However, multiple interventions like patient education, medication management, clinical education, environmental modification, multi-disciplinary reviews, hospital systems and policies, and assistive devices help prevent falls in healthcare settings.

A.2 PICO Components and Evidence-Based Practice Question

Evidence Practice Question: *Among older adults in acute care settings, do multiple intervention programs compared to single interventions effective in preventing falls.*

- **Patient/population/problem (P):** Older adults in acute care settings
- **Intervention (I):** Multiple fall prevention Interventions
- **Comparison (C):** Single intervention
- **Outcome (O):** Falls prevention

B. Selecting a research-based article that answers My EBP question from part A2 to conduct an evidence appraisal.

Article: de Jong, L. D., Weselman, T., Kitchen, S., & Hill, A. M. (2020).

Exploring hospital patient sitters' fall prevention task readiness: A cross-sectional survey. *Journal of Evaluation in Clinical Practice*, 26(1), 42-49.

According to de Jong et al. (2020), falls are a significant public health challenge that increases healthcare costs. The authors note that the rate of falls in the United Kingdom and the United States' surgical and acute medical units is approximately 3.4 and 4.8 per 1000 bed days. These falls cause physical harm to those affected, including head injuries and hip fractures. However, de Jong et al. (2020) notes that falls are preventable through universal fall precautions and managing the patients' risk factors for falls. The author argues that implementing delirium interventions and patient-based education strategies can reduce falls. Nonetheless, evidence regarding multifactorial or specific individual interventions to reduce falls in healthcare settings is limited.

Multiple factors contribute to fall prevalence in the hospital setting. According to de Jong et al. (2020), most falls in the healthcare setting result from unsupervised patients, especially those diagnosed with cognitive impairment or dementia. These patients do not understand their mobility needs, requiring healthcare providers to assist them. However, some healthcare facilities use patient sitters to minimize falls among unsupervised patients. The strategy is effective because it offers patients companionship and continuous observation to reduce their falling risk. Nonetheless, de Jong et al. (2020) note that there lacks evidence regarding patient sitter's effectiveness in fall reduction. Some research suggests that patient sitters might be

expensive or ineffective because their use may result in increased falls. Therefore, further research is required to understand patient sitter effectiveness in reducing falls.

de Jong et al.(2020) note that if healthcare providers use patient sitters as a fall prevention intervention, they should assess whether they have the skills and background knowledge to prevent patient falls. Previous studies have suggested a lack of clear guidelines regarding the sitter's role, and their approach to care remains inconsistent. Therefore, the sitter's education, training, and motivation are paramount to enhancing their competence in preventing falls. Limited research exists regarding sitter's readiness to prevent falls among hospitalized patients. The existing study's findings indicate that sitters lack competence in caring for dementia patients. Additionally, they lack awareness and knowledge of fall prevention strategies. According to de Jong et al. (2020), the theory of health behavior change mandates that individuals should have the knowledge, skills, motivation, and opportunity to engage in beneficial health behaviors. Therefore, healthcare providers should prepare sitters before engaging them in a falls prevention program. In this context, if the sitters' motivation, opportunity, knowledge, and skills are inadequate, they increase the patient's risk of falling. Thus, de Jong et al. (2020) purpose was to analyze hospital patient sitters' motivation, opportunity, and capability to implement fall prevention strategies.

Describing the Research Methodology

de Jong et al.(2020) used a cross-sectional survey to conduct their study. The researchers' pilot tested the survey before using it to collect information. de Jong et al.(2020) also evaluated the deductive analytic framework before conducting the cross-sectional survey. The surveyor asked clinical ward managers if their wards had patient sitters. Patient sitters who agreed to participate in the study were checked to ensure they met the inclusion criteria. The patient sitters filled the survey as the surveyor observed their patients to enhance their safety and allow the study participants to respond to the survey questions without worry. The questionnaire included questions about the patient sitter's training needs, background, and motivation. The survey incorporated open-ended, categorical, and multi-choice responses.

Identifying the Article's level of evidence using the (JHNEBP) model.

The article is a cross-sectional study, suggesting it is a Level III type of evidence. The researchers conducted a non-experimental research study without using an intervention. The researchers' aimed to evaluate patient sitters' readiness to prevent falls in hospital wards.

Summarizing How the article Analyzed Data

de Jong et al.(2020) summarized closed-ended items quantitative data using descriptive statistics. The researchers also copied verbatim responses to open-ended questions into an excel spreadsheet. de Jong et al.(2020) used a deductive approach to perform a content analysis of the collected data. The researchers also utilized the explanatory matrix to conceptualize fall mechanisms. de Jong et al.(2020) tested the matrix designed based on previous research and the COM-B behavior change model.

The matrix highlighted a framework that conceptualized falls prevalence in hospital settings. The framework also highlighted that effective interaction between the environment, staff actions, and patient actions are crucial to reducing a patient's risk of falling. .

de Jong et al.(2020) used two independent researchers to review the collected data repeatedly. The independent researchers separated the study subjects' verbatim responses into personalized response items. The researchers then used the matrix to code the items, which were grouped into generic categories. The generic categories were further grouped into subcategories with each category accommodating similar items. The researchers then compared coding, discussed and resolved any differences. The generic categories derived from the quantitative data were capability (knowledge and awareness), motivation (motivation and confidence to prevent falls and willingness to undergo training), and opportunity (enablers and barriers). The researchers used method triangulation to enhance the credibility of their findings. The researchers sent the matrices to a third researcher to review. All researchers agreed on the resulting matrices and main categorization.

Summary of the ethical consideration(s) of the research-based article

The Quality Improvement Project approved the study. All the hospitals participating in the research granted the quality improvement approvals. The study subjects obtained a verbal and written explanation of the research objectives and methods. They were also assured of the survey's anonymity. The participants were allowed to ask questions about the research before deciding whether to or not to engage

in the study. The study subjects were given consent verbally and in written form.

Subjects who gave their consent initiated and completed the paper survey

Identifying the Article's quality rating based on JHNEBP model

The article's quality is high because the results are generalizable and consistent. Also, the conclusions are definitive, and the recommendations are based on scientific evidence. For instance, de Jong et al. (2020) note that practical training and education focusing on patient's risky behaviors can boost patient sitters' readiness to help in fall prevention in wards. The training and education will strengthen cooperation and communication between nursing staff and patient sitters in preventing falls among hospitalized patients. These findings are generalizable to any healthcare setting because they underscore the importance of engaging patient sitters' in fall prevention programs. However, they should be trained and educated on the risk factors for falls and strategies to prevent falls, and make their involvement effective.

Analyzing the Article's results or conclusions and explaining how the article help answer My EBP question

According to the article, patient sitters are interested in helping healthcare workers prevent falls. However, their ability to avoid falls is limited because they are unaware of the risk factors for falls, barrier to falls prevention, and solutions to risk factors for falls (de Jong et al.,2020). The article notes that most patient sitters believe that confusion causes patients to fall. Nonetheless, other factors like challenging patient actions like violence are significant barriers to fall prevention. Patient sitters believe that modifying the environmental factors would prevent falls. Although

adjusting the healthcare facility's environment may reduce fall risks, the strategy cannot prevent patients, especially those with delirium or confusion, from engaging in actions that increase their susceptibility to falls.

Most sitters want further education and training to enhance their effectiveness in preventing falls (de Jong et al., 2020). Their desire suggests that targeted training and education are necessary to improve patient sitters' ability to engage in fall prevention programs. Accordingly, the national guidelines for hospital fall prevention require the training of workers as a significant aspect of fall prevention program. The training program should focus on providing cognitive stimulation, de-escalation techniques, and how to help patients with mobility challenges. Additionally, creating awareness about dementia will help patient sitters offer excellent fall management. The strategy ensures that patient sitters offer individualized fall prevention plans to their patients.

de Jong et al.(2020) also note that multifactorial strategies effectively prevents hospital falls. However, individual techniques like fall prevention education and balance exercises are effective in reducing falls among patients in rehabilitation centers. Nonetheless, the national fall prevention guidelines mandate healthcare providers to assess patients' risks and tailor interventions to modify the risk factors and prevent falls. The interventions designed should address each risk factor for falling. The article's findings answer my evidence-based question by emphasizing that a no-one-size-fits-all strategy can prevent falls among hospitalized patients. On the contrary, healthcare providers should design fall prevention interventions for each patient's risk factors. Additionally, the strategies should integrate education and

training of patients and healthcare providers to enhance their effectiveness in reducing falls among hospitalized patients. Thus, de Jong et al.(2020) emphasize that multimodal interventions are more effective in preventing falls than single interventions.

C. A Non-Research-Based Article that Answers by Evidence-Based Question

Article: Heng, H., Jazayeri, D., Shaw, L., Kiegaldie, D., Hill, A. M., & Morris, M. E.

(2020). Hospital falls prevention with patient education: a scoping review. *BMC geriatrics*, 20(1), 1-12. <https://doi.org/10.1186/s12877-020-01515-w>

Background of the Research Article

According to the article, hospital falls are a debilitating and common challenge globally. Heng et al. (2020) note that most fall prevention approaches target medication reviews, hospital systems, assistive devices, environmental modifications, and clinician education. However, these strategies do not consider patient's role in fall prevention. Nonetheless, Heng et al. (2020) note that patients play a vital role in fall prevention despite being given less attention in the hospital setting. For instance, patient education addresses the mismatch between actual and perceived fall risk in hospitals.

Healthcare providers use assessment tools like the Hendrich II Fall Risk Model, St. Thomas's Risk Assessment Tool, and Falls Risk Assessment Tool to assess patients' risk of falls based on the patient scores. Clinicians apply research evidence and clinical judgment to determine a patient susceptibility to falls. These strategies can help healthcare providers to design person-centered fall prevention interventions. Regardless of these interventions, some patients engage in behaviors that increase their risk of falling. They include not

pressing the bed alarm when wanting to use the washroom or failing to wait for nurses before attempting to move. Some walk without nurses' supervision, especially when it is unsafe for them to do so. This is true for patients with gait disorders, cognitive impairment, or poor balance who are at increased risk of falling. Heng et al. (2020) note that approximately 80% of fall results when patients are not under supervision. Some of the hospital falls are attributable to patients initiating risky decisions without consulting healthcare providers or nurses. Thus, patients' education is paramount to reducing their risk of falling and exerting financial burden when treating falls-related injuries.

Heng et al. (2020) note that patient education creates awareness among individuals of their risk of falling and strategies to mitigate falls in the hospital environment. The education program can assume various forms, including assistive devices like bed alarms, wristbands, and sensors; videotapes, handouts, posters, and face-to-face discussions. Despite the significance of patient education in fall prevention, limited research exists regarding the design or outcomes of the education program components. Thus, the article's purpose was to identify gaps in existing research by summarizing and assessing the distinct sources of evidence from clinical trials, narrative literature reviews, systematic reviews, and grey literature. The scoping review also aimed to perform a hospital search of fall prevention interventions related to patient education, appraise the design of patient education programs, and identify and evaluate measures, tools, and variables utilized to quantify the reduction in falls and related outcomes.

Describing the Type of Evidence

The type of evidence is clinical guidelines because the authors recommend the best practices to prevent falls in hospital settings. Heng et al. (2020) recommend the combination of patient education and other fall prevention program to achieve positive patient outcomes. For instance, the article notes that patient education is a significant aspect of falls prevention programs. However, the education's program content should encourage the target audience to interact with healthcare providers who reinforce the learning process. Additionally, the educational program should reflect the patient's learning style. For instance, video tapes with headphones should be utilized for patients with auditory and visual impairments to enhance their understanding of fall prevention strategies.

Heng et al.(2020) also recommend multifactorial interventions coupled with patient education to prevent falls among hospitalized patients. Therefore, training patients should be a component of the multifactorial bundle. Also, patients should be actively involved in the education program because it boosts their knowledge and self-efficacy about fall prevention. Falls prevention education programs can modify older adults' behaviors and risk of falls because they are willing to learn. However, healthcare providers should consider the patients' individual needs, task demands, and context to make the education program effective. For patients with cognitive impairments, Heng et al.(2020) recommend techniques like simplification, repetition, chunking, rephrasing, positive reinforcement, and concrete example and stories when designing their education programs.

Identifying the level of evidence and Quality using the JHNEBP model

Heng et al.(2020) included 10 randomized controlled trial articles, five systematic reviews, three published thesis, and three qualitative studies. Others were quasi-experimental trials.

Based on the articles reviewed, the article's level of evidence is II. Level II evidence comprises systematic reviews combining quasi-experimental study only, without or with meta-analysis or quasi-experimental and RCTs. The quality of the article is high because the results are generalizable with definitive recommendations and conclusions based on an in-depth literature review and support of scientific evidence.

How the author's recommendation(s) in the article helps to answer your EBP Question

According to Heng et al. (2020), hospital fall prevention programs that integrate patient education effectively reduce falls. However, patient education can be effective if its design considers environmental context and individual patients' risks. Additionally, the education program should combine multiple strategies like videotapes, handouts, and face-to-face discussions because they are more effective than a single modality. Also, the fall education intervention should integrate education principles and theories of health behavior change and the healthcare providers should actively engage the patients in its design. Lastly, healthcare providers should adhere to established guidelines when reporting fall prevention interventions to enhance research quality and transparency. Thus, Heng et al.(2020) recommendations help answer my evidence-based practice question because it underscores the importance of multimodal intervention in preventing falls. For instance, all fall prevention programs should incorporate patient education to enhance their effectiveness in reducing falls. Additionally, patient education should include multiple strategies to enhance the programs' effectiveness like handouts, flyers, face-to-face discussions, and videotapes.

D: Recommending a Practice Change That Addresses My Evidence-Based Question

According to the research and non-research article, multimodal interventions effectively prevent falls in hospitals. For instance, the non-research article recommends that falls prevention programs should incorporate education and training programs for healthcare workers and patient sitters to enhance fall prevention programs' effectiveness. However, the education program should combine multiple strategies like videotapes, handouts, and face-to-face discussions to enhance individuals' understanding of the risk factors for falls and strategies to prevent each risk factor. The research article also underscores the importance of education and training programs on improving individual competence in providing cognitive stimulation, de-escalation techniques, and how to help patients with mobility challenges. Therefore, both articles highlight the significance of education and training to enhance individuals' effectiveness in addressing each risk factor for falls using appropriate interventions.

How to Involve Three Key Stakeholders in Supporting the Practice Change Recommendation

Falls are a significant cause of mortality and morbidity among older adults. Falls are responsible for the psychological and physical outcomes resulting in loss of independence, decline in function, and death. Therefore, key stakeholders should focus on modifiable risk factors like hospital environment, muscle weakness, gait and balance, medication issues, and visual impairment to reduce falls. Therefore, the following three key stakeholders will support the practice change recommendation: health administrator, informal caregivers, and healthcare providers.

Informal caregivers play a crucial role in meeting the needs of hospitalized patients. Thus, they are a vital source of trusted information and implementation of fall prevention programs. Caregivers can encourage, engage, and negotiate with older adults to engage in fall prevention strategies and comply with fall prevention programs. Many older adults are unaware of the behaviors or factors that increase their risk of falling. Therefore, the informal caregivers will discuss with patients about their risk factors for falls, address them using appropriate strategies, and empower patients to implement the fall prevention strategies to reduce their risk of falling. Encouragement and advice from caregivers influence older adults' engagement in falls prevention programs. Thus, the informal caregivers will help implement the falls prevention programs by encouraging and empowering their care recipients to participate in falls prevention programs and implement appropriate strategies given their risk factor for falls.

Healthcare providers are vital in supporting the recommended practice change. They include occupational and physical therapists, pharmacists, advanced practice nurses, nurses, and physicians. These individuals will conduct the patient's fall risk assessment and design interventions that reflect the individual patient's needs. The healthcare providers will also offer an appropriate follow-up to modify the patient's risk factor for falls. Lastly, the healthcare administrator will provide the resources to implement the recommended practice change. For instance, informal caregivers and healthcare workers will require training and education to enhance their awareness of the risk factors for falls and their appropriate intervention strategies. According to Oliveira et al.(2017), staff and nurses' attitudes, behaviors, feelings, and knowledge influences their implementation of the falls prevention program. Therefore, staff and caregivers' training and education will enhance their

competence in implementing the fall prevention program and assessment of the patient's risk factors for falls,

Barrier to Implementing Practice Change Recommendation

According to the World Health Organization, the available evidence should inform healthcare delivery. Mathieson, Grande, & Luker(2019) note that healthcare providers should engage with scientific evidence in their service delivery. However, healthcare providers face significant barriers to evidence-based practice implementation, thus undermining their engagement. These barriers include family commitments, workload, staff shortage, lack of time, negative beliefs about EBP, and limited knowledge of EBP. Thus, the barrier I expect when implementing the practice change recommendation is inadequate knowledge and time. Increased workload because of staff shortage may be a barrier to evidence-based implementation. Also, a lack of knowledge about the recommended practice change may undermine its implementation.

Strategy to Overcome the Identified Barrier

One strategy to overcome the identified barrier is obtaining administration support. The administration will provide significant insights into techniques utilized by other projects to enhance their success despite healthcare providers' lack of time or limited knowledge about the change in practice (Ginex, 2018). Additionally, the administration is vital in promoting a culture that embraces evidence-based practice. Additionally, the administration will provide the needed resources to facilitate healthcare workers' training and education. For instance, they may hire external experts to educate healthcare providers and caregivers on the importance of falls prevention, how to identify risk factors for falls, and effective fall prevention strategies.

One Outcomes from My Evidence-Based Practice Question to Measure the Recommended Practice Change

One of the outcomes is the reduced incidence of falls among older adults hospitalized in acute care settings. The recommended practice change aims to use multiple interventions to prevent falls. The interventions will be based on the patient's risk factor for fall. For instance, if gait and balance is the risk factors for falls, the patients will be educated about the risk factor and the healthcare provider will recommend appropriate exercise programs for the patient to enhance their mobility. The resultant outcome will be reduced incidence of falls because the patient will be aware of the risks that increase their susceptibility to falls.

References

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