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# Nursing Education to Prevent Resident Falls in Long-Term Care

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# Walden University

College of Health Sciences

This is to certify that the doctoral study by

Henrietta Aguwa

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.

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The Office of the Provost

Walden University  
2019

Abstract

Nursing Education to Prevent Resident Falls in Long-Term Care

by

Henrietta Alero Aguwa

MS, Walden University, 2014

BS, Texas Christian University, 2002

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

Walden University

November 2019

## Abstract

Residents in nursing facilities are more prone to falls than those living in the community. Injuries resulting from falls impact residents, their families, and healthcare costs. The gap in nursing practice was the lack of a comprehensive fall-prevention program in a long-term care facility that had experienced high fall rates among residents. This project addressed whether an educational program using the American Medical Directors Association's clinical practice guideline and the Centers for Disease Control and Prevention's STEADI (Stopping Elderly Accidents, Deaths, & Injuries) toolkit for fall-prevention improved the self-efficacy of direct-care staff in preventing falls among residents in a long-term care facility. The practice-focused question focused on whether education on the use of an integrated multifactorial fall-prevention guideline would increase confidence of long-term care staff in reducing falls in long-term care residents. The evaluation used the 11-item Self-Efficacy for Preventing Falls-Nurse scale for 5 licensed nursing staff and the 8-item Self-Efficacy for Preventing Falls-Assistant scale for 21 nursing assistants. The positive change in self-efficacy scores of nurses and nursing assistants after the education program was greatest for face-to-face team communication regarding fall risk and individual resident prevention plans. The use of best-practice guidelines that improve fall risk-assessment and use of fall precautions to decrease the number of falls and falls with injury has the potential to bring about positive social change by improving the nursing care of nursing home residents, resulting in improved resident safety and quality of life.

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## Dedication

I am dedicating this project to my children and every member of my family.

## Acknowledgments

I acknowledge members of my extended family, the faculty of Walden University and my preceptors for their support and encouragement throughout my studies

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## Section 1: Nature of the Project

### **Introduction**

In 2014, 2.8 million adults 65 years and older were treated in an emergency room as a result of injuries resulting from a fall; approximately 800 of these patients were hospitalized, and close to 2,700 patients died (Bergen et al., 2014). Those individuals who fell are more likely to fall again. Residents in the nursing facilities are more prone to fall than those living in the community. 20 % of deaths from falls happened in residents who live in nursing homes (CDC, 2019). 1% of residents in long-term care facilities (LTC), often referred to as nursing homes, fall each year, which is double the rate of falls in individuals living in the community. About 1800 long-term care residents die each year as a result of falling (Willy & Osterberg, 2014). Falling and the fear of falling leads to disability, decreased functional ability, reduced quality of life, sadness, social isolation, and the feeling of helplessness in individuals who lives in the long-term care facilities, where most of the care is delivered by licensed professional nurses and nursing assistants.

The gap in practice is the lack of a comprehensive fall prevention program in this long-term care facility, which has experienced high fall rates among residents. The purpose of this project was to address the gap of no formal fall prevention program by educating direct care staff on implementation of a multifactorial fall prevention strategy, using the principles from the AMDA fall prevention guideline and the STEADI toolkit, so that they can gain self-efficacy in preventing falls in residents in a long-term care setting. The positive social change is prevention of injury from falls and an improved quality of life for residents of this nursing home facility.

## **Problem Statement**

Falls are the primary cause of both life-threatening and minor injury of seniors (Stevens & Phalen, 2012). Falls are the major factor that leads to critical injuries in adults 65 years and older (Willy & Osterberg, 2014). The national percentage of older adults who stated that they fell in 2014 ranged between 21 and 33 % (Bergen et al., 2014). More than thirty to 35 % of people sixty-five and older fall each year (Gillespie et al., 2012). One in five older adult falls lead to profound injury.

50 to 75 % of residents in long-term care facilities (LTC), often referred to as nursing homes, fall each year, which is double the rate of falls in individuals living in the community. About eighteen hundred long-term care residents die each year as a result of falling (Willy & Osterberg, 2014). The economic impact of falls is over \$30 billion (CDC, 2019). Nursing homes can experience enormous monetary consequences from deficiencies assessed by the Centers for Medicare and Medicaid (CMS) and state health departments (CDC, 2019). Moreover, levies in the event of preventable harm or loss, and lawsuit expenses can be significant. According to the New York Times (2016), Plaintiffs have been awarded thousands to millions of dollars in a fall-related lawsuit settlement.

This 114-bed, long-term care facility in the southern region of the United States had 62 falls in 3 months. Fifty-four of these falls were without assistance, and eight of these were with support. Twenty % of these residents were hospitalized and two died from complications of the falls. The facility does not have a formal fall-prevention program in place, thus resulting in a gap in nursing practice.

Many prophylactic measures used to prevent falls in older people are multifactorial interventions that combine different types of activities. Researchers have discovered that multifactorial interventions which combined exercise, medication, environmental factors, and the use of proper equipment reduced the risk of falls in hospitals but did not show any significant reduction of fall in long-term care residents (Phelan et al. 2015). This variance in outcome may be due to the characteristics of the long-term facility population; many are no longer able to accomplish the activities of daily living, are fragile, and experience issues with cognition and balance. The American Medical Directors Association (AMDA) has developed clinical practice guidelines for the assessment, management, and prevention of falls in long-term care residents (Vance, 2012). A STEADI fall-prevention toolkit was developed by a scientist at the CDC's injury center to address the barriers to implementation of fall-prevention programs (Stevens & Phalen, 2012). The STEADI toolkit was developed based on theory, evidence-based research, and inputs from providers. The vital principles from these evidence-based fall-prevention programs were integrated to educate the staff at the long-term care facility on the implementation of fall-prevention guidelines to prevent preventable falls, reduce fall-related injuries, and reduce the fall rate.

Nurses and nursing assistants provide most of the direct care for patients in long term care facilities. The Hartford Institute for Geriatric Nursing (<https://hign.org/>) emphasizes the importance of using evidence-based research to guide practice. The increasing population of older adults in long term care facilities deserves to have a

comprehensive program in place to reduce falls and to improve their overall quality of life.

### **Purpose**

The gap in practice is the lack of a comprehensive fall-prevention program in this long-term care facility, which has experienced high fall rates among residents. The purpose of this project is to address the gap of no formal fall-prevention program by educating direct care staff on implementation of a multifactorial fall-prevention strategy using the principles from the AMDA fall-prevention guideline and the STEADI toolkit so that they can gain self-efficacy in preventing falls in residents in a long-term care setting. This scholarly project aims to introduce an evidence-based multifactorial fall-prevention program to the staff of the long-term care facility in the southwest.

The intended practice setting is a long-term care facility with six registered nurses (RN), twelve licensed vocational nurses (LVN), and twenty-eight certified nurse aides (CNA). The average age range of residents in the facility is seventy-five years old. The project objective is to integrate the contents from the AMDA (2018) evidence-based clinical practice guideline with the STEADI toolkit to introduce a multifactorial fall-prevention program to the direct care staff of the facility. The clinical nurse specialist team, who are clinical experts on fall-prevention, will make up the panel of experts for the development and delivery of the staff education program. This clinical fall-prevention expert team is made up of the three nurses with a master's degree in nursing. A pre- and post-Likert style survey questionnaire will be administered to the direct care staff to

measure the knowledge gained and the staff members' efficacy in implementing the guidelines.

The practice-focused question of this project was: Will education on the use of an integrated multifactorial fall-prevention guideline increase the confidence of long-term care staff in reducing falls in long-term care residents?

The use of best-practice guidelines may improve fall risk assessment, the use of fall precautions, and decrease the number of falls and falls with injury. The implementation of an evidence-based fall-prevention guideline in the long-term care setting will improve residents care, safety, and quality of living. Research has shown that the application of fall-prevention guidelines in the acute care setting has been effective in decreasing its fall rate. The anticipation is that the implementation of evidence-based fall-prevention guidelines will be adequate to minimize falls in the long-term care setting when the long-term care staff's self-efficacy is enhanced to implement the fall-prevention program.

The benefits of using a fall-prevention guideline in the long-term care setting include reducing the fear of falls and the occurrence of falls, which, in turn could lead to an increase in taking part in activities of daily living, a delay in deterioration related to aging, and improving social skills and networks among long-term care residents (Finnegan et al., 2017). By preventing falls, the long-term care residents will have reduced risk for depression, fractures, use of pain medications, and increased use of their lower extremities because of the fear of falling is eliminated (Finnegan et al., 2017). Staff education on a fall-prevention protocol has the potential to increase staff skills in

preventing falls and improved quality of life for the residents. Evidence-based practice (EBP) has resonated through all nursing practice. The appeal for evidence-based quality nursing and healthcare change indicated a need for redesigning care that is current, safe, and proficient (Stevens, 2013). The nursing profession has designed several initiatives to meet this need. All healthcare settings now strive to implement evidence-based practice. Evidence-based practice involves the use of the best research evidence to support and guide clinical decisions in nursing practice. Applying the best research evidence can result in quality clinical decisions that improve the health outcome for patients and the general public (Grove et al., 2013).

### **Nature of the Doctoral Project**

The project is a nursing education program that is intended to introduce staff to an evidence-based framework for a fall-prevention program. In implementing the evidence-based fall-prevention program, the nursing home facility would provide individualized, person-centered care that decreases the fall rate and improves outcomes through effective communication and appropriate assessment methods (AHRQ, 2012). The fall-prevention program is an interdisciplinary quality improvement program. Research has shown that using an evidence-based multidimensional approach, such as the fall-prevention program, has helped many healthcare facilities reduce their fall rate (AHRQ, 2012).

Evidence-based journals were accessed through the Walden University Library using CINAHL, EBSCO, Medline and the Cochran databases. The important terms and phrases utilized for the search included *peer-reviewed fall-prevention in older adults*,

*multifactorial fall-prevention, fall risk factors, fall-prevention in nursing homes, the use of vitamin D supplements in fall-prevention, systematic reviews on fall-prevention, and meta-analysis fall-prevention strategies.* The evidence from the journals was summarized, organized, and presented to the stakeholders, which included the director of medical director of the facility, the director of nurses, the residents and their families, and allied health care professionals involved in the residents' care.

The AMDA (2018) clinical practice guideline used for the staff education program provided LTC staff with a comprehensive guide on identifying the intrinsic and extrinsic risk factors for falls and a systematic approach to patient assessment and how to choose the appropriate interventions for each patient (Vance, 2012). The STEADI toolkit information was provided through the CDC. As more attention is focused on the problem of falls in patients to increase awareness that falls and their adverse outcomes is preventable--funding was made available through the National Council on Aging (NCOA) to support the development of clinical practice guidelines (Jacob, 2015). Physicians and advanced practitioners became more involved in finding strategies and guidelines to reduce the fall rate in LTC settings (Jacob, 2015). AMDA's clinical practice guideline has become the standard care procedure in some post-acute and long-term care setting (Jacob, 2015). The AMDA's clinical guideline became the standard care procedure because of its emphasis on necessary care procedures into any facility policy as a guide to staff in clinical practice. Some components of the STEADI toolkit were integrated by the clinical nurse leader team into the fall-prevention program using AMDA's guideline. The education program of staff on fall-prevention using the



AMDA's guideline and the STEADI toolkit for falls consists of staff education on the four phases of the AMDA's guideline.

The first phase of the AMDA guideline is the recognition of risk by utilizing an evidence-based fall-risk assessment tool to evaluate residents to determine if the resident has a history of falls and if he/she is at high risk for falling. A comprehensive fall-risk evaluation is intended to indicate specific risk features of residents to implement fall-prevention interventions for the identified risks factors. The Resident Assessment Instrument Minimum Data Set (RAI-MDS) falls Resident Assessment Protocol (RAP), and the identification of fall risks and intervention for falls and injury reduction tool are in-depth assessments tools that are evidence based. The Mobility Fall Chart, Area Ellipse of Postural Sway, and the Tinetti Balance Subscale are recommended fall-risk assessment tools for the long-term care setting (CEP, 2016). The staff at the project facility uses the recommended Briggs fall-risk evaluation tool, which is also a reliable fall-risk assessment tool for long-term care settings. The staff was coached on the rationale for completing a fall assessment on admission, as well as after a fall. Instructions on collecting data from the resident's medical records, admission records, charts, MDS assessment forms, and information from the resident and their family members were given to the staff to integrate the STEADI toolkit (CDC, 2019). Other collected data included items such as previous falls, the location of the fall, and approximate height from which the resident fell.

The second phase of the AMDA's guideline was the assessment/root cause analysis. The staff was instructed that, in this phase, the predisposing and precipitating

factors for falls were explored at the individual and facility level to determine the cause of a fall and the impact of preventive interventions on the daily life of the resident. The staff was instructed that some intrinsic factors that can cause falls include age (greater than eighty-five years old), muscle weakness, visual impairment, foot disorders, transfer dependence, and wheelchair dependence. Other intrinsic factors are low body mass index and weight loss, gait impairment, chronic medical conditions, bowel/bladder incontinence and urgency, Parkinson's disease, orthostatic hypotension, hypotension, Alzheimer's disease, diabetes, arthritis and accompanying discomfort, cardiovascular disease, chronic obstructive pulmonary disease, depression, obstructive sleep apnea, end-stage renal disease, stroke, and acute illness.

The staff was also instructed that some extrinsic factors that can cause falls include previous history of falls and medications: opioids, insulin, psychotropics, antidepressants, selective serotonin reuptake inhibitors or serotonin-specific reuptake inhibitors, tricyclic antidepressants, benzodiazepines, antipsychotics, sedatives, hypnotics, anticonvulsants (e.g. phenytoin, phenobarbital, carbamazepine), vasodilators (e.g., alpha 1 receptor blockers, calcium channel blockers, long-acting nitrates, angiotensin-converting enzyme inhibitors, and angiotensin 1 receptor blockers), anti-arrhythmic, digoxin, diuretics, excessive alcohol, assistive devices, improper footwear or clothing, nutrition and hydration, behavior such as fear of falling, decreased sociability, that leads to possible depression, risk-taking behavior (e.g. not using a walking aid or grab bar when one is needed), sedentary behavior, environmental hazards (e.g., high bed, wax on floor).

The nursing staff was educated on how to identify the patient's actual and potential risk for fall and to identify medications that increase the risk of falling in the elderly. The staff was also instructed to integrate the STEADI toolkit by screening the resident to identify modifiable risk factors and nonmodifiable risk factors. Finally, the staff was instructed on conducting a functional assessment to evaluate the gait, strength, and balance of the resident. The resident's vision was assessed for visual alertness or loss of vision. The result of this evaluation was used to determine whether additional medical services were needed, such as a consultation with the ophthalmologist for vision care and with the physical therapist for physical therapy. The STEADI toolkit recommends evaluating the resident's mental health; thus, the staff was instructed to assess the resident's mental health to identify any need for behavior or alcohol and drug-related interventions (CDC, 2019).

The staff was instructed on assessing the resident for postural hypotension and dizzy spells. If any of these were present, they should notify the physician so that it could be addressed. The staff was instructed on reviewing the resident's medications for potentially inappropriate medications for older adults. The staff was instructed to review the resident's medications to identify any that could cause falls or that could be harmful to the resident. If any medication that could cause falls or that could have adverse side effects on the resident is identified, the physician should be notified so that the issue can be addressed. The resident's medications were also reviewed to determine whether a vitamin D supplement should be prescribed. The staff was instructed on providing brochures or verbal information to the resident on fall-prevention. The staff was

instructed on assessing the resident's room for any equipment or furniture that poses a risk for falls. The staffs were instructed on encouraging the residents to participate in a daily exercise activity and other fall-prevention programs in the facility.

The third phase of the AMDA's guideline is treatment, where the staffs were educated on how to develop prevention interventions that are suitable for each resident, based on the outcome of their fall-risk assessment.

The fourth phase is monitoring, where the staff members were instructed on how to monitor the course of treatment or management of residents who have fallen by conducting periodic reviews to determine whether to continue, change, or stop interventions and to establish quality improvement activities related to their fall risk and their falling. The nursing staff members were educated on the rationale that the monitoring phase continues over the life or stay of the resident since most of the conditions of the residents in long-term care settings are chronic. The nursing staff were educated on how to identify and implement environmental modification as a component of fall-prevention strategies. The nursing staff were instructed on assessing the resident's room for any equipment or furniture that posed a risk for falls.

The formative assessment followed Kirkpatrick's model for evaluating the impact of continuing education in two domains: knowledge gain and self-efficacy (Kirkpatrick Partners, 2018). According to Bandura (1986), "Unless people believe they can produce desired effects by their actions, they have little incentives to act." This social belief system indicates that it is not enough to evaluate the staff member's acquisition of knowledge, it is also essential to assess their intent to put the experience into practice. By

educating direct care staff on implementation of an evidence-based multifactorial fall-prevention strategy, they will gain self-efficacy in preventing falls in residents in a long-term care setting.

### **Significance**

Involvement of stakeholders is critical to getting a new evidence-based practice approach into the practice system. The stakeholders included the medical director of the facility, the director of nurses, the residents and their families, and allied health care professionals involved in the residents' care. The main objective of the Affordable Care Act of 2010 is to change both institutional and community-based long-term care into a more person-centered system (Grabowski et al., 2014). This practicum setting indicated readiness for change as staff members have a shared determination, belief, and commitment to implement change that will reduce fall rates and benefit all stakeholders. The facility also has the resources to implement the change process. When an organization has high moral readiness for change, their staff associates have more probability of commencing change, putting forth superior determination, showing prominent commitment, and exhibiting more supportive actions (White & Dudley-Brown, 2012). The outcome is a successful implementation. The availability of resources is undoubtedly imperative for a successful change process.

Research has shown that frontline staff's input in decision making on the change process is highly related to the degree of collaboration and buy-in (Grove et al., 2013). The end users are mostly nurses' aides who consistently feel left out of decision-making and often feel ignored in their observations about the residents and their care. Barriers to

implementing change in an organization include lack of acceptance or alignment of stakeholder's thinking, lack of appropriate guidance or knowledge, and no clear strategies for maintaining long-term results. Involving the front-line staff in the education and implementation of the fall prevention program, is important. Change, which is the transformation of tasks, processes, methods, structures, and relationships, is necessary for organizational survival (White and Dudley- Brown, 2012). Change takes individuals out of their comfort zone; it can be inequitable and uncomfortable because changing from one state to another reorders control over outcomes. But change is needed when all the underpinnings and practices of the past are no longer adequate.

This project, if successful, would add to the nursing literature about fall-prevention in the long-term care setting, an area where residents are at increased risk for falls and complications. The information gleaned from this study may also inform nurses working with older adults in alternative settings. The positive social change would be the improved preventive care for nursing home residents with the consequence of maintaining and improving health status in this at-risk population.

### **Summary**

No tool or approach can independently ascertain older adults at increased risk for falls, but several reasonable and feasible methods are available to assist healthcare professionals in identifying patient risk and preventing falls. Multifactorial evaluation and intervention program are expected to reduce the fall rate but not the risk of falling. By assimilating the AMDA's guidelines, and the STEADI toolkit strategies into clinical

practice, the number of falls in the nursing homes can be reduced by 25%. Section 2 will discuss the background and context for this study.

## Section 2: Background and Context

### **Introduction**

Over half of the residents in long-term care facilities fall yearly and around 1800 residents die as a result of fall. This number doubles the fall rate of adults living in the community (Stevens, 2013). This 114-bed long-term care facility experienced a high rate of falls in the last 6 months. The facility does not have a formal fall-prevention program in place, thus resulting in a gap in nursing practice.

The purpose of this project was to educate nursing staff on implementation of a multifactorial fall-prevention strategy using the AMDA's fall-prevention guidelines and the STEADI toolkit so that they can gain self-efficacy in preventing falls among residents in a long-term care setting. The practice-focused question was: Will education on the use of an integrated multifactorial fall-prevention guideline increase self-efficacy of long-term care staff in reducing falls in long-term care residents?

This section will provide details on the concepts, models, and theories, as well as the relevance to nursing practice and the role of the DNP student.

### **Conceptual Models and Theoretical Frameworks**

The Prochaska stages of change model, which requires an individual to change her or his behavior, was used to develop the STEADI toolkit resource, "Talking about fall-prevention with your patient." (CDC, 2017). The toolkit was guided by the stages of change theory, and thus was used to guide this educational project. The Prochaska stages of change model was appropriate as both physicians and patients have difficulties conversing about falls during wellness visits (Stevens, 2013). Another benefit of the



Prochaska model of change is that it portrays evolution as a process involving progress through a series of stages. The resources in the toolkit also offer a short dialogue about how to guide the patient to the next level at the end of every stage, such as statements that inform the clinician about when to lead the patient to the preliminary step, make a recommendation, or encourage seeking assistance from family members (Stevens, 2013). Using the Prochaska stages of change model also enables healthcare providers to utilize the usual patterns of patient-provider discussions during each step and to suggest some answers to commonly asked questions that could be easily reconstructed to fit culturally diverse patients (Stevens, 2013).

The STEADI toolkit deciphered the risk for fall evaluation and management procedure into precise actions that could fit into a diversity of clinical practice arenas, including long-term care settings (Stevens, 2013). The STEADI toolkit system can be used to evaluate and provide care to residents have all kinds of fall-risk factors. Though the STEADI toolkit process mainly uses the American and British Geriatric Societies (AGS/BGS) Clinical recommendation, it integrates the principles of fall-prevention (Stevens, 2013).

### **Relevance to Nursing Practice**

Several pieces of research showed that some falls are preventable. The Cochrane Collaboration's meta-analysis of randomized controlled trials of fall interventions revealed that, in the healthcare arenas, the number of those who fall could be reduced by assessing, identifying, addressing, and treating symptoms of chronic conditions of older persons (Gillespie et al., 2012). The systematic review conducted by the United States

Preventive Services Task Force (USPSTF) found that interventions delivered through primary care that included exercise and physical therapy reduced falls in older adults (Moyer, 2012). The AGS/BGS recommended an individualized clinical approach for reducing falls among older adults. They also gave an outline of how to prevent falls in older adults in their clinical guidelines (AGS/BGS, 2010). However, Stevens and Phalen (2012) stated that primary care general practitioners have been hesitant to inculcate this instruction into practice. They also reported that some physicians indicated that they do not know how to perform fall risk assessments and lacked adequate information about fall-prevention (Stevens & Phelan, 2011).

According to Stevens, 2013, some providers also reported not having enough time to spend with each patient during wellness visits. Stevens, 2013 also stated that the new Medicare annual wellness visit offers reimbursement incentives to healthcare providers to encourage the incorporation of fall risk assessment and treatments in older adult's yearly wellness visits.

The STEADI toolkit was developed by a scientist with inputs from healthcare providers based on evidence-based research and theory to eradicate the barriers to fall-prevention (Stevens & Phalen, 2012). The AMDA's fall-prevention practice guideline has been effective in preventing fall in the acute and long-term care settings. The STEADI toolkit has also been effective in preventing falls in acute care settings (CDC, 2018). The concept of self-efficacy is the guiding framework of this project. In their pilot study on education on fall-prevention to improve self-efficacy of nursing staff in long-term care, (Leverenz & Lape, 2018), concluded that fall-prevention training by a licensed

expert might be useful in increasing the self-efficacy of nursing staff for implementation of fall-prevention strategies and prevention of resident falls in long-term care.

Demonstrating that educating nursing staff in the long-term care setting on the use of an integrated multifactorial fall-prevention guideline will lead to increased self-efficacy that will lead to reduced fall in the long-term care setting provide evidence-based practice for nursing practice. Expanding the self-efficacy of bed-side nurses for implementing fall-prevention guideline will improve the nurses' professional practice behaviors as they will have the ability to exercise self-influence to shape their social systems (Leverenz & Lape, 2018). There is a need for evidence-based quality nursing and healthcare change to redesign care that is current, safe, and proficient (Stevens, 2013). The nursing profession has designed several initiatives to meet this need.

The nursing profession is ensuring the implementation of evidence-based care practices in all healthcare settings. Nurses are improving practice using best research evidence that supports and guide clinical decisions that lead to high-quality outcomes. By applying the evidence that when the confidence of nursing staff are increased preventable falls will be reduced in the long-term care setting, the staff will make quality clinical decisions that will improve the health outcome for patients and the general public (Grove et al., 2013). Research has shown that nursing staff belief in their capability is highly related to the degree of the levels of their performance, and there is a correlation of their performance to the overall performance of facility (Leverenz & Lape, 2018). Education is a factor in fall-prevention, and the element of self-efficacy is beneficial in putting the knowledge got from education into practice. Improving the self-efficacy of nursing staff

which includes nurses' aides in the long-term care setting will reduce falls of residence and prevent all collateral losses that accompanies falls of the resident. The residents will have more confidence in taking part in social activities and improving the quality of their lives when the fear of falling is eliminated.

### **Local Background and Context**

Falls in the long-term care facilities is an ongoing problem to the resident, the family, and the public (CDC,2019). Reducing the fall rate is a significant focus on quality improvement in patient safety. About five % of adults 65 years and older live in the long-term care setting, and 20% death in adults who fell are from residents in the long-term care setting (Stevens, 2013). The adverse effects of fall result in debility, functional decline, reduced quality of life, and even death (Stevens, 2013). Over half of the residents in long-term care facilities fall yearly and around 1800 residents die as a result of fall. This number doubles the fall rate of adults living in the community (Stevens, 2013). These data indicate that fall-prevention is a challenge to both the residents and the interdisciplinary team in the long-term care setting. Developing a system of safety is a must because residents who fell before are more likely to fall again. There is no one intervention to prevent all preventable and non-preventable falls. A multifactorial fall-prevention approach has been shown by evidence-based practice to reduce the number of falls in some healthcare facilities.

Environmental factors that increase the risk of falls in a long-term care facility can be modified, and management of the intrinsic factors that increase the risk of fall can be managed. To accomplish this, the long-term care facility's direct care professionals

must possess the self-efficacy to implement a multifactorial fall-prevention intervention to reduce the fall rate among residents in the long-term care setting. Macrosystems are the outer layer of a person's environment. They provide full ideological, organizational values that shape the long-term care environment. The microsystem is the small, functional, frontline units that provide most health care to most people. They are the essential building blocks of the larger organization and the health system. An efficient healthcare system needs both systems. The Macro and microsystem influence the care provided in the nursing homes through their professional knowledge, capabilities, available resources, interventions and how they feel about delivering care interventions (McCluskey & Middleton, 2010).

An interdisciplinary approach uses a safety culture that is necessary for the long-term care setting. Bedside nurses and certified nurse aides in the long-term care facility are in the best position to observe changes in the resident mobility, gait, and behavior that indicates risk for fall. They can assess the risk for fall daily and implement an evidence-based multifactorial intervention to prevent falls and lessen the effect of non-preventable falls among the residents in the long-term care setting. The benefits of improving the efficacy of the nursing staff to implementing fall-prevention strategies outweigh the cost and time as it will lead to the positive outcome of reducing the fall rate in the long-term care setting.

### **Role of the DNP Student**

The DNP student is a transformation scholar. My role in the project was leading the development and delivery of the education project. I was able to develop the

education project because of my extensive knowledge of the topic. I am not an employee of the long-term care facility where project was implemented. I was able to collect data without bias because of my acquaintance in privacy issues and moral ethics in research procedures. The American Association of Colleges of Nursing (AACN) defined scholarship as “those systematic activities that systematically advance the teaching, research, and practice of nursing through rigorous inquiry that is significant to the profession, is creative, can be documented, can be replicated or elaborated and can be peer-reviewed through various methods” (AACN, 2006). According to the AACN, 2006, scholarship and research are the seals of doctoral education. The role of the DNP student is to gain the knowledge to cover the gap between EBP and Patient care (Zaccagnini & White, 2011).

### **Summary**

The gap in nursing practice is the absence of an evidence-based fall-prevention program in this long-term care facility. The purpose of this project was to educate nursing staff on implementation of a multifactorial fall-prevention strategy using the AMDA’s fall-prevention guideline and the STEADI toolkit so that they can gain self-efficacy in preventing falls in residents in a long-term care setting.

Section 3 provides more detail about the collection and analysis of evidence.

### Section 3: Collection and Analysis of Evidence

#### **Introduction**

The gap in practice the lack of a comprehensive fall-prevention program in this long-term care facility, which has experienced high fall rates among residents. The purpose of this project was to educate nursing staff on implementation of a multifactorial fall-prevention strategy using the AMDA's fall-prevention guideline and the principles from the STEADI toolkit so that staff can gain self-efficacy in preventing falls among residents in a long-term care setting. The practice-focused question was: Will education on the use of an integrated multifactorial fall-prevention guideline increase the confidence of long-term care staff in reducing falls in long-term care residents? This section will provide details on the sources of evidence.

#### **Sources of Evidence**

For the literature reviews for fall intervention, evidence-based journals from 2013 to 2019 were accessed through the Walden University Library using the CINAHL and Cochran databases. Terms and phrases utilized for the search include peer-reviewed fall-prevention in older adults, multifactorial fall-prevention, fall risk factors, fall-prevention in nursing homes, and the use of vitamin D supplements in fall reduction, systematic reviews on fall-prevention and meta-analysis fall-prevention strategies. Several research articles were evaluated for applicability in supporting the use of multifactorial fall-prevention strategies. The searches for fall-prevention approaches included fall assessment, fall risk assessment, and multifactorial implementation process was done. Many research articles were reviewed; it was determined that most reports focused on the

practice of fall-risk evaluation and assessment tools as the first step to assess the risk for fall. It is known that the assessment tools that are individualized to different care settings were favorable for each setting's fall intervention process (Leverenz & Lape, 2018). It is also known that focusing on specific risk dynamics is effective in reducing the sum of falls in older adults. Multiple articles reinforced the use of multifactorial interventions that are directed at defined risk factors (Leverenz & Lape, 2018). It was learned that precise aim at risk-reducing approaches could help prevent falls in clinical settings (Cameron et al., 2010). The literature also revealed that multifactorial interventions directed at fall prevention helped reduce the number of falls in a facility (Gillespie et al., 2012).

The population samples in the literature search criteria were mostly adults, 65 years and older, in either long-term care, assisted living, acute care, or community settings. A multifactorial intervention such as the use of exercise, gait and balance assessments, vitamin D supplementation, medications regimen assessment, vision assessment, and the environmental factor was evaluated. The analytical technique to answer the research project question include synthesizing the data descriptively and integrating the outcomes of the findings of the different kinds of literature examined.

The AMDA (2018) clinical practice guideline used for the staff education program was formulated to provide long-term care staff a comprehensive guide on identifying the intrinsic and extrinsic risk factors for falls and a systematic approach to patient assessment and how to choose the appropriate interventions for each patient (Vance, 2012). The AMDA organized themselves to develop a fall-prevention clinical



guideline (Vance, 2012). The AMDA used the Appraisal of Guidelines for Research and Evaluation (AGREE) instrument to critically appraise the clinical practice guideline to ensure that it is standardized for practice in the long-term care setting (Katz et al., 2014). The AMDA also utilized the rigorous process of having 450 AMDA members first review the guidelines and then having several organizations such as the American Geriatric society further revise and vet the instructions (Katz et al., 2014).

The guidance was developed to help facilities establish processes for evaluating, managing, and preventing falls (Vance, 2012). The clinical practice guidelines (CPGs) are intended to provide the long-term care staff the ability to identify the factors that indicates a resident is at risk for falls and how to carry out a comprehensive fall assessment and implement the appropriate individualized multifactorial fall interventions. AMDA guidelines stress necessary care procedures and are systematized for incorporation into any institutions policies and procedures to provide high-quality, evidence-based practice to prevent falls in the long-term care setting. The AMDA aspiration is that the guideline should be used to reduce the risk for fall, injury and increase the resident's self-esteem, independence, and quality of life (Vance, 2012). The AMDA Falls prevention Guideline highlights vital health care procedures and applies a multifactorial and an interdisciplinary team approach to guide the assessment, intervention and the implementation process. The CPG addresses the recognition, assessment, treatment, and monitoring phases (Vance, 2012). The AMDA fall-prevention guideline has produced positive outcomes on resident's standards of living, prevent falls

and enhance facilities monitoring and benchmarking falls to national levels (Vance,2012).

The STEADI toolkit information is provided through the Centers for Disease Control and Prevention. The CDC, in partnership with experts from the American Physical Therapist Association (APTA), developed the STEADI fall-prevention toolkit. The CDC and the APTA experts developed the kit using the principles from the American and British Geriatric Societies' clinical practice guideline (CDC, 2019). The STEADI fall-prevention toolkit is made up of essential facts on the incidence of falls, scenarios of falls, how to converse about falls, and the right way to take steps and walk, and assessment to test balance with training videos. The STEADI toolkit also includes an educational video and handout that provides information on how to prevent falls. The STEADI toolkit has been successfully used to avoid falls in the geriatric emergency department, Hospital settings, and in the community (CDC, 2019). After reviewing all the available literature, it is evident that some falls are not preventable, but some falls are preventable. The use of a multifactorial fall-prevention strategy by staffs who have the increased self-efficacy stands effective in reducing falls in the long-term care setting.

### **Analysis and Synthesis**

The project question was: Will education of staff on the use of a multifactorial fall-prevention tool increase the knowledge and confidence of long-term care staff in reducing the falls in long-term care residents? The purpose of this project was to educate direct care staff on implementation of a multifactorial fall-prevention strategy using the AMDA fall-prevention guideline and the STEADI toolkit so that they can gain

knowledge and self-efficacy in preventing falls in residents in a long-term care setting. The scholarly project introduced the AMDA's evidence-based multifactorial fall-prevention guideline and the STEADI fall risk prevention toolkit to the staff of the long-term care facility in Texas. The intended practice setting is a long-term care facility with six registered nurses (RN), twelve licensed vocational nurses (LVN), and twenty-eight certified nurse aides (CNA). The average age range of residents in the facility is sixty-five years old.

The project objective was to integrate the contents from the AMDA (2018) evidence-based clinical practice guideline, and the STEADI toolkit principles to teach a multifactorial fall-prevention program to the direct care staff of the facility. The clinical nurse leaders made up the team of clinicians for the exploring and delivery of the staff education program. This clinical fall-prevention team is made up of the 3 nurses with a master's degree in nursing. The 11 - item self-efficacy for preventing falls- Nurse (SEPF-N) scale was used to assess the nurses' pre/post education knowledge and self-efficacy in implementing fall-prevention interventions to prevent residents' falls. And the 8-item self-efficacy for preventing falls- Assistant (SEPF- A) was used to assess nursing assistant's pre/post education knowledge and self-efficacy in implementing fall-prevention interventions to prevent residents fall. These scales are chosen because the scales have shown validity and reliability about each item and scale totals when used in the assessment of nursing staff's self-efficacy beliefs for preventing falls ((Leverenz & Lape, 2018). The results from the pre and post-Likert style survey questionnaire was tallied, evaluated and compared.

All the team members and participants were informed of the purpose of the project and were volunteers. The long-term care facility expressed support for this quality improvement project and view the participation of all staff as a part of their professional development. There were no residents involved. To protect participants' rights and privacy and to ensure that the project is ethically conducted, I obtained approval from the project facility's IRB and employee union agency. The project was also submitted to the Walden IRB for approval, and the signed site agreement was obtained and submitted to the IRB. The preapproved consent form for anonymous questionnaires was used to conduct surveys to ensure the anonymity of staff members responses.

### **Summary**

The fall rate of residents 65 years and older living in the long-term care setting is double that of individuals 65 years and older living in the community (Vance, 2012). There was an urgent need to address the high fall rate in the long-term care setting and assist the interdisciplinary team of caregivers in the long-term setting. There was a gap in practice as there was no comprehensive fall-prevention program in this long-term care facility, which has experienced high fall rates among residents. The education program was intended to inform nursing staffs on implementation of a multifactorial fall-prevention strategy using the AMDA's fall-prevention guidelines and the STEADI toolkit so that they can gain knowledge and self-efficacy in preventing falls in residents in the long-term care setting.

Section 4 will address the findings and recommendations.

## Section 4: Findings and Recommendations

### **Introduction**

Falls in long-term care facilities remain an ongoing problem for the resident, the family, and the public. The gap in practice was the lack of a comprehensive fall-prevention program in the long-term care facility, which has experienced high fall rates among residents. The purpose of this project was to educate direct care staff on implementation of a multifactorial fall-prevention strategy using the AMDA's fall-prevention guideline and the CDC's STEADI fall-prevention toolkit so that they can gain knowledge and self-efficacy in preventing falls in residents in a long-term care setting. This scholarly project sought to introduce an evidence-based multifactorial fall-prevention guideline to the staff of the long-term care facility in the southern region of the United States.

The practice-focused question was: Will education on the use of an integrated multifactorial fall-prevention guideline increase the confidence of long-term care staff in reducing falls in long-term care residents? Research has shown that using an evidence-based multidimensional approach has helped many healthcare facilities reduce their fall rate (AHRQ, 2012).

### **Findings and Implications**

A pre- and post-Likert style survey questionnaire was administered to the direct care staff (7 nurses and 21 nursing assistants) to measure the knowledge gained and the staff members' confidence in implementing the guidelines. The evaluation was done using the 11-item Self-Efficacy for Preventing Falls—Nurse (SEPF-N) scale in Appendix

A to assess the nurses' pre- and post-education self-efficacy in implementing fall-prevention interventions. The 8-item Self-Efficacy for Preventing Fall-Assistant (SEPF-A) in Appendix B was used to assess the pre- and post-education self-efficacy of nursing assistants in implementing fall-prevention interventions. The answers from the pre-education survey were compared to the responses from the post-education survey. Ratings ranged from 1 (*strongly disagree*) to 5 (*strongly agree*). Results are the percentage of direct care staff reporting agreement at ratings 4 and 5 for each item at pre- and post-survey administration.

All nurses reported receiving a verbal report about their patient's fall risk and nurses from the previous shift told them what they could do to prevent patients from falling. However, 30% of nurses did not feel that they had easy access to why patients were at risk for falls. Nurses indicated in the post-education evaluation that they would improve communication on patient risk factors via shift report and documentation in the medical record fall-risk report.

In the pretest data, 25% of nurses reported that they did not give nursing assistants face-to-face reports about their patients' fall-risk. 40% of nursing assistants reported that they did not receive a verbal report about their patients' fall risk. On the post-education assessment, all nurses indicated that they would include this information in a face-to-face nursing assistant patient briefing at shift change in order to improve communication regarding patient safety.

The initial evaluation also showed that 25% of nurses reported not giving nursing assistants face-to-face information about how to prevent their patients from falling; 90%

of nursing assistants reported getting this information. At the end of the education session, 100% of nurses indicated that they would include this information about fall-prevention strategies in the communication process going forward. All nursing assistants indicated that they give a fall risk report and tell the nurses on the next shift what to do to prevent patients from falling.

While 100% of nurses reported that they all work as a team, only 63% of nursing assistants felt this way. Only 40% of the nursing assistants reported going to the nurse to ask what they should do to prevent a patient from falling. At the end of the educational session, both nurses and nursing assistants agreed to work to foster improved teamwork and communication regarding the prevention of falls among residents. 90 % of the nursing staff and 100% of the nursing assistants staff indicated increased confidence in the implementation of fall-prevention measures in the long-term care setting. The conclusion is that staff's knowledge, and determination to implement fall-prevention interventions were improved after the education on fall-prevention.

The implications of the findings in terms of the direct care staff is that their confidence to implement fall-prevention interventions have improved after the education on fall-prevention, and they now have the belief that they can do more to prevent resident falls. Research has shown that nursing staff's view of their capability is highly related to the degree of the levels of their actions (Leverenz & Lape, 2018). As a result, it is expected that the positive social change will be a decrease in the fall rate of residents in the long-term care facility and improved quality of life for the residents. Improving the knowledge and confidence of direct care staff in the long-term care setting will reduce

falls of residence and prevent all collateral losses that accompanies falls of the resident.

The residents will have more confidence in taking part in social activities and improving the quality of their lives when the fear of falling is eliminated.

The implication resulting from the findings in terms of the institution is that the direct care staff's utilization of best-practice guidelines will improve fall risk assessment, use of fall precautions, and decrease the number of falls and falls with injury in the facility. The anticipation is that the implementation of an evidence-based, comprehensive multifactorial fall-prevention interventions will reduce the fall incidence as the staff's knowledge and self-efficacy are enhanced to implement the fall-prevention interventions. An individual's belief of their capability is interrelated to the degree of the levels of their accomplishments, and there is a correlation of an individual's achievement to the overall attainment of the institution (Leverenz & Lape, 2018).

The research findings that have demonstrated that educating nursing staff in the long-term care setting on the use of an integrated multifactorial fall-prevention guideline leads to increased knowledge and self-efficacy to prevent falls (Stevens, 2013). Increased expertise and confidence of bedside nurses for implementing fall-prevention guideline will improve the nurses' professional practice behaviors as they can now exercise self-influence to shape their social systems (Leverenz & Lape, 2018). The increasing population of older adults in long-term care facilities will now have a comprehensive program in place to reduce falls and to improve their overall quality of life.



### **Recommendations**

A key recommendation is that a six-month pilot surveillance of the utilization of the fall-prevention measures and the number of falls in the unit be conducted to determine if there is a correlation between knowledge and self-efficacy and actual practice. If there is improvement in adherence to best practice guidelines and a reduction in the number of falls, this falls policy should be made permanent. The policy should also indicate that the direct care staff should be educated on fall-prevention at orientation and every six months to twelve months to reinforce the staff's knowledge and self-efficacy in preventing resident falls. Provisions for adequate resident care should be made for staff to attend the education sessions. Separating the direct care staff by their educational levels should be taken into consideration so that the education can be tailored for the understanding of the direct care staff. Additional research is needed to explore the longer-term relationship between nursing staff's knowledge and self-efficacy in preventing falls, practice change, and patient outcomes. Patient outcomes should be developed that include the impact of fall-prevention on confidence and participation in activity as well as number of falls and their health impact. A quality improvement tracking board with updates on the trends should be set up in the facility. This activity will provide feedback to the staff on how they are performing concerning preventing resident's falls.

### **Contribution of the Doctoral Project Team**

The DNP student and two master's degree clinical nurse leaders made up the team for developing, teaching and delivery of the education project and the pre/post-education survey. The DNP student was responsible for obtaining permission from the author of the

11 - item self-efficacy for preventing falls- Nurse (SEPF-N) scale and the 8-item self-efficacy for preventing falls- Assistant (SEPF- A). Among other tasks, one of the clinical nurse leaders was responsible for contacting the unit manager and informing them of the dates and time for the staff education program while the other clinical nurse leader was responsible for compiling the names of all intended participants for the project. The team worked together to assemble the multifactorial evidence-based fall-prevention intervention program, analyze the pre and post-survey results, and made the final recommendations. Every member of the team worked hard and contributed equally to ensure the successful execution of the project.

### **The Strengths and Limitations of the Doctoral Project**

The strength of the doctoral project is that it provides evidence that well-formulated educational programs can serve to improve nursing home direct care nursing staff's knowledge and self-efficacy in fall-prevention. As most of the fall-prevention research has focused on acute care, these findings will add to the knowledge about falls in the long-term care nursing literature.

An unanticipated limitation is that some of the participants could not attend a group presentation. Some participants had to take care of residents at the time the group education was being done. A one-on-one presentation of the material had to be done for such participants. This occurrence could increase the risk of bias that could affect the validity of the findings. Another limitation is the small sample size of registered nurses, which could affect the validity of generalization of the result to other long-term care facilities. The timing of the post-education survey could impact the validity of the

findings. The outcome might be different if the post-education review was after an extended period, such as one-month interval post-education. A recommendation for a future project is to give a reasonable interval before the post-education survey to provide the staff time to put into practice what they have learned.

### Section 5: Dissemination Plan

The result of the study has been presented to the leadership team in the facility. They have determined that this education will become the standard for the facility for orientation and continuing education/competency assessment. They have agreed to the recommendation of continuing the evaluation of nursing care by their clinical nurse leaders. I plan to publish this project in a journal of nursing continuing education and present to a meeting of long-term care providers. This will provide information to those in the long-term care industry on the use of best guidelines. This may also add to the nursing literature in addressing the needs of long-term care residents and fall-prevention.

#### **Analysis of Self**

The American Association of Colleges of Nursing (AACN) defined scholarship as "those systematic activities that systematically advance the teaching, research, and practice of nursing through rigorous inquiry that is significant to the profession, is creative, can be documented, can be replicated or elaborated and can be peer-reviewed through various methods" (AACN,2006). Although I encountered challenges such as the problem of getting the direct care staff buy-in to taking the pre and post-education survey. Some of the staff were reluctant to take the survey because they thought that there could be a negative repercussion for the answers they give to the survey. The team became cooperative and participated as volunteers after I explained to them that this is an anonymous survey, and no repercussion will come from it. As a DNP scholar, my research in using a multifactorial fall-prevention guideline in direct care staff education t led to improved knowledge and efficacy of the direct care staff to prevent residents' falls

in the long-term care. This increased my insight that the use of an integrated multifactorial fall-prevention guideline increases the knowledge and confidence of long-term care staff in reducing falls in long-term care residents.

There is the realization that nursing staff belief of their capability is related to the degree of the levels of their actions and there is a correlation between their activities to the overall achievement of the organization (Leverenz and Lape, 2018). The outcome of my project can open a door for other researchers to build upon. My role included continually gaining the knowledge to cover the gap between EBP and Patient care (Zaccagnini & White, 2011). I will continuously endeavor to expand my skills in developing and implementing evidence-based practice at the clinical, aggregate, and organizational levels in all health care settings.

Through my journey in the DNP program, I have become visionary, creative, a change agent, conflict resolution specialist, and a strong advocate for EBP. I have also become an advocate for a higher future of the nursing profession and the professionals in clinical practice, leadership and management, nursing education, nursing research, and health policy levels. I have acquired the necessary knowledge base for EBP, and I am a resource and facilitator of evidence-based practice to the bedside and other nurses. I have learned how to find evidence-based practice researched literature that I used to make EBP and guidelines available to other nurses to ensure that patient care is based on best available evidence instead of on trials and errors (Burns, Grove & Gray, 2013). I have improved skills on how to disseminate and implement evidence-based practice, and I perform the role of the disseminator and implementer of evidence-based practice.

As the project manager, I am in the position to ensure that the six-month pilot surveillance program of the nursing practice and the number of falls in the unit is conducted. I am also responsible for ensuring that there is a policy for staff education on fall-prevention every quarter to reinforce the staff's knowledge and improve their confidence in preventing a resident's fall. I am now proficient in using quality improvement strategies in creating sustaining changes at the organizational and policy level (AACN, 2006). I can research and teach EBP information. I am also proficient in encompassing research, integration, application, and education in all levels of an organization (Glassick, 2000). I can develop project information and make them available for peer reviews, critique, reproduction, and use by other professionals.

As a DNP student, I endeavored to expand my skills in developing and implementing evidence-based practice at the clinical, aggregate and organizational levels in all health care settings. I acquired all the necessary knowledge so that I can be a resource and facilitator of evidence-based practice to the bedside and other nurses. As a DNP student, I learned how to find evidence-based practice researched literature so that I can make EBP and guidelines available to other nurses to ensure that patient care is based on best available evidence instead of on trials and errors (Burns, Grove & Gray, 2013). I improved my skills on how to disseminate and implement evidence-based practice so that I can perform the role of the disseminator and implementer of evidence-based practice after graduation as a DNP nurse. I learned how to be proficient in using quality improvement strategies in creating sustaining changes at the organizational and policy level (AACN, 2006).

According to Glassick, 2000, Boyer and Rice proposed that the definition of scholarship should be more than teaching versus research but to encompass research, integration, application, and education. Schulman added that the criteria for the definition of learning should include the ability to be made public, available for peer review and critique, and reproducible and built on by others. I would say, this is real progress towards having an acceptable definition of the role of the DNP student.

### **Summary**

The project was a nursing education program on the use of an integrated multifactorial fall-prevention guideline increased the knowledge and confidence of long-term care staff in reducing falls in long-term care residents. Research has shown that nursing staff belief of their capability is highly related to the degree of the levels of their functioning. There is a correlation between their actions to the overall achievement of the facility (Leverenz and Lape, 2018). The responses from the self-efficacy pre and post-education survey questionnaires show that the education on the use of a multifactorial fall-prevention guideline increases the knowledge and confidence of the direct care staff. A multifactorial fall-prevention intervention can be effective in improving staff knowledge and self-efficacy in preventing falls in the long-term care setting. Further research will examine whether a gain in knowledge and self-efficacy translates to improved nursing practice and improved resident quality of health in long term care.

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## Appendix A: 11-Item Self-Efficacy for Preventing Falls-Nurse (SEPF-N)

Circle the number that best describes your opinion in the boxes below.

Response Format

1 = strongly disagree; 2 = disagree; 3 = neither agree nor disagree; 4 = Somewhat agree; 5 = strongly agree.

I am confident about my ability to prevent patients from falling because:

- |    |   |           |
|----|---|-----------|
| 1  | I receive a verbal report about my patients' fall risk  | 1 2 3 4 5 |
| 2  | The nurse from the previous shift tells me what to do to prevent my patients from falling           | 1 2 3 4 5 |
| 3  | I have easy access to information about why patients are at risk to fall                            | 1 2 3 4 5 |
| 4  | I have easy access to information on how to prevent patients from falling                           | 1 2 3 4 5 |
| 5  | I do a fall risk assessment during my shift   | 1 2 3 4 5 |
| 6  | I work with families/visitors to carry out the fall-prevention plan                                 | 1 2 3 4 5 |
| 7  | I give nursing assistants face-to-face report about their patients' fall risk                       | 1 2 3 4 5 |
| 8  | I give nursing assistants face-to-face information about how to prevent their patients from falling | 1 2 3 4 5 |
| 9  | I give a fall risk report to the next shift   | 1 2 3 4 5 |
| 10 | I tell the nurse on the next shift what to do to prevent our patients from falling                  | 1 2 3 4 5 |
| 11 | We all work together as a team  | 1 2 3 4 5 |

## Appendix B: 8-Item Self-Efficacy for Preventing Falls–Assistant (SEPF-A)

Circle the number that best describes your opinion in the boxes below.

## Response Format

1 = strongly disagree; 2 = disagree; 3 = neither agree nor disagree; 4 = Somewhat agree;  
5 = strongly agree.

I am confident about my ability to prevent patients from falling because:

- |   |  |           |
|---|--|-----------|
| 1 | I do receive a verbal report about my patients' fall risk                    | 1 2 3 4 5 |
| 2 | The nurse tells me what to do to prevent my patients from falling            | 1 2 3 4 5 |
| 3 | I write down information about my patients' fall risk                        | 1 2 3 4 5 |
| 4 | I go to the nurse and ask what I should do to prevent a patient from falling | 1 2 3 4 5 |
| 5 | I have all the equipment my patients need to prevent them from falling       | 1 2 3 4 5 |
| 6 | I make sure that there is a clear path to the bathroom                       | 1 2 3 4 5 |
| 7 | I answer any call light rapidly  | 1 2 3 4 5 |
| 8 | We all work together as a team   | 1 2 3 4 5 |