

# **INTRODUCTION**

Falls are a major threat to the health and independence of older adults.

- Each year, 1 in 3 adults >=65 experiences a fall, and people who fall once are 2 to 3 times more likely to fall again (CDC, 2016).
- Every second of the day an adult aged 65 years and older falls.
- Globally 646,000 individuals die from falls each year (WHO, 2018).
- Effective strategies to prevent falls have been identified but are underutilized (Tinetti et al., 2008).
- 2018 cost for falls= \$34 billion.
- 50% of all falls can be prevented (Brenoff, 2012).
- Fear of falling, as been associated with increased fall risks (Lee, et al. 2018)
- Early assessment and intervention can prevent a fall and decrease development of additional medical problems and disability. (Stanhope & Lancaster, 2016)

#### PURPOSE

To determine the effects of reducing the incidence of falls for adults aged sixty five years and older living in their homes.

### **PROBLEM STATEMENT**

Among adults >= 65 years there was a lack of awareness and education regarding fall prevention strategies.

- VNA reported 19 cases of falls in 1 month.
- The fall rates were 20% higher than the state and national benchmark of 1.54%.
- These data supported the need to improve the fall prevention program at the agency.



#### **PICOT QUESTION**

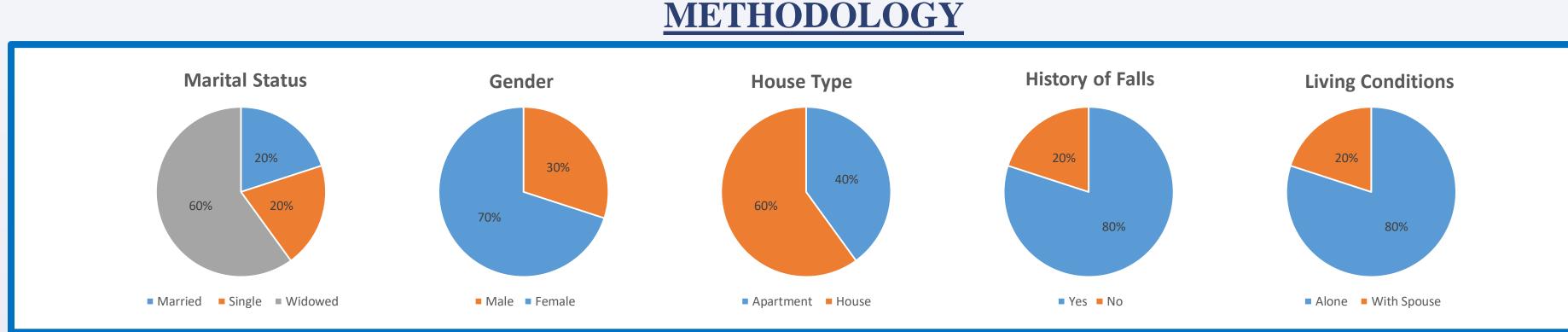
- P: Adults >= 65 living in their homes
- I: Education on fall prevention strategies
- C: No education on fall prevention strategies
- O: Lower incidence of falls
- T: Within 6 weeks





# **Educating and Engaging Elders** in the Sure Steps **®Fall Prevention Program**

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N= (10) Average age 76

- A convenience sample was used among 10 adults>=65 living in the community.
- Medical history may include conditions that are stable but affect mobility, such as: heart disease, diabetes, arthritis, Parkinson's disease, pain, osteoporosis, depression.
- May have history of prior fall with or without injury.
- May be taking any medication(s) that increases fall risk such as: benzodiazepines, antidepressants, sedatives, antihypertensives, analgesics, and diuretics.
- Walks with or without an assistive device, but may have difficulty or is unsteady.
- Does not usually leave home without assistance of another person.
- Does not have a cognitive impairment.
- Needs to be an active participant in the program (Sure Steps®, 2012).

#### **Instrument - The Falls Efficacy Scale**

Tinetti, Richman, and Powell (1990) developed "the Falls Efficacy Scale (FES), an instrument to measure fear of falling, based on the operational definition of this fear as 'low perceived self-efficacy at avoiding falls during essential, nonhazardous activities of daily living.' (Tinetti, Richman & Powell, 1990, p.239).

#### Design

This was a quantitative pilot study using a pre and post survey design enrolled in the program for six weeks.

- Phase 1, each participant filled out a FES at the beginning and upon completion of the program in their home. The FES was included in the patient's Sure Steps® Guidebook, which was given to them on the first visit by the physical therapist.
- Phase 2, conducted the follow-up telephone survey from the participants who had completed six weeks in the Sure Steps Fall Prevention Program. A total of four questions were asked: (a) Have you fallen, (b) Have you been doing the exercises, (c) The FES questions, and (d) What is your long term goal? In addition, during Phase 2 I asked the patient to fill out a new FES. This was the qualitative data collection Phase 2 of the project

### **RESULTS AND DISCUSSION**

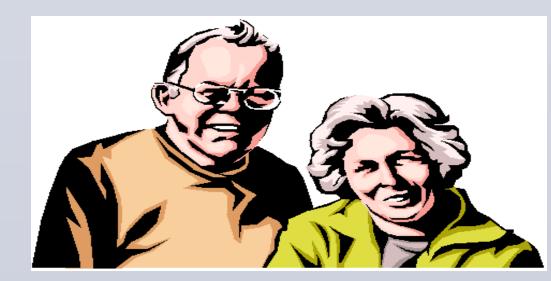
#### **Data Analysis**

- Frequencies and percentages were conducted with the FES and quantitative data.
- Paired t-tests were used to compare the scores from the pre survey and post survey.
- A content analysis was conducted which included the responses from the open ended questions on the telephone survey.

#### FINDINGS

- No falls were reported by participants who received monthly telephone follow-up surveys over the one year timeframe.
- All participants who made the recommended home modifications either had an improved FES score or remained the same.













- It is essential to educate nursing students about fall prevention strategies; For example:
- Wearing proper footwear, either nonskid socks or shoes.
- Removing any environmental hazards that someone could trip over.
- Proper use of lighting in hallways and on stairs.
- Adjust the height of the bed for easy access on and off. • Install grab bars near toilet and tub.
- Install handrails on both sides of stairs.



# CONCLUSIONS

- The program decreased the fall risk for the sample group.
- Falls and accidents seldom "just happen" and many can be prevented. This project provided adults >=65 living in their home a safer
- environmental atmosphere and an ongoing exercise program. • VNA staff received training at four additional office sites.
- Reducing falls, decreases the burden on the healthcare delivery

### **IMPLICATIONS FOR NURSE EDUCATORS**

- These results can be directly translated into evidence-based practice. This program could be replicated for anyone with a:
- Disability, mobility issue, Parkinson's disease, pain, sensory deficits
- Osteoporosis, arthritis, abnormal
- cognition, oxygen deficits
- A history of heart disease, diabetes, peripheral neuropathy



This Sure Steps<sup>®</sup> resource guide could be created in other languages to be utilized internationally.

# **FUTURE STUDY**

Connecting clients with the program and collaborating with other visiting nurses and homecare agencies could act as a catalyst, to provide more detailed definitive data on programs outcomes across the United States and around the world.

### REFERENCES

- Brenoff, A. (2012). Falls lead the path toward nursing home. *The Huffington Programs*. Retrieved from:
- http://www.cdc.gov/homeandrecreationalsafety/pdf/falls/fallpreventionguide-2015- a.pdf
- CDC, (2016) Home and Recreational Safety. Retrieved from:
- http://www.cdc.gov/homeandrecreationalsafety/falls/adultfalls.html Lee, S., Lee, C., Ory, M., Won, J., Towne, S., Wang, S. & Forjuoh, S.,
- (2018). Fear of Outdoor Falling Among Community-Dwelling Middle-Aged and Older Adults: The Role of Neighborhood Environments. The
- *Gerontologist*, 58 1065–1074. Retrieved from: https://doi.org/10.1093/geront/gnx123
- Stanhope, M. & Lancaster, J. (2016) Public heath nursing; Population-centered healthcare in community (9th ed) St. Louis, MO; Elsevier.
- Sure Steps, (2012). A clinical overview of Sure Steps®: A fall prevention program. Retrieved from
  - www.vnacarenetwork.org
- Tinetti, E., Baker, D., King, M., Gottschalk, M., Murphy, T., Acampora, D.,
  - & Allore, H. (2008). Effect of dissemination of evidence in reducing injuries from falls. *New England* Journal of Medicine, 359 (3), 252-61.
- Tinetti, M., Richman, D., & Powell, L. (1990). Falls efficacy as a measure of fear of falling. Journal of Gerontology, 45 (6), 239-243. WHO, (2018). Falls, Retrieved from: www.who.int/news