

Fall Prevention: Increasing Awareness and Preventive Care in Older Adults

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Introduction and Purpose

- Falls in community-dwelling older adults are significant health concerns and continues to be on the rise despite many initiatives and available evidence-based interventions. Those with a history of falls have a higher risk of subsequent falls. More than one out of four older adults fall each year, but less than half are open to discuss the issue with their healthcare providers (Center for Disease Control and Prevention [CDC], 2017).
- The purpose of this project was to use an education tool in conjunction with a post-discharge call to increase awareness of major fall risk factors and empower post-fall patients discharged into the community.

Background/ Literature Review Summary

- A fall can be a life-changing event leading to increase frailty, dependency, and loss of self-worth (Larson, 2017).
- Falls in these older adults are particularly common in those with previous falls and the post-discharge period (Hoffman et al., 2019).
- About 14% of older adults have experienced a fall within 1-month post-hospital discharge and 40% within 6 months after discharge (Tzeng et al., 2020).
- Three million older patients are treated in emergency departments for fall injuries while over 800,000 patients are hospitalized because of a fall injury per year (CDC, 2017).
- Fall is the leading cause of injury-related deaths among people age 65 years and older (older adults) and continues to increase (Burns & Kakara, 2018).
- An estimated 43,000 older adults will die in the United States because of a fall in 2030 if the rate remains the same (Burns & Kakara, 2018).
- The total medical costs for falls in 2015 were more than \$50 billion of which Medicare and Medicaid carried 75% of these costs (CDC, 2017).

Patients' Barriers

The following themes emerged regarding the intent, perception, and motivation of older adults about falls and prevention interventions:

- Elimination of barriers was done through proactive assistance, understanding motivation, and increased frequency of follow-ups (Mikolaizak et al., 2018).
- There are top three opportunity-related facilitators of fall prevention interventions: institutional or organizational support, social support or encouragement, and engaging older adults to mitigate participation barriers (Tzeng et al., 2020).
- Gaps and the need for future research in fall prevention relative to behavioral changes were revealed (Tzeng et al., 2020).
- Increasing fall risk awareness, emphasis on evidence-based fall prevention advice, follow-up actions, and routine discussions about falls could advance older adults' perception and participation in fall interventions significantly (Lee et al., 2015).

Nursing Theoretical Framework

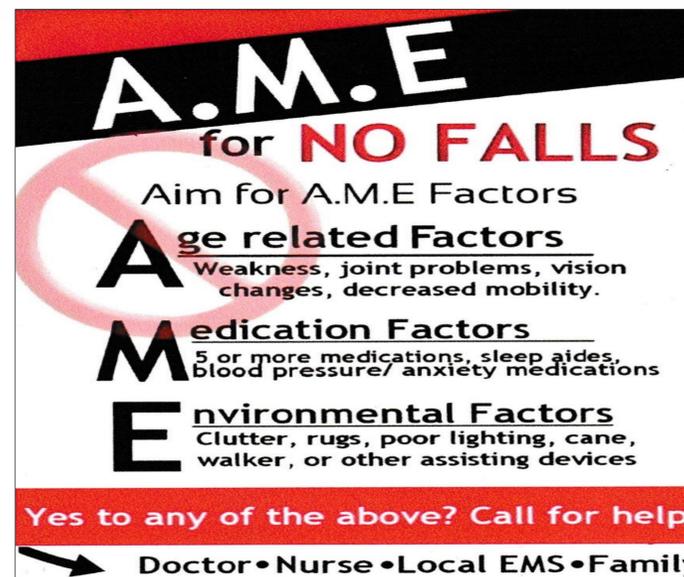
- The Health Belief Model (HBM) by social psychologists Hochbaum, Rosenstock, and others.
- Explains the failure of people to engage in disease detection and prevention programs (Glanz et al., 2015).
- Serves as a guiding framework for interventions and explains the change of health-related behaviors (Glanz et al., 2015).
- Uses six constructs to explain health behaviors: Perceived susceptibility, perceived severity, perceived benefit, perceived barriers, and cues to action, while self-efficacy was added later (Glanz et al., 2015; McEwen & Wills, 2014).
- The construct of cues to action is a unique concept of HMB that provides a specific internal or external stimulus that triggers health-related behaviors or effects that could make the patient aware of a health threat or risks (McEwen & Wills, 2014).
- Promoting awareness and using appropriate reminder and recall systems are intervention strategies to influence this concept (Glanz et al., 2015).
- Performing post-discharge calls in conjunction with a visual tool that highlights fall risks and helpful resources serve as cues to action. Activation of readiness to act and stimulation of overt behaviors come from cues to action (McEwen & Wills, 2014).

Methods/ Project Description

- A fall risks awareness tool- **A.M.E. for NO Fall Magnet**- was created by categorizing common fall risk factors under **3** main factors:
 - **Age related Factors**
 - **Medication Factors**
 - **Environmental Factors**
- A post-discharge call script was created which incorporated an aspect of meeting with the PCP and a brief education about fall risks and fall prevention.
- Pilot patients were identified
- Post-discharge calls were made to **96** candidates
- 54** candidates were reached out of **96** calls made and **23** were interested in the **A.M.E. for NO Fall Magnet**
- The **A.M.E. for NO Fall Magnets** and the study instruction / written consent, were mailed to the interested **23** candidates
- Post-intervention calls were made to the **23** candidates 3 to 4 weeks after mailing out the magnet using the post-intervention questionnaire
- 14** out of **23** candidates were reached and evaluated

Results & Evaluation

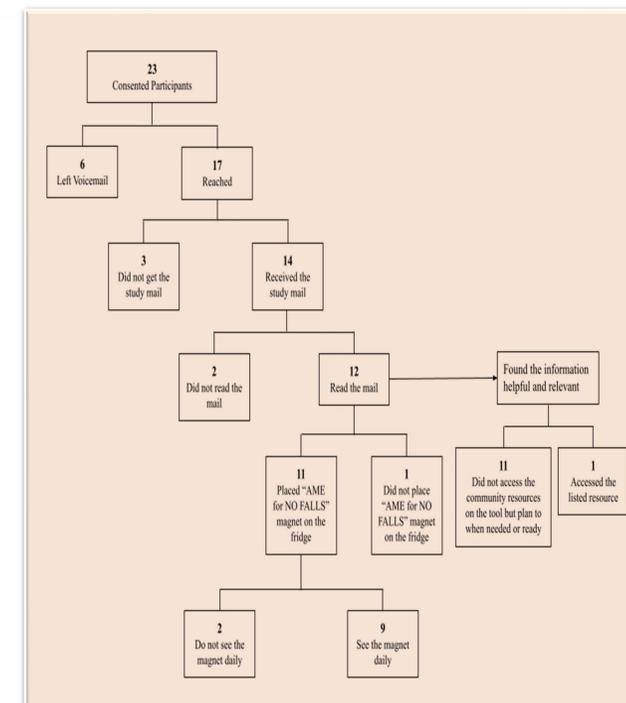
- To foster a patient-driven approach towards fall prevention and access fall prevention resources in the community.
- 12** out of **14** respondents found the information on the magnet relevant and helpful with the plan to access the listed resources in the nearest future.



Post-Implementation Assessment Results and some Responses

Q#	Question	Yes	No
1.	Did you read the information on the fall prevention magnet after receiving it? "I have not been home for some time to take care of my mails"	12	2
2.	Did you place it on your refrigerator or any other visible location? "I don't have a magnetic fridge"	11	1
3.	If yes, do you see the information on the magnet as a daily reminder to you? "I really don't have a specific reason except may be because my fall was accidental caused by my dog, so no point to focus on that" "I don't go to the kitchen area that much since I return from rehab"	9	2
4.	Is the information relevant and helpful? "Serves as a reminder about fall" "They are information I am already familiar with somehow" "Yes! That magnet is colorful. It reminds you and calls you to look at it. I think when others, like my friends come to my house, it will catch their attention" "Very informative" "The information may not be helpful for older patient like my dad but it's helpful and a reminder to the caregivers and family members like me"	12	0
5.	Did you call your primary care provider, or access any other resources listed on the magnet because of questions, concerns or issues regarding falls? "Yes, when I fell again after having a hip replacement done"	1	11
6.	If yes, did you get the help you needed towards preventing falls? "Yes, there is a plan in place to re-do my hip replacement surgery"	1	N/A
7.	If no, are you planning to access or call your primary care provider or other resources? "If needed, I know where to find it on the magnet" "Yes, I always call my daughter" "Yes, I know where it is if needed and I have a family close by" "Yes, because I have fallen twice, and I don't want to fall again"	11	0
8.	Would you like us to follow up with you with an additional call to address any concerns? "No concerns at this time but you are more than welcome to call" "No, I always call my daughter and son, they work in healthcare" "I should be fine, I just got approved for life alert and will be using that" "It will be nice to have a place or a phone number on the magnet to contact"	6	5

Notes: Many participants responded that they did not call the listed resources because they just did their follow-up appointments or had follow-up appointments coming up.



Implications for APRN and Primary Care

- Nurse Practitioners are required to promote fall prevention strategies to prevent patients' harm, morbidity, and mortality while saving healthcare costs.
- Post-discharge calls and fall-risk awareness tools could improve patients' motivation and consequently reduce barriers and improve advanced providers' collaboration with the patients.
- With this patient-driven fall prevention approach, the advanced providers would be able to engage the patients in fall prevention practices easily and obtain patients' support to achieve treatment intervention plans and outcomes.

Conclusion

- Empowering older adults through increasing awareness about fall risk factors could promote engagement in fall prevention strategies and their collaboration with healthcare providers.
- This study revealed participants' interest and engagement with this tool.
- Participants are yet to proactively access the healthcare resources on the tool since many just had or would have post-discharge follow-up with their primary provider.
- However, participants noted the awareness of the fall risk factors and the resources to access.
- This empowerment could help reduce the high number of falls and the associated healthcare cost projected for 2030.

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