Safely Avoiding Falls Everyday (SAFE)

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Recommended Citation
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Safely Avoiding Falls Everyday (SAFE)

Description
This paper examines the process undertaken in the quest to develop a fall prevention program for a local county government agency in Oregon. The Safely Avoiding Falls Everyday (SAFE) curriculum was developed after a literature review to determine features and variables of existing programs.

Disciplines
Occupational Therapy

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Safely Avoiding Falls Everyday (SAFE)
Peer-led Community Fall Prevention Program

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A collaborative effort between Washington County Family Caregiver Support Program and Pacific University School of Occupational Therapy
Safely Avoiding Falls Everyday (SAFE)

Peer-led Community Fall Prevention Program

A collaborative effort between Washington County Family Caregiver Support Program and Pacific University School of Occupational Therapy
Safely Avoiding Falls Everyday (SAFE)
Peer-led, Community-based Fall Prevention Program

2011 Innovative Practice Project by
Summer Ireland and Christy Running

A collaborative effort between
Washington County Family Caregiver Support Program and
Pacific University School of Occupational Therapy
“I fell at home yesterday. That’s just what happens when we get older”. This may be a hypothetical quote, but one that could easily be heard from a growing proportion of today’s older adult population. Falls are a prominent cause of injury and death for older adults. Almost one in three seniors fall per year, with 20-30% of those falls resulting in injury. Among the senior population in Oregon, the leading injuries that falls cause are hip fractures and traumatic brain injuries. Falls are the 10th leading cause of death among Oregonians ages 65 and older, and Oregon ranked 11th in the country for fatal falls among seniors in 2005 (Oregon Health Authority, 2005).

Does this mean that people should just swallow the bitter pill and come to grips that everyone will suffer falls and break hips and heads as time marches on? Or, is it perhaps smarter to take a proactive approach and put systems in place that will help lower that risk of falling? Where is the best place to obtain information on preventing falls? One obvious answer would be by talking with one’s physician about any medical conditions or medications that may increase the risk for falling? However, not all people are aware that some conditions or medications can affect fall risk. Additionally, older adults avoid discussing falls with their physician, for fear of losing their independence. There are suggestions that knowledge of fall prevention may be better received by someone who older adults can better relate to. There have been studies documented in Australia and Great Britain, evaluating the effectiveness of peer led fall prevention training. A peer is someone of a similar age, role, culture, religion, health condition, interest, and/or other aspects that link people together.
This paper examines the process undertaken in the quest to develop a fall prevention program for a local county government agency in Oregon. The Safely Avoiding Falls Everyday (SAFE) curriculum was developed after a literature review to determine features and variables of existing programs. In order to identify articles fit for inclusion in this literature review of peer-led fall prevention curricula, Pubmed, MEDLINE, and CINAHL were searched using the terms “fall prevention”, as well as the combination of “peer” and “fall prevention”. Reference lists of articles related to the search terms were also scanned to supplement the search findings.

Existing Fall Prevention Curricula

Upon examination of several fall prevention courses, similarities and differences emerged. Similarities included course content such as home safety and environmental modifications, awareness of risk factors, and exercises for increasing balance to name a few. Some main differences between curricula appeared to be duration of the course, who held the leadership/teacher role conveying the information to the class, and whether or not the course offered a screening component. Of the classes examined by this literature review, class duration ranged from a short 30-minute presentation for the Stay On Your Feet program (Hughes, Newman, Jones, 2007) to a 12-week, weekly curriculum addressing a different content area each week (Banez, Tully, Amaral, Kwan, Kung, Mak, Moghabghab, Alibhai, 2008).

Leadership role was another key area of difference in curriculum design. Several programs examined were peer-led, even to the level of trying to match ethnic backgrounds to overcome language and cultural barriers (Hughes et al., 2007) to an interdisciplinary, multi-instructor course with a different professional teaching each session’s content, such as physical therapists, occupational therapists, doctors, nurses, and optometrists (Banez et al., 2008). Those
classes offering instruction by professionals were often seen to offer various health screenings, such as vision, balance, and medication review.

**Peer-led Programming**

Sciacca stated “Peer education is the teaching or sharing of health information, values and behaviors by members of similar age or status” (as cited in Vernon, 2010).

There are several reasons to promote the design of using peers to lead fall education programming. Among the arguments in favor include providing a positive role model for peers to emulate, breaking down communication barriers that can exist across generations or between professional and lay groups, and economic sustainability inherent in volunteer-powered programming (Peel & Warburton, 2008). In addition, a sense of trust and sharing may be more present in a class led by peers. According to Peel and Warburton’s (2008) review, although research is insufficient to prove that peer-led fall prevention leads to less incidence of falling, some evidence suggests that there has been an increase in knowledge and awareness of risk factors (Hughes et al., 2007). Part of the advantage of utilizing a peer leader is the increased likelihood of relating between leader and class attendee. A peer leader who is closer to the same age as a class attendee may have shared more similar experiences as an attendee that, say, someone much younger. Furthermore, an attendee may feel more comfortable sharing with a peer leader with decreased fear of jeopardizing their level of independence that they may perceive if sharing fall history with their physician.

A study in Great Britain examined the responses of class attendees following the peer led “Positive Action on Falls” program (Allen, 2004). Many attendees reported that it was the first time they had been provided any information regarding falls or fall prevention, and that the
presentation resulted in them having an increased understanding of certain causes, as well as feeling more comfortable about what to do in the event that they do fall (Allen, 2004). Some of the statements from the responses included:

- “...it was a good experience and we have learned several tips on how to prevent accidents that we never thought about before”;
- “...made me think about things I have never thought of before”;
- “...removed a rug at the top of my stairs”;
- “...always put the light on when I get up in the night now--I never used to” (Allen, 2004)

One study addressed the actions of subjects who attended the peer-led “Up and About” program in Victoria, Australia (Deery, Day, and Fildes, 1999). Materials presented by peer leaders included raising awareness of risk factors for falling, ways to prevent falls, and modifications at home and in the yard to help prevent falls (Deery et. al., 1999). Follow-up information was collected from attendees three and twelve months after completing the program. Attendees reported installing more features at home and in their yards, as well as taking more actions to prevent falling, compared to a control group that did not attend the program.

Peer education as part of health promotion initiatives such as fall prevention awareness is one useful approach to increasing awareness and indirectly decreasing risk. It is not a replacement for treatment or education provided by medical professionals (Vernon, 2010), and should not be promoted as such, but rather as a supplement to other avenues of health promotion.
Theory

When examining the theoretical underpinnings of peer led education, particularly in healthcare promotion, some of the following theories emerge: social learning theory, social identity theory, and the transtheoretical model of change (Peel & Warburton, 2008). Social learning theory (Bandura et al., 1977) states that instilling a sense of self-efficacy or confidence can create expectation that a goal will be met. Similarly, the process a learner goes through in the transtheoretical model of change also results in a sense of self-efficacy through behavior change (Johns, 2007). Social identity theory posits that people are better persuaded (or in the case of a class, better taught) by people who share their social group and share similar characteristics (Johns, 2007). These overlapping themes lead to the conclusion that peer education is a “good fit” for health promotion education, particularly for older adults who, as an age cohort, hold a vested interested in maintaining health and functional independence.

Fall Prevention and Occupational Therapy

Several health care professions provide advocacy, education, and care dedicated to the prevention of falls. The value of occupational therapy’s involvement with fall prevention takes place on multiple levels, many of them deriving from the Occupational Therapy Practice Framework: Domain and Process (OTPF). First, occupational therapists are trained to consider the various contexts and environments that affect a person’s ability to perform desired and necessary occupations. Such contexts and environments include cultural, personal, temporal, virtual, social, and physical environments (American Occupational Therapy Association, 2008). The OTPF defines the physical environment as the natural and built nonhuman environment and the objects in them (AOTA, 2008). The physical environment plays a crucial role when
determining the ability to safely maneuver through one’s home, yard, and driveway, based on the home layout, as well as any objects that may impede “traffic” or pose as a fall risk. Such items include throw rugs and cords in the walkways, narrow walkways, and improper or inadequate lighting.

Second, occupational therapists are trained to assess performance skills that are required for performing tasks within an environment. Performance skills learned include motor and praxis, sensory-perceptual, emotional regulation, cognition, and communication and social skills (AOTA, 2008). When considering motor and praxis skills, an occupational therapist is educated in assessing how a person bends and reaches for items, pacing themselves, coordination of body movements necessary to perform a task, and adjusting posture and positioning. If one or more of these areas are not being executed properly, the risk for falling increases. This also applies to sensory-perceptual skills, such as having the ability to positioning the body in a safe place to move or walk, as well as timing the appropriate moment to step over items in one’s path, such as an animal.

Occupational therapists are also trained in the concept of performance patterns, such as habits, routines, rituals, and roles. For example, an occupational therapist may recommend a person placing their mostly used kitchen supplies at torso level to keep them from needing a step stool to reach items up high, or crouching near the floor to obtain items down low. If the person develops the habit of placing objects near torso level, they will decrease their risk of falls in the kitchen. This leads into two main occupational therapy intervention approaches indicated in the OTPF: modify and prevent. Occupational therapists are educated in the area of modifying activities, behaviors, and environments. An occupational therapist may help prevent a person from falling by suggesting modifying one’s environment, such as installing a grab bar in the
bathroom, adding rope lighting for proper night time sight, and removing throw rugs that are not secured to the floor.

**Designing the SAFE program**

In order to develop the most useful, economically sustainable, user-friendly program that could easily be integrated to be taught by a motivated volunteer, the new fall prevention program was designed as a single-session, peer volunteer-led community-based class. Based upon recommendations from the Centers for Disease Control’s National Center for Injury Prevention and Control (2008), the following content areas were addressed in the newly developed program: risk factors and home safety education. Other CDC recommended content areas that were beyond the scope of this single-session peer-led program included vision assessment, exercise recommendations, and medication reviews. The SAFE program was designed with three goals in mind: increasing awareness of risk factors, increasing recognition of the need for potential referrals to medical professionals, and increasing likelihood of simple behavior and environmental changes.

In conclusion, falls are occurrences that will continue to happen throughout the life span, from childhood to old age. There will always be a need to educate the public on how to avoid a fall, how to set up one’s environment and behaviors to help prevent falling, and what to do in the event of a fall. Although many professional disciplines advocate and educate on fall prevention, peers are also a viable and credible group to deliver fall prevention information. Through the ability to relate with older adults by experience or knowledge, older adults may feel more comfortable with, as well as critically listen to information coming from a peer. The resources
mentioned earlier from Great Britain and Australia indicate that there is a successful place within health care for peer-led fall prevention training. Furthermore, the occupational therapy viewpoint can pose as a valuable vehicle to design training and curricula in order to assist people with identifying how fall prevention fits into their lives. Overall, the goal is to decrease falls, decrease expensive, long-healing injuries, and decrease the number of deaths that face today’s and tomorrow’s older adults. The way to get there is through prevention and education.

Resources:


National Center for Injury Prevention and Control (2008). *Preventing Falls: How to Develop Community-Based Fall Prevention Programs for Older Adults*. Atlanta, Georgia: Centers for Disease Control.


General Things to consider when leading a group/class (Papke)

- Get your point across by being as brief and concise as possible.
- When making a point, give specific examples and details.
- Utilize explanations, principles, and generalizations as appropriate.
- Verbalize/acknowledge when someone has said or done something that you like.
- Listen to understand the other person, instead of preparing your next statement.
- Help others participate in discussions.
- Make sure you understand what others are saying before agreeing or disagreeing with them.
- Summarize the key points of agreements and disagreements.
- Ask questions that elicit more than “yes” or “no” answers.
- Pay attention to how much you speak in group discussions, making sure that others are able to share as well.
- Prepare ahead of time to become familiar enough with the material that you can use your own words to describe it.

Tips for Facilitating in Pairs (Alameda County, 2008)

- Agree ahead of time how to share the limelight; for example, does one facilitator mind if the other interjects with a story, or would you prefer to keep sections very separate and not speak over each other?
- Decide ahead of time how to divide the material.
- Consult ahead of time which sections are more critical to cover and which can be skimmed over if you realize that you are running short on time.
- Where will one presenter stand while the other is presenting?
- Debrief afterwards - what went well, what needs more practice? Avoid criticizing your co-presenter in front of the group.
**Tips for Adult Learning** (Zemke, 1984)

- Straightforward “how-to” instruction is preferred
- Consider that attendees may be there due to a life-changing event - fear, concern, and stress may come from one’s own experience or what loved ones have been through
- The sense of control through increased knowledge that you are giving the learners may help alleviate this stress or worry and help them through a transition time in their lives
- Increasing or maintaining one's sense of self-esteem and enjoyment are also motivators for seeking out learning experiences.
- Adults have expectations and want to know at the beginning the clear objectives for what they are going to learn - “tell them what you’re going to tell them, tell them, then tell them what you told them”
- Make the classroom comfortable; avoid long periods of sitting without a chance to stretch and stand, and avoid long periods of listening without a chance to contribute
- Understanding of concepts is more important than sticking to a set schedule and covering every bit of content; be prepared to spend more time on a subject if the class is more focused on a particular section of the course and seems to be getting a lot out of it
- Be open to facilitating - letting participants’ contributions lead the discussion, as long as one class member is not dominating the conversation. Sharing relevant experience and knowledge makes participants feel more involved in the course.

**References:**


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SAFE

Safely
Avoiding
Falls
Everyday

Washington County Disability, Aging, and Veterans Services
Family Caregiver Support Program

Pacific University School of Occupational Therapy
Today’s talk

✓ Risk factors for falls
✓ What you can do to avoid falling
✓ Ideas to make your home safer
✓ What to do if you do fall
✓ Developed with help from:
  • Occupational therapists
  • Physical therapists
  • Pharmacologists
Why is fall prevention important?

- Accidental falls are a major cause of injury and death among older adults.
- Almost 1 in 3 seniors falls each year.
- 20-30% of those who fall are injured--leading injuries: hip fractures and brain injuries.
- Falls are the 10th leading cause of death among Oregonians ages 65 and older.
- In 2005, Oregon ranked 11th in the U.S. for fatal falls among older adults.

(Purcell et. al, 2008)
Risk Tower

1. Balance problems
2. Mobility issues
3. Multiple medications
4. Low blood pressure
5. Sensory Deficits
6. Home hazards
Balance Problems

Balance can be affected by:

- Change of medical condition
- Using a poorly fitting assistive device
- Some footwear
- Medication
- Dizziness/vertigo
- Dehydration
Mobility Issues

The ability to get from place to place can be affected by

- Pain
- Stiff or swollen joints
- Lack of mobility devices (cane, walker, wheelchair)
- Ill-fitting mobility devices
Multiple Medications

4 or more?

- If you take 4 or more medications, check with your doctor or pharmacist for any interactions
- This includes over-the-counter
- Multiple medications can affect blood pressure
- Grapefruit juice interacts with many medications
Low Blood Pressure

Can happen when we quickly stand up from lying or sitting. A drop in blood pressure can affect:

- balance
- vision
- coordination
Sensory Deficits

The following deficits can increase your risk for falling:

- Neuropathy – pain & numbness in hands & feet
- less ability to sense the need to go to the bathroom
- conditions affecting the ability to grab items effectively
- painful limbs and joints
Home Hazards

- Throw rugs
- Poor lighting
- Stacks of magazines and clutter
- Items stored out of reach, requiring standing on a chair
Adapting Activities
Dressing

- Sit down while dressing and putting on shoes
- Wear nonslip, low-heeled shoes or slippers that fit snugly. Avoid walking in stocking feet.
- Wear shoes and slippers with firm non-slip soles. Avoid wearing just socks, loose-fitting slippers, leather or other slippery soles.
Sit-To-Stand

1. Scoot forward in chair
2. Tuck feet firmly under you
3. Lean forward – “nose over toes”
4. Push off from chair to rise
5. Be sure you have your balance before starting to walk
Health Maintenance

- Review medications with your doctor or pharmacist, including over-the-counter drugs. Some drugs may make you drowsy, dizzy, and unsteady.

- Have your hearing and eyesight tested

- If you wear glasses…
  - Keep your prescription current
  - Keep your glasses clean
Keep in Mind

Don’t let fear of falling make you inactive; instead find ways to do your favorite activities safely.
Changes at Home
Outside at Home

- Keep walkways clear and well lit
- Be sure steps have a sturdy handrail that is easy to grip
- Keep yard free of hazards like hoses and tools
- Make sure paths around the house are in good repair and free from moss and leaves
Floors and walkways

- Remove clutter from walking areas and stairs.
- Keep cords out of pathways.
- Position fans and heaters away from walkways or the middle of the room.
- Remove or replace rugs and runners that slip, or attach nonslip backing.
- Check that all loose mats have slip-resistant backing and lie flat. Avoid throw rugs and mats if possible.
- Make sure carpets are in good condition, especially on steps.
- Tack down rugs so that they lie flat.
Around the house

- Avoid standing on chairs to reach items.
- Store frequently used objects within easy reach.
- Place furniture so that you don’t have to stretch or lean too far to open windows.
- Wipe up spills as soon as they occur.
- Place a bell on your pet’s collar so you always know where it is.
- In the kitchen, put frequently used items between hip and eye level to avoid using a step stool or stooping.
- A rolling cart can be useful to carry items from room to room.
- Use a sturdy step stool and have adequate hand holds if a step stool is absolutely necessary.
In the Bedroom

- If you use walking aids, put them within easy reach when you sit or lie down.
- Place glasses close to bedside so they are easy to reach when you get up.
- Get out of bed slowly to prevent dizziness.
Bathroom

- Add grab bars in shower, tub, and toilet areas. Do not depend on towel bars for support.
- Place a nonslip mat or adhesive strips in your shower/tub
- Consider sitting on a bench or stool in the shower
- Consider using a hand held shower nozzle
- Position soap and shampoo within easy reach (between shoulder and hip)
- Keep a whistle or your cell phone in the bathroom to make noise or call for help if you need it
Lighting

- Put a lamp within easy reach without getting out of bed
- Use night lights in the bedroom, bathroom, and hallways
- Keep a flashlight handy
- Use bright lighting (at least 100 Watts)
- Consider task-specific lighting
- Insure adequate lighting by stairs and steps
- Allow time for your eyes to adjust when going to and from light and dark areas
- Open curtains & blinds during daytime
Helpful Equipment

- Reacher
- Magnifier
- Non-slip mats
- 100-200 watt light bulbs or compact fluorescent bulbs
- Crutch tips, walker tips
What if I DO fall?
Review

- Risk factors
- Home safety ideas
  - Outside
  - Floors/walkways
  - Bedroom
  - Bathroom
  - Lighting
  - Equipment
- What to do if you fall
Questions?
What if I fall?

- Refer to the decision tree and picture diagram with step-by-step instructions
- Call your doctor and report the fall. They may help determine if you need an appointment to check for injuries, as well as determine the cause of your fall.

Safely Avoiding Falls Everyday (SAFE)
Quick Guide

Am I at risk of falling?
Check those that apply

Balance Problems
- Change of medical condition
- Using a poorly-fitting assistive device
- Flimsy footwear
- Medications
- Dizziness/vertigo
- Dehydration

Mobility issues
- Pain and stiffness

Multiple medications
- 4 or more? Check with your doctor or pharmacist

Low blood pressure
- Take your time sitting or standing up

Sensory issues
- Neuropathy and pain
- Sudden urge to go to the bathroom
- Difficulty picking things up

Washington County Disability, Aging & Veteran Services
Family Caregiver Support Program
180 E. Main Street, Suite 180
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503-846-3060
www.washington.or.us/HHS/DAVS

Safely Avoiding Falls Everyday (SAFE) was developed through a collaboration between Washington County Family Caregiver Support Program and Pacific University School of Occupational Therapy
Home Safety Checklist

1. Are walkways free of cords and other clutter?
   - Coil or tape cords and wires next to the wall so you don't trip over them
   - Pick up things that are on the floor
   - Have someone move your furniture so that you have a clear path

2. Are floor coverings in good condition?

3. Are floor surfaces non-slip?

4. Are loose mats and rugs securely fixed to the floor?
   - Remove rugs, or apply double sided tape or non-skid backing so rugs don't slip

5. Can you get up from your chair and bed easily?
   - Scoot to the edge of your chair
   - Pull feet in under you, and push yourself up with your hands on the chair

6. Are all the lights bright enough for you to see clearly?
   - Put brighter light bulbs in your lamps as needed
   - Make sure a light is nearby when reading

7. Can you switch a light on easily from your bed?
   - Place a light close to the bed that is easy to reach.

8. Are you able to get on and off the toilet easily and safely?

9. Are you able to walk in and out of the bath or shower easily and safely?
   - Place a non-slip bath mat outside the shower
   - Install a sturdy grab bar, or hold onto the counter as needed

10. Is there an accessible and sturdy grab bar in the shower or beside the tub?

11. Are non-slip rubber mats or strips placed in the shower or tub?

12. Can you easily reach items in the kitchen that are used regularly without climbing, bending, or disrupting your balance?
   - Rearrange cabinet contents so most commonly used item are located between shoulder and hip height

13. Can you carry meals easily and safely from the kitchen to your eating area?
   - Carry an individual plate of food, avoiding carrying heavy serving dishes full of food
   - Put hot foods on non-hot plates, or use a towel or potholder

14. Can you use the front and back doors safely and easily?

15. Are you wearing well-fitting shoes or sturdy slip resistant slippers?
Safely Avoiding Falls Everyday (SAFE)
Participant Survey

What was the most helpful information for you today?

What 3 changes do you plan on making to decrease your risk for falling?
1. 
2. 
3. 

Were there any topics not covered today that you would like to learn more about?

Any other suggestions for the class or the trainer?

Are there other useful tips or ideas related to home safety and fall prevention that you currently use?

Would you recommend this class to a friend or family member?

Can you recommend any other locations where this class would be helpful?

Thank you very much for your participation in today’s class.

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