

Engaging older people in fall prevention activities

*NSW falls Prevention Network,
Rural AHS Videoconference,
8th Nov
Clinical Excellence Commission
Sydney*

FACULTY OF HEALTH SCIENCES

Lindy Clemson



Enabling older people to prevent falls

- Understanding and using key concepts when working with older people to prevent falls

➔

- To become more aware
- Make decisions to change lifelong habits
- Incorporate and sustain changes over time



The University of Sydney

Domains and constructs that make a difference

Explanatory frameworks	<ul style="list-style-type: none"> The enabling-disabling process Environment-person-participation models
Motivations and intent	<ul style="list-style-type: none"> Empowerment Enabling, goal setting and choice Decision making: The Preventive Framework
Beliefs about capabilities	<ul style="list-style-type: none"> Exerting control Self efficacy

Perspectives of older people

- Mismatch between what willing to do and what should do (McInnes, 2004)

Willing to do	Evidence based
Walking	Balance and strength training
Low intensity	Mod-high intensity
Belief that home hazards cause falls	Both single mode and multifactorial work

Working with



Beliefs and motivation

What causes my falls

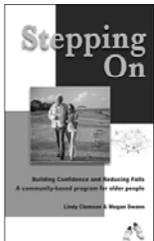
Understanding his beliefs and motivation for change

What causes his falls

Stepping On, a community-based falls prevention program

Clemson & Swain 2008 (2nd Ed.) Sydney University Press

- Evidence based:
 - 31% fall reduction
 - maintained confidence (MES $p=0.042$)
 - used more protective behaviours (FaB $p=0.024$)
- Conceptual basis to program:
 - A decision making framework to explore barriers and options
 - Strategies to enhance self efficacy
 - Variety of learning techniques – story telling, group process
- Manual outlines how to run it




The University of Sydney

LIFE Lifestyle approach to balance & strength training

Clemson, Fiatarone Singh, Bundy, Cumming, Weissel, Manollaras, Munro & O'loughlin
USYD, Veterans Affairs, NHMRC project grant

- ▶ 3- arm RCT
- ▶ Compared LIFE and a structured exercise program to gentle sham exercise
- ▶ LIFE reduced falls by 31% RR=0.69
- ▶ Home based, habit training,



7

Concept: enablement

- ▶ Moving from models of disablement to enablement
 - Latest version: Model of enabling disabling process (Brand & Pope) 1997
 - Occupational therapy models of environment-person-participation e.g. COPM

"We all have our abilities and disabilities. As we get older the disabilities become more obvious. You lose some sight, some hearing and maybe your balance is worse. But what you have done is focus on our abilities. No one else has done that."
Nancy p 1, Stepping On Clemson & Swann 2008



The University of Sydney

8

Enablement and goal directed behaviour



- ▶ Lost confidence in gardening and going out
- ▶ Personal goal to visit her daughter in the city
- ▶ Strength and balance exercise combined with bus safety strategies and planning ahead

Maureen, Stepping On graduate



The University of Sydney

9

Val on the Life Program



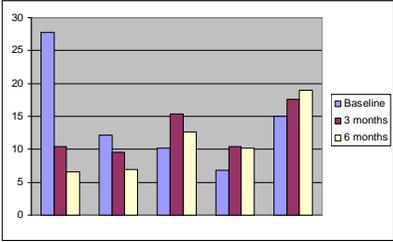
Before Strengthening knees on the Life program



The University of Sydney

10

Val's balance and strength test results



Task	Baseline	3 months	6 months
Tandem walk (sec)	28	10	6
Get up go (sec)	12	9	7
R knee Kg force	10	15	13
R Hip kg force	7	10	10
R Ankle Kg force	15	18	19

Clemson 2009

11

Concept: empowerment

"Individuals cannot be empowered by others, but can be enabled to empower themselves"

Bounds & Hepburn, 1996



The University of Sydney

12

Concept: empowerment

- ▶ the participants were now more in control, more empowered and felt validated.
- ▶ allowed older people to be heard,
- ▶ sense of ownership and responsibility
- ▶ giving them back their power over their own body

From Interviews of Stepping On leaders (welfare and community organisations) by Lovarini (unpublished data), Sydney



13

Delphi expert review

Top ten factors for Stepping On

1. Engage people in what is meaningful and contextual
2. Leader facilitates increased sense of ownership by participants
3. Use plain language
4. Develop trust
5. The importance of participant reflecting and evaluating on the intervention

Mahoney, University of Madison, Wisconsin, unpublished data



14

Delphi process

6. Training participants in cues for self-monitoring quality of exercises
7. Group leader – learns about exercises and understands how to progress
 - links exercises to preventing falls
8. Reinforcement of accomplished prevention activities (follow up home visit)
9. Use optimism and positive talk
10. Link strategies and skills to personal goals as they emerge



15

Concept: Decision making

- ▶ Stepping on used a decision making model based on Janis & Mann, 1977
- ▶ The Preventive Framework: framed the prompts used to elicit stories and reflections



16

Stepping On: the preventive framework for fall and safety stories

1. What are the causes of falls, and the consequences?
2. What can you do to try and prevent falls?
3. How can you make this happen?
4. What are the barriers to making this happen?
5. How can you overcome the barriers and make the changes? How can you keep it happening?

Clemson & Swann,



17

Concept: Sense of control

- ▶ Longitudinal studies confirm the importance of control beliefs to successful ageing (Wurm, 2007, Wolinsky, 2003).



18

Exerting control

Exerting control explained whether these women would follow through with home safety advice or not, mediated by:



- Knowledge of environmental risks for falls
- Fall and injury history and fear of falling
- Individuals meaning of home
- Options and validating options
- Self efficacy
- Degree of freedom in decision making about home
- Perceptions of level of risk in relation to environmental hazards

Clemson, Cusick & Fozard, 1999



The University of North Carolina

Clemson 2005

19

Personal control beliefs can be predictors of outcomes in hip fracture

- Self efficacy beliefs about rehabilitation better predictors of locomotor outcomes than pre-fracture locomotor ability or depressive symptoms (Fortinsky, 2002)
- Sense of personal control over injury and recovery remained a unique predictor of anxiety levels (Bruggeman, 2007)



The University of North Carolina

20

Using social-cognitive theory approaches to initiate and maintain strength training

Winett, Williams, Davy 2008

- Perceived barriers?
- Using our decision making framework



The University of North Carolina

21

Embedding social cognitive theory in protocols and practice

Winett, Williams, Davy 2008

- Self regulation – planning, goal setting, self incentives
- Environment and ecology
- Affect responses – before, during and after
- Embedding these factors in protocols and during the course of training

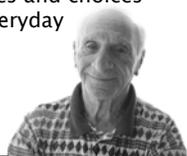


The University of North Carolina

22

Conclusion

- Are you 'working with' rather than being just prescriptive,
- Do you know what they think causes falls?
- Can you assess their beliefs and motivations and where they are in the decision making framework?
- What enabling opportunities and choices can you provide in your everyday interactions?
- Life long skills



The University of North Carolina

23