Fear of falling in older persons: does it protect or does it hurt?

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Falls Network Forum 2011

www.NeuRA.edu.au
1. Fear of falling as a fall risk factor

2. Assessment of fear falling

3. Fear of falling interventions
I’m getting a bit older and I feel that I am not as stable on my feet any more. The other day my sister had a bad fall and broke her wrist. She has always been the better one! I don’t want to imagine what would happen if I would break my hip after a fall ... I don’t think that I would be able to cope by myself anymore.
Fear of falling

• Important psychological factor associated with falls in older people (since 1982)

• Prevalence
  – 29-92% in older people who have already fallen
  – 12-65% in older people who have NOT fallen
  – Women > men
  – Increases with age

• Many associated factors
Fear of falling: good or bad?

- ADL avoidance
- Frailty
- Sedentary lifestyle
- Depression
- Concern
- Poor QOL
- Confidence
Fear of falling: good or bad?
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The perfect balance
- Awareness
- Realistic appraisal of balance ability and falls risk
Disparity

**subjective** perception of fall risk

*versus*

**objective** physiological fall risk
Results from Classification and Regression Tree analysis

Fallers (33%)

- Low actual (40%)
  - Fallers (25%)
    - Low perceived (29%)
      - Fallers (20%)
    - High perceived (11%)
      - Fallers (39%)

- High actual (60%)
  - Fallers (38%)
    - Low perceived (20%)
      - Fallers (34%)
    - High perceived (40%)
      - Fallers (41%)

Vigorous  Worrier  Battler  Aware
Conclusion

• Many elderly people under or over estimate their risk of falling

• Disparities between perceived and physiological fall risk influence the probability of falling
  – Worriers have a higher falls rate despite low actual risk
  – Battlers have a low perceived risk despite high actual risk + slightly lower falls rate

• Fear of falling leads to falls, independent of physiological fall risk factors
Worrier

- Similar fall risk
- Similar activity levels

- Psychological profile: neurotic personality traits, i.e. increased vulnerability to develop irrational fears

- More likely to be female
- Older
- Worse self-perceived health
- More medications
- More depressive symptoms
- Lower quality of life
Battler

- Lower levels of fear of falling
- Less previous falls
- Psychological profile: emotionally stable, less reactive to stress, happy and satisfied with life
- Younger
- Better self-perceived health
- Better quality of life
- More planned exercise
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# Conceptualizations

1. *fear of falling* = continuous concern regarding falls which may limit ADL

2. *falls efficacy* = perceived ability to confidently undertake ADL without falling

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<td>Concern</td>
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<td>Yes</td>
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Questions

• Are you concerned about falling?
  – No, a little, quite a lot, very much

• Are there ADL that you are not confident doing because of fear of falling?
  – E.g. Reaching

• Do you avoid certain ADL because you are afraid of falling?
  – E.g. shopping, taking a bath/shower

• Do you avoid certain situations because you are afraid of falling?
  – E.g. going to the markets on a crowded day
Inventories

1. Falls efficacy Scale International (FES-I)
   - www.profane.eu.org
   - Concern about falling on 7/16 daily activities
     - Including indoor, outdoor, social ADL
   - Item score range: 1 (not at all concerned about falling) to 4 (very concerned)
   - Interpretation
     - 16-19: Low levels of concern
     - 20-27: Moderate levels of concern
     - 28-64: High levels of concern
   - Refs:
Inventories

2. Iconographical Falls efficacy Scale (Icon-FES)
   - Concern about falling on 10/30 daily activities
     - Including indoor, outdoor, social, risky ADL
     - Using pictures as visual cues
   - Item score range:
     - Refs:
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A problem we need to consider ...

Can we do harm by reducing fear of falling in older people during intervention strategies?

Probably NOT

High levels of fear of falling are likely to be dysfunctional and should be reduced
Clinical implications

• The presence of fear of falling is likely to be a sign that something is wrong:
  – The person has an accurate perception of falls risk
  – The person is spiralling into a vicious circle of general frailty through depression or other psychological factors

• Lower levels of fear of falling are likely to be protective of falls:
  – The person has a low actual falls risk
  – The person has a positive attitude to life and has engaged him/herself in falls preventative activities
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Vigorous
- Intervention
  Nothing

Anxious
- Intervention
  Mainly psychological + Standard falls prevention

Stoic
- Intervention
  Mainly physical falls prevention

Aware
- Intervention
  Both psychological and physical falls prevention
Falls prevention - exercise

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“The handle on your recliner does not qualify as an exercise machine.”
Falls prevention - exercise

Exercise modalities

Exercise Overall
Moderate to high balance
High dose

RR=1

18%
RR=0.82
(0.75-0.91)

27%
RR=0.73
(0.59-0.91)

20%
RR=0.80
(0.66-0.97)
Falls prevention - CBT

• Cognitive restructuring of misconceptions around falls
  – E.g. education on commonness of fear of falling

• Behavioural activation, graded exposure
  – e.g. first time together with someone else

• Problem solving
  – e.g. install a handrail next to the bath tub

• Assertiveness training
  – e.g. ask for assistance
Acknowledgements

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2. Memory and Ageing Study of the Brain and Ageing Program
   - School of Psychiatry, UNSW