Background

- Fear of falling is a major health problem among the elderly living in communities, present in older people who have fallen but also commonly in older people who have not yet experienced a fall.
- Little is known about the prevalence and correlates of fear of falling and avoidance of activity in postmenopausal women under 65, although fear of falling is one of important factors related to the risk of falling.
- This focus was taken to advance current understanding and to help inform the design of interventions.

Objective

- This study was performed in a large sample of the general population of postmenopausal women in Korea and aimed to:
  (a) assess the prevalence of fear of falling and avoidance of activity due to fear of falling, and
  (b) identify demographic, health-related, and psychosocial correlates of fear of falling and avoidance of activity due to this fear.
- This focus was taken to advance current understanding and need to help inform the design of interventions.

Methods

- Design: cross-sectional design, and used the baseline data of a larger study to explore risk factors of osteoporosis and falls in postmenopausal women under 65 (Ahn, Kim, Lee, & Chun, 2012).
- Participants: 541 postmenopausal women aged less than 65 years living in 6 urban areas in South Korea.

Results

Prevalence of fear of falling and avoidance of activity, and level of self-efficacy

19.4% reported severe fear of falling (most of the time and always) and 15.0% did severe avoidance of activity (most of the time and always).
- Describing a fall (29.9%) and climbing (25.3%) stirs/cours, rising up (23.7%) and bending down (14.0%) into closets/cabinets
- fall self-efficacy: 26.32 (SD=4.52), moderate level of confidence

Table 1. Association between Study Variables and the level of Fear of Falling and Avoidance of Activity (N=541)

<table>
<thead>
<tr>
<th>Variables characteristics</th>
<th>N</th>
<th>Fear of falling</th>
<th>Avoidance of activity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mild</td>
<td>Severe</td>
<td>Mild</td>
</tr>
<tr>
<td>Age (yr)*</td>
<td>55-70</td>
<td>57.78</td>
<td>4±0.41</td>
</tr>
<tr>
<td></td>
<td>50-54</td>
<td>52.00</td>
<td>2±0.13</td>
</tr>
<tr>
<td></td>
<td>55-59</td>
<td>188</td>
<td>114/74</td>
</tr>
<tr>
<td></td>
<td>60-64</td>
<td>114</td>
<td>84/27</td>
</tr>
</tbody>
</table>

Fall self-efficacy

7-item questionnaire measuring the beliefs regarding the certainty of not being able to fall and 'not all at once' or 'very sure'

Psychosocial variables

- fall self-efficacy
- fear of falling
- avoidance of activity due to fear of falling

Associated avoidance of activity

- (Do you avoid certain activities because of fear?)

Fear of falling (Are you afraid of falling?)

11 activities via the Fear of Falling Questionnaire (FOFQ) (Tideiksaar, 1997, p230)

Psychosocial avoidance of activity

Prevalence of fear of falling and avoidance of activity, and level of self-efficacy

- Our findings showed that fear of falling and associated avoidance of activity were correlated.
- From multifactor approach, age 55-59, worsened perceived health, and having osteoporosis were independently associated with severe fear of falling; and older age, severe fear of falling, and lower fall self-efficacy were significant factors associated with severe avoidance of activity.
- Improved education for osteoporosis and fall is needed to enhance the level of awareness and to reduce the level of fear of falling and avoidance of activity in postmenopausal women, particularly in their early stages of development.

Summary

- Our findings showed that fear of falling and associated avoidance of activity were correlated.
- From multifactor approach, age 55-59, worsened perceived health, and having osteoporosis were independently associated with severe fear of falling; and older age, severe fear of falling, and lower fall self-efficacy were significant factors associated with severe avoidance of activity.
- Improved education for osteoporosis and fall is needed to enhance the level of awareness and to reduce the level of fear of falling and avoidance of activity in postmenopausal women, particularly in their early stages of development.

Table 2. Explanatory Factors for Fear of Falling and Avoidance of Activity (N=541)

<table>
<thead>
<tr>
<th>Variables characteristics</th>
<th>OR (95% CI)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (yr)*</td>
<td>1.06 (1.01-1.11)</td>
<td>1.06 (1.01-1.12)</td>
</tr>
<tr>
<td>Living situation</td>
<td>5.50 (2.15-14.06)</td>
<td>1.55 (0.76-3.07)</td>
</tr>
<tr>
<td>Physical activity</td>
<td>0.95 (0.75-1.20)</td>
<td>0.09 (0.71-1.28)</td>
</tr>
<tr>
<td>Severe fear of falling</td>
<td>1.43 (1.01-2.06)</td>
<td>1.41 (1.08-1.83)</td>
</tr>
</tbody>
</table>

Funding Resource

- This study was funded by National Research Foundation (NRF No. 2010-0023152).

Measurement

- Participant
- Design
- Little is known about the prevalence and correlates of fear of falling and avoidance of activity in postmenopausal women under 65, although fear of falling is one of important factors related to the risk of falling.