

**Title of Intervention:** Strength and Balance Training for Older Women

**Intervention Strategies:** Individual Education, Supportive Relationships

**Purpose of the Intervention:** To reduce the number of falls for older women

**Population:** Women aged 80 years and

**Setting:** Participants' homes; home-based

**Partners:** None mentioned

**Intervention Description:**

- Individual Education: The instructor visited each participant who had been randomized to the exercise group four times over her first two months in the study. The instructor prescribed a selection of exercises from the program at appropriate and increasing levels of difficulty and a walking plan. Each home visit took approximately one hour. The exercises took 30 minutes to complete and the women were told to complete it at least 3 times a week and were encouraged to walk outside the home at least three times a week. To ensure safety, participants were given an instruction booklet with illustrations. After the fourth visit, participants were encouraged to continue the exercise program on their own and to telephone the physiotherapist with any problems.
- Supportive Relationships: Participants were telephoned regularly to maintain motivation.

**Theory:** Not mentioned

**Resources Required:**

- Staff/Volunteers: Instructor
- Training: Not mentioned
- Technology: Telephone
- Space: Homes
- Budget: Not mentioned
- Intervention: Exercise program, written material
- Evaluation: Not mentioned

**Evaluation:**

- Design: Randomized Controlled Trial
- Methods and Measures:
  - Physical assessments were completed by physiotherapist at pre- and post-intervention.
  - Participants were given 12 addressed, reply paid postcards on which they could record falls daily for each month. Postcards were mailed back at the end of each month throughout the year. Compliance to the exercise program was also recorded on postcard calendars.

**Outcomes:**

- Short Term Impact: Balance had improved in the exercise group compared with the control group. A higher proportion of those in the exercise group had improved their performance in the chair stand test.
- Long Term Impact: The mean rate of falls per year was lower in the group receiving the exercise program than in the control group. Elderly people who had four or more falls during the follow up had a higher risk of having fallen in the previous year than the remainder of the participants.

**Maintenance:** After completing the falls prevention program for one year, participants were invited to continue for another year.

**Lessons Learned:** The study showed that a program of strength and balance training exercises, which could be done at home and organized by general practices, reduced significantly the number of falls and injuries experienced by women aged 80 years and older.

**Citation(s):**

Campbell AJ, Robertson MC, Gardner MM, Norton RN, Tilyard MW, Buchner DM. Randomised controlled trial of a general practice programme of home based exercise to prevent falls in elderly women. *Bmj*. Oct 25 1997;315(7115):1065-1069.

Campbell AJ, Robertson MC, Gardner MM, Norton RN, Buchner DM. Falls prevention over 2 years: a randomized controlled trial in women 80 years and older. *Age Ageing*. Oct 1999;28(6):513-518.