

Title of Intervention: Home-based fall risk reduction

Intervention Strategies: Supportive Relationships, Environments and Policies

Purpose of the Intervention: To reduce the incidence of falling among rural community dwelling older adults

Population: Individuals over the age of 65 living independently within the community

Setting: Rural communities in southwest Montana; community-based; home-based

Partners: Senior centers, faith-based organizations

Intervention Description:

- **Supportive Relationships:** The intervention group received a four-part program throughout a 10-week period to help reduce fall-related risk factors. The intervention consisted of fall risk education, exercise programming, nutritional counseling, referral and environmental hazard education. The intervention group was briefed on the importance of fall prevention and risk reduction. The instructor spent 20 minutes educating the subjects about the association between falling and poor vision, poor hearing, sedative use, multiple medications, orthostatic hypotension, depression and lack of physical activity. The exercise program, presented in a four-page brochure, focused on improving strength, coordination, balance, and mobility through 19 chair-based exercises. The participants were given an hour-long introduction to the exercise program. During this time, they were taught how to properly perform each exercise and were allowed to ask questions.
- **Environments and Policies:** An environmental assessment was made of the participants' home. The assessment was specifically designed to determine environmental risk within the bathroom, kitchen, living room, bedroom, stairwells and yard. Any of the environmental hazards identified were noted, and appropriate safety modifications were outlined. For example, if a stairwell was steep and dimly lit, the suggested modifications included night lights and new bulbs in the overhead lights, fluorescent tape marking the stairs and banisters extending the length of the stairwell.

Theory: Not mentioned

Resources Required:

- **Staff/Volunteers:** Instructors
- **Training:** Training in home assessment
- **Technology:** Not mentioned
- **Space:** Space for group classes
- **Budget:** Not mentioned
- **Intervention:** Guidelines from Movement Matters Home based exercise program, chairs, instruction booklets, home assessment form
- **Evaluation:** Log sheets, Get Up and Go tests, interviews

Evaluation:

- **Design:** Quasi-experimental
- **Methods and Measures:**
 - Exercise compliance was assessed with log sheets completed by the participant.
 - Bicep endurance, body mobility, range of motion and balance were measured by a physiological test and the Get Up and Go tests.
 - Falls efficacy and reduction of environmental home hazards data were collected by interviews.

Outcomes:

- **Short Term Impact:** The analysis revealed statistically significant changes for the intervention group on balance, bicep endurance, lower extremity power, falls efficacy, reduction of environmental hazards and nutritious food behavior.
- **Long Term Impact:** Not measured

Maintenance: Not mentioned

Lessons Learned: Not mentioned

Citation(s):

Yates, S. M. and T. A. Dunnagan (2001). "Evaluating the effectiveness of a home-based fall risk reduction program for rural community-dwelling older adults." *J Gerontol A Biol Sci Med Sci* 56(4): M226-30.