

Title of Intervention: Exercise Programs for Older Adults

Intervention Strategies: Group Education, Supportive Relationships

Purpose of the Intervention: To improve mobility and decrease falls

Population: Individuals 60 years of age and older

Setting: Long-term care centers; health care facility-based

Partners: None mentioned

Intervention Description:

- **Group Education:** Two different exercise programs were randomly distributed across 15 facilities. Within each facility, participants were assigned to an intervention or a control group. The intervention groups followed a 20-week exercise program with one meeting a week during the first four weeks and two meetings a week during the remaining weeks. Each session lasted 90 minutes. Instructors were experienced in leading exercise activities for older adults. The first program, Functional Walking (FW), consisted of balance, mobility and transfer training exercises. Each exercise was described in several variations to provide various levels of complexity. Exercises consisted of standing up from a chair, reaching and stepping forward and sideways, heel and toe stands, walking and turning, stepping on and over an obstacle, staircase walking, tandem foot standing and single-limb standing. The second program, In Balance (IB), involved exercises inspired by the principles of Tai Chi such as sensory feedback signals coming from ankle and hip motions, body position and sensation exercises, slow, continuous movements, trunk rotation and weight shifting.
- **Supportive Relationships:** Each exercise session included a 30-minute social component intended to maintain and increase motivation.

Theory: Not mentioned

Resources Required:

- **Staff/Volunteers:** Experienced instructors
- **Training:** Not mentioned
- **Technology:** Not mentioned
- **Space:** Room to conduct group exercise sessions
- **Budget:** Not mentioned
- **Intervention:** Chairs
- **Evaluation:** Performance Oriented Mobility Assessment (POMA), Groningen Activity Restriction Scale (GARS), physical performance assessment

Evaluation:

- **Design:** Multi-center randomized controlled trial
- **Methods and Measures:**
 - Gait and balance were measured with the Performance Oriented Mobility Assessment (POMA).
 - Physical performance was scored.
 - Self-reported disability was measured by the Groningen Activity Restriction Scale (GARS).

Outcomes:

- **Short Term Impact:** Participants in both exercise groups showed a small, but significant improvement in their Performance Oriented Mobility Assessment and physical performance scores. The functional walking group showed significant improvement in the Groningen Activity Restriction Scale score as well.
- **Long Term Impact:** Fall incidence rate was higher in the functional group compared with the in balance and control groups, but this difference was not statistically significant. The risk of becoming a faller in the exercise groups increased significantly in the subgroup of participants who were classified as being frail. For participants who were classified as being pre-frail, the risk of becoming a faller decreased.

Maintenance: Not mentioned

Lessons Learned: Fall-preventive moderate intensity group-exercise programs have positive effects on falling and physical performance.

Citation(s):

Faber MJ, Bosscher RJ, Chin APMJ, van Wieringen PC. Effects of exercise programs on falls and mobility in frail and pre-frail older adults: A multicenter randomized controlled trial. Arch Phys Med Rehabil. Jul 2006;87(7):885-896.