

**Title of Intervention:** Fitness and Mobility Exercise Program (FAME)

**Intervention Strategies:** Group Education

**Purpose of the Intervention:** To improve outcomes in older adults with stroke

**Population:** Individuals age 50 and older with chronic stroke

**Setting:** Vancouver community center; community-based

**Partners:** Rehabilitation hospital, stroke clubs, newspapers, community hall

**Intervention Description:**

- Group Education: A physical therapist, occupational therapist and exercise instructor supervised participants in aerobic sessions. Intervention participants attended an exercise program in groups of 9 to 12 for 19 weeks. The exercise program included three workout stations with cardiovascular fitness, mobility, balance and strengthening activities.

**Theory:** Not mentioned

**Resources Required:**

- Staff/Volunteers: Physical therapist, occupational therapist, exercise instructor
- Training: Not mentioned
- Technology: Not mentioned
- Space: Multipurpose room of a community hall for classes
- Budget: Not mentioned
- Intervention: Recruitment materials, hip protectors, class space, heart rate monitors, exercise equipment
- Evaluation: Ergometer, electrocardiography system, face mask, portable metabolic unit, sphygmomanometer (blood pressure), handheld dynamometer, assessment tools, dual-energy x-ray absorptiometry (DEXA scan)

**Evaluation:**

- Design: Prospective, single blind, randomized, controlled intervention trial
- Methods and Measures: All measures were taken at baseline and 19 weeks:
  - Cardiorespiratory fitness or maximal oxygen consumption was measured with an ergometer test, a blood pressure reading at rest and end of test and the 16-point Borg Rating of Perceived Exertion Scale
  - Mobility was assessed with a 6-minute walk test
  - Leg muscle strength was assessed using an isometric knee extension
  - Berg Balance Scale assessed functional balance in older adults
  - Physical Activity Scale for Individuals with Physical Disabilities questionnaire assessed participation in physical activity of different intensities for the previous 7 days
  - Femoral neck bone mineral density

**Outcomes:**

- Short term Impact: The intervention group had significantly more improvements in cardiorespiratory fitness, 6-minute walking time distance and paretic leg muscle strength. The intervention group maintained bone mineral density while the control group did not. Both groups improved in balance and activity participation.
- Long Term Impact: Not measured

**Maintenance:** Not mentioned

**Lessons Learned:** The study showed that the proposed Fitness and Mobility Exercise (FAME) program is feasible and beneficial for improving cardiorespiratory fitness, mobility and leg muscle strength and maintaining

hip bone mineral density in individuals with chronic stroke. The program may provide a good model for community-based fitness programs for older people with chronic disabilities.

**Citation(s):**

Pang, M. Y., J. J. Eng, et al. (2005). "A community-based fitness and mobility exercise program for older adults with chronic stroke: a randomized, controlled trial." *J Am Geriatr Soc* 53(10): 1667-74.