Effects of a 12-week Exercise Intervention on Falls Risk in Community-Dwelling Older Falls

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Abstract

Fully one-third of people over the age of 65 years fall annually. Risk factors for falls are numerous and include potentially modifiable physical performance parameters. Recent research has demonstrated that regular exercise can reduce the risk for future falls, but there have been few very long progressive exercise program models validated for such a purpose.

PURPOSE: To determine if a progressive 12-week falls prevention exercise program lowers falls risk in a sample of community-dwelling older adults who have recently fallen.

METHODS: Fifty-four community-dwelling older adults (mean ± SD, age: 78.3 ± 8.9 yrs, weight: 72.6 ± 15.5 kg, who had sustained at least one accidental fall in the past 6 months) completed at least 83% of classes in a 12-week exercise program held at local senior centers. Exercise classes were held two days per week for 60 minutes targeting functional fitness. Classes were led by fitness professionals trained and certified for undergraduate students trained by the lead researcher. Functional fitness outcomes were measured at pretest and posttest by Functional Reach Test (FRT), Timed Up-and-Go Test (TUG), and 30 Second Chair Stand Test (CS). Pre-post comparisons were made using Pared T-Tests.

RESULTS: Anterior reach displacement as measured by the FRT improved significantly from pretest to posttest (21.6 ± 2.0 cm to 29.3 ± 2.6 cm). TUG performance improved significantly from pretest to posttest (10.4 ± 2.7 sec to 9.5 ± 3.2 sec). CS performance improved significantly from pretest to posttest (15.7 ± 5.3 reps to 12.2 ± 5.9 reps).

CONCLUSION: This progressive 12-week exercise program was effective at lowering falls risk among a sample of community-dwelling older adults who have recently sustained accidental falls.

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