A Randomized Controlled Trial of Fall Prevention

Programs and Quality of Life in Older Fallers3

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Abstract

OBJECTIVES: To compare the effects of three fall-prevention programs (education (ED), home safety assessment and modification (HSAM), and exercise training (ET)) on quality of life (QOL), functional balance and gait, activities of daily living (ADLs), fear of falling, and depression in adults aged 65 and older. DESIGN: A 4-month randomized trial. SETTING: Randomized, controlled trial. PARTICIPANTS: One hundred fifty participants who had experienced a recent fall. MEASUREMENTS: QOL was assessed according to the brief version of the World Health Organization Quality of Life instrument (WHOQOL-BREF), functional balance and gait according to functional reach and Tinetti balance and gait, ADLs according to the Older Americans Resources and Services questionnaire, fear of falling according to a visual analog scale, and depression level according to the Geriatric Depression Scale. RESULTS: The score changes for the ET group were 2.1 points greater on the physical domain (95% confidence interval (CI)=-1.2-5.3), 3.8 points greater on the psychological domain (95% CI=0.7-7.0), and for the WHOQOL-BREF, 3.4 points greater on the social domain (95% CI=0.7-6.1) and 3.2 points greater on the environmental domain (95% CI=0.6-5.7) than for the ED group. The score change for each domain of the WHOQOL-BREF for the HSAM group was greater than that for the ED group, although these results were not statistically significant. The ET group also had greater improvements in functional reach, Tinetti balance and gait, and fear of falling than the ED group. CONCLUSION: The QOL outcome supports the superiority of ET over the other two interventions in older people who have recently fallen. This finding also parallels those gathered from the functional measures.