

Abstract

Title: Predictors of Long-Term Exercise Adherence in Community-Dwelling Older Women

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Problem/Purpose: Little research has been conducted to address exercise adoption and long-term adherence in older adults. This study's purpose was to assess predictors of adherence to an exercise intervention aimed at preventing falls in older women.

Conceptual Framework: Principles of the Transtheoretical Model (TTM) were incorporated to promote exercise adoption.

Subjects: Community-based sample of women (n = 131) aged 70 and over with multiple risk factors for falling.

Method: Exercise adherence data collected using a daily log were analyzed for the intervention group from a randomized controlled trial with 2-year follow-up. The exercise prescription included walking 30 minutes/day, five days per week and balance exercises twice per week. Analyses were conducted using linear regression for walking adherence and logistic regression for balance exercise adherence. Independent variables analyzed were sociodemographic, cognitive, clinical, postural competence, and health-related quality of life variables, and TTM constructs.

Results: Participants walked a mean of 95.2 (SD 68.8) minutes per week. Balance exercises were completed an average of 1.5 (SD 1.6) times per week. 19% of the variance for walking adherence was explained by an increased number of chronic conditions and probable depression leading to decreased adherence, and higher use of behavioral processes of change leading to increased adherence. 24% of the variance for

adherence to the balance exercises was explained with low cognitive functioning and higher self-rated health decreasing the odds of performing the balance exercises, whereas higher self-efficacy increased the odds of performance.

Conclusion: In this sedentary population of older women, most were exercising during the 2-year period following the intervention; however, not at the prescribed levels.

Nurses should be aware that predictors of adherence may differ by type of exercise, so individually tailored approaches may be successful where one-size-fits-all programs have failed.

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