

A META-ANALYSIS OF FEAR OF FALLING TREATMENT PROGRAMS FOR THE ELDERLY

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Purpose : The purpose of the study was to examine the effectiveness of interventions for decreasing the fear of falling by synthesizing the result of individual studies of fear of falling prevention. The research question is “Are fear of falling treatment programs effective in reducing the fear of falling among the elderly?”

Method: Meta-analysis was employed to summarize the findings of intervention studies of fear of falling prevention in the elderly. The literature search was performed using Medline, Cumulative Index for Nursing Allied Health Literature, and Pub-Med. Additional search strategies were used to supplement the computerized databases. Studies were reviewed by two of the authors with the eligibility criteria in mind. Studies were then coded, an inter-rater reliability check was performed, and mean weighted effect size (MWES) computed.

Findings: The overall mean weighted effect size (MWES) for the 6 studies is .2148($Z=2.8715$, $p<.001$) based on $N=801$ with a 95% CI .0682 to .3615. Results indicate that interventions are effective in reducing the fear of falling or increasing fall efficacy. Fear of falling intervention types included exercise and education (MWES =.2487, $p<.05$), strict exercise (MWES =.0236, $p>.05$), and hip protectors (MWES=.4176, $p<.05$). Time to outcome measure analyses revealed that the MWES for studies measuring the outcome at three months or less was .000 ($p>.05$), and after 4months was .239 ($P<.05$). For types of intervention setting, the mean weighted effect size for facility was .0224($Z=.1642$, $p>.05$), for community was .2284($Z=2.4336$, $p<.05$), and for hip protector study was .4176 ($Z=2.3604$, $p<.05$).

Discussion : In this meta-analysis, fear of falling treatments overall were effective in decreasing fear of falling and increasing fall efficacy. Subgroup analysis results suggest that “fear of falling” is affected not only by physical problems, but also by psychological and cognitive aspects. In addition, these results suggest that the best outcome of fear of falling treatment is obtained after four months indicating that. Fear of falling treatments need some time to obtain their effects. Additional intervention studies are needed to prevent fear of falling in the elderly.

