

Modifying Home Environments to Enhance Well-being in Functionally Vulnerable EldersLaura N. Gitlin*Thomas Jefferson University, Philadelphia, PA, United States*

Older adults with functional difficulties are at risk for relocation, poor quality of life, functional decline and mortality. We conducted a prospective two-group randomized trial with 319 community-living adults 70 years or older who reported difficulty with daily activities. The 6-month intervention, Advancing Better Living for Elders (ABLE program) involved instruction in strategies of problem-solving, energy conservation, safe performance, and fall recovery techniques, and balance and muscle strength training from occupational and physical therapists and implementation and training in use of home modifications over a 6 month period to address client-identified functional goals. Three follow-up telephone calls to support strategy use occurred over the following 6-months. We found that at 6-months, compared to a usual care control group, ABLE participants had less difficulty with instrumental activities ($p = .044$, 95% CI = -0.28, -0.00) and self-care activities ($p = .033$, 95% CI = -0.24, -0.01), with largest reductions in bathing ($p = .015$, 95% CI = -.51, -.06) and toileting ($p = .049$, 95% CI = -.35, -.00); greater self-efficacy ($p = .025$, 95% CI = 0.02, 0.27); reduced fear of falling ($p = .001$, 95% CI = 0.26, 0.96); fewer observed home hazards ($p = .050$, 95% CI = -3.06, .00); and greater use of positive adaptive strategies ($p = .009$, 95% CI = .03, .22). Benefits were sustained at 12-months for most outcomes. Of significance is that by 12 months, ABLE participants exhibited a 1% mortality rate compared with a 10% rate for control participants ($P=.003$), and at two years, ABLE participants ($n=160$) had a 5.6% mortality rate ($n=9$ deaths) compared to controls ($n=159$) who had a 13.2% rate ($n=21$ deaths; $p=.020$). Mortality rates remained relatively lower for ABLE participants up to 3.5 years from study entry. The ABLE trial shows that helping older adults modify their task performance and home environment has an enduring effect on their well-being resulting in extended survivorship. ABLE presents as a low-cost clinical program to delay both functional decline and mortality and should be considered for inclusion as the standard of care for older functionally vulnerable elders.