Structured physical activity results in small reduction in sedentary time among older adults

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In older adults with mobility impairments, long-term, moderate-intensity physical activity was associated with a small reduction in total sedentary time, according to a study published by *JAMA*.

Excessive sedentary time is associated with a number of negative health consequences, especially in older adults, who accumulate the most sedentary time. Although behavioral interventions can increase moderate-intensity activity, the effect on sedentary behaviors remains unclear.

Todd M. Manini, Ph.D., and Amal A. Wanigatunga, Ph.D., M.P.H., of the University of Florida, Gainesville, and colleagues analyzed data from the Lifestyle Interventions and Independence for Elders (LIFE) study, which included adults ages 70 to 89 years with mobility impairments randomized to a moderate-intensity physical activity intervention (PA group, with a goal of 150 minutes per week of walking), or a health education program (HE group). Participants were instructed to wear an accelerometer on the hip for 7 consecutive days during waking hours at baseline and 6, 12, and 24 months after randomization. Over 24 months, 1,271 participants had at least one follow-up assessment and 1,164 participants had data collected at the 24-month visit.

The researchers found that at six months, the PA group accumulated less sedentary time than the HE group for sedentary time of 10 minutes or more (475 minutes in the PA group vs 487 minutes in the HE group) and bouts of 30 minutes or more (290 minutes in the PA group vs 299 minutes in the HE group). No intervention differences were detected for bouts of 60 minutes or more of being sedentary. Intervention differences were maintained over 24 months.

"Overall, traditional approaches to increasing moderate-intensity physical activity have little transfer to reductions in total sedentary time and no transfer to prolonged bouts lasting an hour or longer. Additional behavioral approaches are needed to target and reduce sedentary behaviors," the authors write.

Limitations of the study include the inability to detect posture, napping, behavior types (e.g., television watching), and whether changes in sedentary time were clinically meaningful.

More information: *JAMA* (2017). jamanetwork.com/journals/jama/ … .1001/jama.2017.7203

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