SYNOPSIS

KEY POINT SUMMARY

OBJECTIVES

The primary purpose of this study was to evaluate daily physical activity and physical function of community dwellers (CD) (n = 31) as compared to residents of a RC (n = 30). It was hypothesized that daily physical activity would be directly related to the size of the living space.

Living Environment and Mobility of Older Adults

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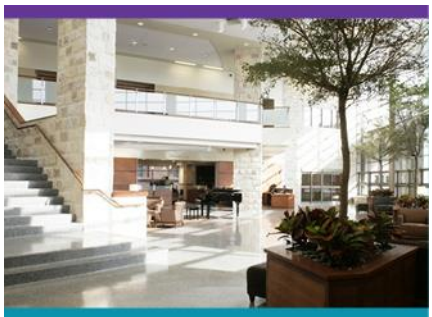
2011 | Gerontologist
Volume 57, Issue 3, Pages 698–703

Key Concepts/Context

Older adults often decide to live in smaller environments. Smaller living space and the addition of services provided by a retirement community (RC) may make living easier for the individual, but it may also reduce the amount of daily physical activity and ultimately reduce functional ability.

Methods

This cross-sectional study with 61 participants assessed group differences in physical activity and physical function in older adults aged 65 years or older from single-family community dwellings (CDs) or residents from a local RC. Physical activity was measured by both self-reported physical activity with the Community Healthy Activities Model Program for Seniors questionnaire and objective physical activity with the StepWatch 3.1 step activity monitor pedometer. During a 48-hour period, physical activity was recorded in a log to identify and categorize clusters of steps on the step activity monitor into the following categories: inside the home, on grounds of home, outside the home, and during exercise. The categories excluding exercise were summed. Physical function was also measured by both a self-report and a performance-based measure. Self-reported physical function was collected as part of a Medical Outcomes Study Short Form Health Survey (SF-36). Performance-based physical functioning was evaluated using the Continuous Scale Physical Functional Performance–10 (CS-PFP10). The CS-PFP10 reflects a person's functional capacity as each task is performed at maximal effort within the person's judgment of comfort and safety. (A detailed description of the tasks and test setup is available at http://www.coe.uga.edu/cs-pfp/overview.html.) One-way ANOVA was used to compare the groups. A general regression model was also used to predict the number of steps per day at home.



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Findings

The living space for the RC group was significantly smaller than that of the CD group. By both self-report and objective measure of physical activity, the RC group was significantly less physically active. The values for total energy expenditure due to physical activity (in kilocalories per week), as estimated by the physical activity questionnaire, were significantly lower in the RC group than in the CD group. The health status was not significantly different between the RC and the CD groups when evaluated using the SF-36, except for the following three domains: general health, vitality, and mental health. Self-reported physical function was not significantly different between groups, while physical performance measured by the CS-PFP10 was significantly different in each domain and in the total score.

Limitations

Authors mentioned the need of a prospective study that can further understand the underlying determinants of why some older adults age in place as CDs, while others move to an RC. Such a study can help to identify interventions to lessen the environmental demands, improve personal competence, and strengthen social networking and caregiving, allowing older adults the highest quality of life by optimizing their environmental and functional status.

Design Implications

This study found that daily physical activity, measured by number of steps per day, excluding intentional exercise, was directly related to the size of the living space and was significantly higher in the CD than the RC residents. Therefore, when designing an RC, designers should carefully consider its size and design of the living space to promote daily physical activity of RC residents.