

Study on Housing that Responds to Changes in Physical Function in an Aging Society: Focusing on Quality of Life and Fear of Falling

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[Study Report Abstract]

Purpose: This study aimed to investigate whether the living environment and physical and mental functions are related to falls by conducting a survey on the actual residence conditions of older individuals. **Methods:** A total of 139 community-dwelling older individuals (103 women and 36 men) that are able to walk independently were included. During the physical function measurement session, a questionnaire-based survey (subject attributes, household composition, housing type, housing information, falls in the past year, selecting housing criteria, and Lawton's instrumental activities of daily living scale) and evaluation and measurement of physical and mental functions (trail making test A, lower limb muscle strength, grip strength, functional reach test, 3m timed up and go, and walking ability) were conducted. **Results:** Of all participants, 15.1% (14.6% of women and 16.7% of men) had experienced a fall in the past year. While 84.9% of all participants answered that they would like to continue living in their present homes, 53.2% did not consider making their present homes barrier-free considering their old age if asked whether they had considered this when building or selecting their current homes. Regarding the association between falls, physical and mental functions, and living environment, the differences in the results between men and women were determined. For women, significant differences were found between the two groups in terms of lower limb muscle weakness, household composition, and subjective view of health, whereas in the data for men, no significant differences were noted between the two groups in each item. **Discussions and Conclusions:** The study showed that although most of the older individuals would like to continue living in their current environment, >50% did not consider their old age in selecting a residence. Considering the possibility of using a wheelchair, we believe that barrier-free accessibility in no small measure to select a residence should be considered.