



## KEY POINT SUMMARY

### OBJECTIVES

The aim of this descriptive study was to estimate and compare the association between cognitive decline and quality of life for two groups of dementia patients differing by place of residence: home or institution.

### DESIGN IMPLICATIONS

Quality of Life (QOL) would not seem to be better at home with regard to the institutional context. Therefore, no design limitations can be drawn.

## Impact of Place of Residence on Relationship between Quality of Life and Cognitive Decline in Dementia

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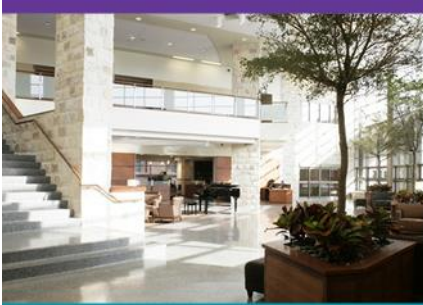
2009 | *Alzheimer Disease & Associated Disorders*  
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### Key Concepts/Context

In patients with dementia and their family members and caregivers, quality of life (QOL) is an important parameter; much attention is given to its improvement. However, the theory of improved QOL at home compared with that at institutional residences for dementia patients has not been tested by a comparison of two groups of people according to their place of residence. Furthermore, there are few studies of populations of people with dementia, living at home or in an institution, distributed across all different stages of cognitive decline.

### Methods

This cross-sectional study included 455 people with dementia aged 65 years and over. Patients were placed in two groups: an “at home” group was composed of 159 people with dementia and the “institution” group was composed of 296 people with dementia. Each subject of the at home and institution groups was placed within a specific subgroup based on their Mini-Mental State Examination (MMSE) scores: MMSE 0-3 (very severe), 4-8 (severe), 9-13 (severe-to-moderate), 14-18 (moderate), and 19-23 (mild). These groupings were chosen to accurately evaluate the link between cognitive functioning and quality of life. QOL was assessed by a psychogeriatric physician (or psychologist) in collaboration with the family (at home) or staff caregivers (in institutions), according to the Alzheimer Disease Related Quality of Life (ADRQL) translated and validated in French. This instrument is a disease-specific and proxy-report QOL instrument designed specifically for people with dementia, regardless of disease severity. It includes 47 items concerning observable behaviors, which simplifies the caregiver’s judgment and limits biases associated with assessment by proxy. Items are divided into five



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domains: social interaction (ADRQL-A, 12 items), awareness of self (ADRQL-B, with items), feelings and mood (ADRQL-C, five items), enjoyment of activities (ADRQL-D, 15 items), and response to surroundings (ADRQL-E, seven items). A global score and five subscale scores were calculated. The global raw score (0-544.76) and each subscale score were expressed as a percentage; thus each score varies from 0%-100% (“optimal QOL”). Cognitive functioning was assessed by the psychogeriatric physician (or psychologist) using the MMSE. Dependency was evaluated with the psychogeriatric physician (or psychologist) in collaboration with the family (at home) or staff caregivers (in institutions), according to the Katz Activities of Daily Living (ADL) classification.

## Findings

For the “at home” and “institution” groups, global and subscale ADRQL scores showed significant differences between the five MMSE subgroups. Place of residence and MMSE subgroups significantly affected global and subscale ADRQL scores. The MMSE 4-8, 9-13, and 14-18 subgroups had ADRQL global scores significantly better in the institution group than the at-home group. In contrast, the MMSE 19 to 23 and 0-3 subgroups had similar ADRQL global scores in both places of residence. In conclusion, there is no direct relationship between cognitive decline and QOL, and QOL does not seem to be better at home compared with the institution.

## Limitations

Authors of the study identified the following limitations for this study:

1. The size of certain MMSE subgroups is relatively weak (MMSE 19-23 at home and institution as well as MMSE 0-3 at home), which limits the generalization of our conclusions.
2. To compare two contexts of care with different examiners in each context does not allow us to control the variable “examiner.” In the future, it would be interesting to perform a parallel evaluation by the healthcare professional and by the family caregiver of the same patient to confirm or invalidate the hypothesis of examiner bias.
3. The difference of QOL pattern according to the place of residence could be influenced by parameters other than cognitive functioning (which in this study served as the categorized variable) or dependency. The examination of other clinical variables, such as psychological and behavioral disturbances or other psychological variables such as depression or global mood would be worthwhile.