

Research Article

Quality of Life Among Older Adults with Cognitive Impairment or Dementia

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Abstract

Objective: The effectiveness of therapeutic interventions in people with dementia is commonly associated with improvements in their quality of life, which can be self-reported at all stages of the disease. However, quality of life is not routinely included in the regular assessments of affected individuals. In this regard, the aim of this study is to assess the quality of life in people with dementia receiving care in social and healthcare centers in Andalusia and to identify the factors associated with their perception.

Methods: A cross-sectional, observational, and descriptive study was conducted with a convenience sample of 246 individuals aged over 60. The Spanish-validated version of the QoL-AD scale was used to assess quality of life through interviews with the affected individuals, their relatives, or healthcare professionals. **Results:** The mean quality of life score in the study population was 33.26. Quality of life scores decreased by 0.12 for each additional year of age, and increased by 0.25 for each point on the Barthel Index, 0.16 for each point on the MMSE, and 0.22 for each year of formal education. Quality of life declined with the progression of cognitive impairment and was positively associated with living with a partner and remaining in one's own home. **Conclusions:** The findings indicate that age, functional and cognitive deterioration, cohabitation with a partner, and living environment significantly influence perceived quality of life. These trends highlight the importance of further exploring how individual, social, and environmental factors impact the well-being of people with dementia.

Keywords: quality of life, cognitive Impairment, dementia, older people, nursing homes.

Introduction

The increase in life expectancy and the progressive aging of the population have led to a sustained rise in the number of people with cognitive impairment or dementia. Since there is still no preventive treatment or therapy capable of modifying the course of the disease, the number of cases is expected to triple in the coming decades, from 50 million people affected in 2020 to more than 150 million in 2050 [1]. For this reason, dementia has become a global public health priority, prompting the World Health Organization to recommend actions that ensure that all people with dementia

receive an early, accurate, and accessible diagnosis, as well as continuous, integrated, and person-centered care [2].

In the absence of a curative intervention, the effectiveness of therapeutic approaches is usually associated with improvements in the quality of life of affected individuals [3,4]. Quality of life refers to a person's perception of their position in life within the context of their culture and value system, and in relation to their goals, expectations, standards, and concerns [5,6]. The subjective nature of the concept of quality of life makes it particularly difficult to measure in people with dementia [7]. For this reason, its assessment has historically been carried out through relatives or healthcare professionals [8].

Quality of life in people with dementia is still not clearly defined, there is little agreement on the main predictive factors, and it remains uncertain to what extent assessments conducted by relatives or professionals accurately reflect the perception of individuals who cannot respond for themselves. A recent systematic review highlights the diversity of measurement instruments, the lack of consensus regarding which domains to evaluate, and the notable discrepancies between self-reports and proxy reports, which add complexity and limit the comparability of existing studies [9].

The most recent scientific evidence shows that people with dementia can self-report their own quality of life, even at higher levels of cognitive impairment, which means that the challenge lies in having adapted instruments capable of capturing their perception [6].

The most widely used tool to measure quality of life in people with dementia is the QoL-AD, an instrument that has been shown to be applicable for both self-reports and proxy reports, in institutional and community settings, and across all stages of dementia. The QoL-AD evaluates four domains with 13 items and can be completed in less than 10 minutes [6].

The aim of this study was to assess quality of life in people with cognitive impairment or dementia and to identify the associated factors.

Materials and Methods

A cross-sectional, observational, and descriptive study was conducted in 16 facilities across five provinces in Andalusia, with a convenience sample of 246 individuals aged over 60.

Quality of life was assessed using the Spanish-validated version of the QoL-AD [10]. The questionnaire was administered by psychologists and neuropsychologists who had received prior training. In all cases, the instrument was applied through structured interviews with the person affected and, when necessary, with a family member or a reference healthcare professional, after obtaining informed consent from the interviewee.

Descriptive statistics were used for all variables (frequency, mean, and standard deviation). The dependent variable was the overall score obtained on the QoL-AD, whether answered by the person affected, a family member, or a healthcare professional. To analyze the association between QoL-AD scores and age, years of education, functional capacity measured with the Barthel Index, and level of cognitive impairment estimated with the Mini-Mental State Examination (MMSE), Pearson's correlation coefficient was used.

The sample was divided into groups according to the following variables: sex (female, male), age group (<65 years, 65–74, 75–84, and ≥85 years), cohabitation with a partner (yes, no), usual residence (private home, nursing home), type of facility where care was received (association, day care center, nursing home, healthcare facility), type of ownership (public, private), and model of care (traditional care, person-centered care). Significant differences were estimated at a p-value of 0.005.

Results

Of the participants, 65.5% were women and 34.5% men ($p<0.00001$), with a mean age of 80.8 years—78.1 years in men and 82.3 years in women ($p<0.00017$). A total of 36.3% of participants were aged 85 or older, and 84.5% were not living with their partner at the time of the study ($p<0.00001$).

According to the Barthel Index, 77% of the participants had some degree of functional dependence: 33.9% mild dependence, 19.6% moderate dependence, 10.9% severe dependence, and 12.6% total dependence ($p<0.00001$).

According to the MMSE, 21% presented subjective cognitive impairment (score ≥27), 13.8% had mild cognitive impairment (score 25–26), 26.3% had mild dementia (score 19–24), 17% moderate dementia (score 14–18), and 21.9% severe dementia (score <14) ($p=0.0359$).

In total, 74.4% of the questionnaires were answered by the person with dementia, 12.2% by a professional, and 13.4% by a family member ($p<0.00001$). Of the sample, 54.9% received care in a private facility and 45.1% in a public one ($p=0.126$). At the time of the survey, 79.7% were living in a nursing home, 9.35% attended a day care center, 7.7% received care in an association, and 3.25% in a healthcare facility ($p<0.00001$).

The mean quality of life score was 33.26, with a standard deviation of 6.03 ($p<0.0001$). Quality of life scores decreased by 0.12 for each additional year of age ($p=0.0467$) and increased by 0.25 for each point on the Barthel Index ($p=0.001$), 0.16 for each point on the MMSE ($p=0.0168$), and 0.22 for each year of education ($p=0.0005$).

Mean quality of life scores were higher among individuals with mild dementia compared with other categories of cognitive impairment ($p=0.0168$); among those living with their partner compared with those living alone ($p=0.0097$); and among those living in their own homes compared with those living in nursing homes ($p=0.0069$) (Table 1).

Variable	Categories	QoL-AD Score	Standard Deviation	p	*
Gender	Female	33.08	5.94	0.5184	
	Male	33.61	6.21		
Age	<65	35.89	4.78	0.1349	
	65–74	33.74	6.42		
	75–84	33.49	5.89		
	≥85	32.08	5.72		
Cognitive impairment or dementia (MMSE)	Subjective cognitive impairment	33.74	6.55	0.0168	*
	Mild cognitive impairment	33.74	6.42		
	Mild dementia	35.00	5.70		
	Moderate dementia	33.53	5.87		
	Severe dementia	31.86	5.41		
Living with partner	Yes	35.74	6.36	0.0097	***
	No	32.80	5.86		
Usual residence	Private home	35.48	6.43	0.0034	**
	Nursing home	32.70	5.80		
Type of facility	Association	35.00	5.76	0.0532	
	Day care center	32.67	6.15		
	Nursing home	32.96	5.96		
	Healthcare facility	38.25	6.30		
Facility ownership	Private	33.89	6.23	0.0706	
	Public	32.50	5.71		
Model of care	Person-centered care	33.23	6.00	0.6766	
	Traditional nursing home care	32.84	5.98		

Notes: *** p<0.001, ** p<0.01, * p<0.05

QoL-AD = Quality of Life in Alzheimer's Disease; MMSE = Mini-Mental State Examination.

Table 1: Factors associated with quality of life among individuals with dementia

When data were analyzed by sex, statistically significant differences were observed in men according to certain contextual variables. Men who lived with their partner scored significantly higher on the QoL-AD than those who lived alone. Similarly, those residing in their own homes reported better quality of life compared with those living in nursing homes. Finally, men residing in private nursing homes had higher scores than those in public ones.

In men, a downward trend was also observed in quality-of-life scores as the degree of cognitive impairment increased. However, these differences were not statistically significant.

Among women, although similar trends were observed—higher quality of life among those living with their partner, in their own homes, and in private nursing homes—these differences did not reach statistical significance (Table 2).

Variable	Categories	WOMEN			MEN		
		QoL-AD Score	Standard Deviation	p*	QoL-AD Score	Standard Deviation	p*
Age	<65	36.20	3.19		35.50	6.86	
	65–74	34.16	6.35		33.30	6.58	
	75–84	33.65	5.77		33.25	6.16	
	≥85	31.59	5.61		33.94	5.90	
Cognitive impairment or dementia (MMSE)	Subjective cognitive impairment	34.24	5.92		33.35	7.12	
	Mild cognitive impairment	32.16	6.97		36.25	4.65	
	Mild dementia	35.18	5.37		34.63	6.48	
	Moderate dementia	33.15	5.81		34.35	6.20	
	Severe dementia	32.18	5.79		30.73	3.80	
Living with partner	Yes	34.50	7.52		36.81	5.11	**
	No	32.90	5.72		32.56	6.22	
Usual residence	Private home	34.38	6.64		37.81	5.43	**
	Nursing home	32.73	5.71		32.64	6.00	
Type of facility	Association	32.45	4.57		39.00	5.34	
	Day care center	32.58	6.44		33.00	6.00	
	Nursing home	32.95	5.87		32.97	6.16	
	Healthcare facility	39.00	7.71		37.00	4.00	
Facility ownership	Private	33.36	6.15		35.15	6.31	*
	Public	32.68	5.64		32.24	5.86	
Model of care	Person-centered care	32.63	6.03		35.07	5.74	
	Traditional nursing home care	33.08	5.85		32.46	6.20	

Notes: *** p<0.001, ** p<0.01, * p<0.05

QoL-AD = Quality of Life in Alzheimer's Disease; MMSE = Mini-Mental State Examination.

Table 2: Sex differences in quality of life and associated factors

Discussion

The main strength of this study lies in the fact that 76.3% of individuals with moderate cognitive impairment and 42.9% of those with severe cognitive impairment were able to respond to the quality-of-life questionnaire themselves, reaching a total of 74.4% self-reports in the entire sample, in line with the recommendations of validation studies of the instrument used [6,10]. This achievement is important because, despite advances in the participation of people with dementia in health research, there is still excessive reliance on proxy reports from relatives or healthcare professionals, even when individuals are capable of self-reporting their own perception of health status or quality of life, leading to clear inequities in this population [11]. The high proportion of self-reports was largely made possible by the choice of an appropriate assessment tool, the selection of psychologists and neuropsychologists to conduct the interviews, and their prior training. This training paid special attention to developing communication skills and interaction techniques for engaging with people with moderate to severe dementia, as well as to the careful selection of the environment and context in which the conversation took place [12].

On the other hand, this study has some limitations that should be considered when interpreting the results. First, the cross-sectional design prevents the establishment of causal relationships between the variables analyzed. It provides information about potential predictive factors that must necessarily be confirmed through longitudinal studies with larger statistical power to further explore these findings.

Second, although the sample is broad and diverse in terms of individual, sociodemographic, and facility-related variables, it is not a random sample, which may limit the generalizability of the findings. To minimize this limitation, the distribution by sex and age groups in the sample was compared with that of people with dementia in the Andalusian population to identify significant differences that might suggest sample bias. Furthermore, the results of this study were compared with those of other studies on quality of life conducted in similar populations, obtaining consistent findings.

Another limitation is that the quality-of-life assessment described in this study is based on a single self-report tool, which, although validated, may be influenced by the degree of cognitive impairment and the interview context. Some studies recommend the use of proxy reports from a family member or healthcare professional to triangulate self-report results [6].

Regarding the results, several studies have confirmed that quality of life progressively decreases as cognitive impairment advances, with a significant reduction in the moderate and severe stages of dementia [13,14]. This pattern is consistent with the findings of this study, where a downward trend in quality of life was observed as the degree of cognitive impairment increased.

Recent literature highlights significant sex differences in the perception and evaluation of quality of life. Joyce and colleagues

reported that women with cognitive impairment showed a stronger association with depressive symptoms and poorer performance on nonverbal memory tests, while in men, the perception of cognitive impairment was more closely related to performance on verbal memory tasks [15]. These findings may at least partly explain why, in this study, women did not show statistically significant differences in quality of life according to contextual variables, despite trends similar to those observed in men.

With respect to facility ownership, the results of this study show better quality of life among individuals living in private nursing homes, in contrast to the findings of Marventano et al., who found that public ownership of nursing homes was positively associated with the quality of life of institutionalized older adults with dementia [16]. That study classified as "public" both publicly owned facilities and private facilities with public funding. Moreover, the authors concluded that, based on the data collected, it was not possible to verify the specific factors in public or private facilities that influenced quality of life, assuming that it does not depend solely on ownership but on multiple factors, including the individual characteristics of residents, the quality of care, staff training, and available services. These aspects should therefore be considered when interpreting the results and designing interventions to improve the well-being of this population.

The results also show a significant association between quality of life and individual factors such as age, educational level, functional capacity, and severity of cognitive impairment. Prieto and colleagues conducted a survey of quality of life in 429 people aged 60 or older with dementia across 14 nursing homes in 10 Spanish provinces [16]. Their results showed that better quality of life was significantly associated with higher educational level and greater functional independence. Conversely, greater severity of cognitive impairment was associated with poorer quality of life. These findings are consistent with those of the present study.

A total of 84.5% of the participants were not living with their partner, a result similar to that found in the study by Ayala and Díaz Redondo in a sample of 525 institutionalized older adults, of whom 80.8% did not have a partner [16]. In couple relationships, there is a sense of mutual belonging. Partnership creates a culture of intimacy that serves as a boundary with the outside world and provides stability and security for people affected by dementia [17]. In this study, cohabitation with a partner was associated with higher quality of life scores, especially in men. This finding underscores the importance of perceived emotional and social support, which has been identified in the literature as a protective factor against psychological decline and reduced subjective well-being in older adults with dementia. The promotion of support networks and emotional companionship should therefore be considered essential components of person-centered care models.

The difference observed between those living in their own homes and those living in nursing homes is also relevant. Although institutionalization is often associated with greater care needs and lower quality of life, this study suggests that certain residential conditions—such as private ownership or the presence of a

partner—may mitigate some of that impact. However, the evidence on this point remains contradictory and highlights the importance of further examining the qualitative aspects of institutional care, beyond its formal structure.

Finally, although the person-centered care model did not show statistically significant differences in QoL-AD scores, its role as a comprehensive and humanized approach remains fundamental. This result is similar to that found by Rojano and colleagues in a comparison between two nursing homes for older adults, one with a traditional care model and the other with a person-centered care model [18]. It is possible that the impact of this model requires longer implementation or that it may be better reflected in other indicators not captured in this study, such as essential needs in dementia [19], psychological and behavioral symptoms of dementia, or pain [20], among others.

The results of this study emphasize the need to apply a comprehensive and personalized approach to the care of people with dementia, beyond the clinical diagnosis. Person-centered interventions that include emotional support, involve the family (especially partners), and improve the residential environment have been shown to reduce agitation, alleviate depression, and enhance quality of life [21]. Nevertheless, barriers in actual practice—such as limited resources and insufficient staff training—have also been identified as challenges to effective implementation [22].

These findings support the conclusion that, although person-centered care models require organizational changes, they are essential for addressing not only cognitive or functional aspects but also the emotional, relational, and environmental dimensions that are key to the lived experience of dementia.

Conclusions

This study provides new evidence on the quality of life of older adults with cognitive impairment or dementia in social and healthcare settings in Andalusia. A key strength of the research was that nearly three-quarters of participants, including a considerable proportion with moderate and severe cognitive impairment, were able to self-report their quality of life using the QoL-AD instrument.

The findings show that quality of life is significantly influenced by age, educational level, functional capacity, and severity of cognitive impairment, and is positively associated with living with a partner and remaining in one's own home. Among men, contextual variables such as cohabitation, type of residence, and facility ownership were also related to significant differences in quality of life.

These results highlight the importance of promoting person-centered approaches that integrate emotional support, family involvement, and improvements in the residential environment as essential elements of care. Although further longitudinal studies with larger and more representative samples are needed, this work establishes a baseline that can inform future interventions aimed at enhancing the well-being of people living with dementia.

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Ethical Guidelines

The study was conducted in accordance with the principles of the Declaration of Helsinki. All participants or their legal representatives provided informed consent prior to participation. The project was approved by the Andalusian Research Ethics Committee (approval code: SICEIA-2025-001912).

Conflict of Interest

The authors declare no conflicts of interest related to this work.

References

1. Lisko I, Kulmala J, Annertorp M, Ngandu T, Mangialasche F, et al. (2021) How can dementia and disability be prevented in older adults: where are we today and where are we going? *J Intern Med*. 289:807-830.
2. World Health Organization (2017) Global action plan on the public health response to dementia 2017–2025. Geneva: WHO.
3. Loriente VRL, Pardo BM, Lanarpa EG, Bengoechea EG (2025) Long-term effects of an assets-based, co-created physical activity intervention on health-related quality of life in older adults. *Rev Esp Geriatr Gerontol*. 60:101537.
4. López-Navarro MJ, Rodríguez-Blázquez C, Gallardo-Peralta LP (2025) Factors associated with the quality of life of older women living in rural areas: A literature review. *Rev Esp Geriatr Gerontol*. 60:101629.
5. Klapwijk MS, Caljouw MAA, Pieper MJC, van der Steen JT, Achterberg WP (2016) Characteristics associated with quality of life in long-term care residents with dementia: a cross-sectional study. *Dement Geriatr Cogn Disord*. 42: 186–197.
6. Telenius EW, Engedal K, Bergland A (2013) Physical performance and quality of life of nursing-home residents with mild and moderate dementia. *Int J Environ Res Public Health*. 10:6672-6686.
7. Burks HB, des Bordes JKA, Chadha R, Holmes HM, Rianon NJ (2021) Quality of Life Assessment in Older Adults with Dementia: A Systematic Review. *Dement Geriatr Cogn Disord*. 50:103-110.
8. Engel L, Sokolova V, Bogatyreva E, Leuenberger A (2024) Understanding the influence of different proxy perspectives in explaining the difference between self-rated and proxy-rated quality of life in people living with dementia: a systematic literature review and meta-analysis. *Qual Life Res*. 33:2055-2066.
9. Burks HB, des Bordes JKA, Chadha R, Holmes HM, Rianon NJ (2021) Quality of Life Assessment in Older Adults with Dementia: A Systematic Review. *Dement Geriatr Cogn Disord*. 50:103-110.
10. Gómez-Gallego, Gómez-Amor J, Gómez-García J (2012) Validation of the Spanish version of the QoL-AD Scale in alzheimer disease patients, their carers, and health professionals. *Neurología*. 27:4-10.
11. Kinchin I, Boland E, Leroi I, Coast J (2025) Through Their Eyes: Defining 'good life' in dementia for health economics and outcomes research. *Soc Sci Med* 366:117716.

12. Collins R, Hunt A, Quinn C, Martyr A, Pentecost C, et al. (2022) Methods and approaches for enhancing communication with people with moderate-to-severe dementia that can facilitate their inclusion in research and service evaluation: Findings from the IDEAL programme. *Dementia (London)*. 21:1135-1153.
13. Aye S, Bouteloup V, Jean D, Jönsson L (2023) Health-related quality of life in full spectrum of Alzheimer's disease: a longitudinal analysis. *Alzheimer's Dement* 19: e074876.
14. Mank A, Rijnhart JJM, van Maurik IS, Jönsson L, Handels R, et al. (2022) A longitudinal study on quality of life along the spectrum of Alzheimer's disease. *Alzheimers Res Ther*. 14:132.
15. Joyce JL, Chapman S, Gifford KA, Shagalow S, Waltrip LH, et al. (2023) Sex/gender differences in subjective cognitive decline's association to cognition and depression. *Alzheimer's Dement*. 19: e073811.
16. Marventano S, Prieto-Flores ME, Sanz-Barbero B, Martín-García S, Fernandez-Mayoralas G, et al. (2015) Quality of life in older people with dementia: a multilevel study of individual attributes and residential care center characteristics. *Geriatr Gerontol. Int* 15:104-110.
17. Niedling K, Hämel K (2023) Longing for normalcy in couple relationships: How chronic illness and care dependency change the relationship of long-married couples. *Front Public Health*. 11:1117786.
18. Luque XRI, Marsal ES, Cors OS, Casanovas AS (2021) Impact of a Person Centred Care Model on the quality of life, well-being, and thriving in nursing homes. A cross-sectional study. *Rev Esp Geriatr Gerontol*. 56:29-34.
19. Kitwood T, Bredin K (1992) Towards a theory of dementia care: personhood and well-being. *Ageing Soc* 12:269-87.
20. Nagata Y, Nishikawa T, Tanaka H, Ishimaru D, Ogawa Y, et al. (2022) Factors influencing the quality of life in patients with severe dementia. *Psychogeriatrics*. 22:49-54.
21. Kin AL, Griffith LE, Kuspinar A, Smith-Turchyn J, Richardson J (2024) Impact of care-recipient relationship type on quality of life in caregivers of older adults with dementia over time. *Age Ageing* 53: afae128.
22. Guan X, Duan AM, Xin GK, Oyebode J, Liu Y (2025) Barriers and facilitators to implementing person-centred dementia care in long-term care facilities in Western and Asian countries: a scoping review. *Front Psychiatry*. 15:1523501.