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A Systematic Review of the Current Status of Research on the Quality of Life and Well-Being of Institutionalized Older Adults in Spain

Antonia Rodríguez-Martínez[1], Yolanda María de la Fuente Robles[1], María del Carmen Martín Cano[1]

1) University of Jaen, Spain

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Antonia Rodríguez-Martínez
University of Jaen

María del Carmen Martín Cano
University of Jaen

Yolanda María de la Fuente Robles
University of Jaen

Abstract

The review question being considered in this article aims to study the research on quality of life and well-being of older adults residing in nursing homes in Spain, and the elements that address quality of life or its measurement in important aspects. The following databases were used: Scopus, Web of Science, ProQuest, Wiley online library, PubMed, EBSCOhost, ERIC, Emerald, and Dialnet plus. This review was reported according to the PRISMA guidelines. "Thematic Synthesis Analysis" was used to analyze the studies. Of the initial 1231 studies, a total of 18 studies, which met the eligibility inclusion and critical appraisal criteria, were analyzed. We note the lack of unicity of measurement criteria, as well as the need to generate a single scale defining the basic characteristics and essential factors that identify the quality of life. Further research and an integrated model of personalized quality of life, adapted to residents, is required.

Keywords: Institutionalization, nursing homes, older adults, person-centered care, quality of life

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Una Revisión Sistemática del Estado Actual de Investigación sobre Calidad de Vida y Bienestar de Personas Mayores Institucionalizadas en España

Antonia Rodríguez-Martínez
University of Jaen

María del Carmen Martín Cano
University of Jaen

Yolanda María de la Fuente Robles
University of Jaen

Resumen

La cuestión de revisión planteada en este artículo pretende abordar la investigación sobre calidad de vida y bienestar de los adultos mayores que residen en residencias de ancianos en España, así como los factores que influyen en la calidad de vida o su medición en aspectos importantes. Se utilizaron las siguientes bases de datos: Scopus, Web of Science, ProQuest, Wiley online library, PubMed, EBSCOhost, ERIC, Emerald y Dialnet plus. Esta revisión se informó de acuerdo con las directrices PRISMA. Se utilizó "Análisis de Síntesis Temática" para analizar los estudios. De los 1231 estudios iniciales, se analizaron un total de 18 estudios que cumplían los criterios de inclusión y de valoración crítica. Se observa la falta de unicidad de criterios de medición, así como la necesidad de generar una escala única que defina las características básicas y los factores esenciales que identifican la calidad de vida. Se requiere más investigación y un modelo integrado de calidad de vida personalizado, adaptado a los residentes.

Palabras clave: institucionalización, residencias de ancianos, adultos mayores, atención centrada en la persona, calidad de vida

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The aging of the world's population is an increasingly latent, long-lasting, irreversible and unprecedented phenomenon. It is necessary to take into account the evolution of the aging population, as it is a worldwide reality. In 2007, the World Health Organization (WHO) already indicated that the number of elderly people would double from 600 million to 1.2 billion by 2025 and to 2 billion by 2050. Data from the WHO indicate that between 2020 and 2030, the percentage of the world's population over the age of 60 will increase by 34%, and that the trend of population aging is accelerating faster than in the past.

The aging of the population is a fact that should not be ignored in Spain, since it is one of the countries of the European Union where the percentage of people over 80 years of age has increased to a greater extent, and with a rate of aging that is quite accelerated with respect to the rest of the countries. Specifically, the Spanish population over 65 years of age in 2020 has reached 22.9% of the population (Conde Ruiz & Gonzalez, 2021).

In line with the rapid growth of the older adults' population, the use of various housing options has increased over the last 30 years. This, together with the increase in the longevity of the population, has led to the phenomenon of a high number of older adults being cared for in both non assisted and assisted care settings, depending on different pathologies or simply the natural deterioration of age (Burnette, 1986). However, the older adult is exposed to situations of injustice, asymmetry and social exclusion, which means that this longer life expectancy is not accompanied by a better quality of life (Botero Mejía & Pico Merchán, 2007).

In the World Health Organization's WHOQOL-BREF Quality of Life Assessment Development Report (1996), Quality of Life (QoL) is defined as "the individual's perception of their position in life in the context of the culture and value system in which they live and in relation to their goals, expectations, standards, and concerns" (p. 3). According to this definition, it is a complex concept that encompasses the state of physical health of the person, as well as the psychological state, their level of independence, social relationships, personal beliefs and their relationships with their own environment (Cardona-Arias & Higuita-Gutiérrez, 2014; Villaverde et al., 2000).

If we analyze the WHO definition of QoL, we observe the multidimensionality and subjectivity of the concept, and the need to develop measurement instruments that reflect this multidimensionality. Following this

line, measurement instruments have been developed such as the Unmet Basic Needs Method, the Human Development Index, the Barthel Index, the Medical Outcomes Study, the Functional Status Index, the Functional Independence Measure and the Multidimensional Poverty Index (Alkire et al., 2011; Cardona-Arias & Higuita-Gutiérrez, 2014; Feres & Mancero, 2001). Despite the development of these measurement instruments and scales, these works have been insufficient, since they do not prioritize the subjective dimensions of the concept, QoL, they do not have uniformity in the questions, the information cannot be compared or they measure the impact of the disease but not the overall QoL of healthy people (Cardona-Arias & Higuita-Gutiérrez, 2014).

In its effort to adopt a reliable measure, the WHO designed the World Health Organization Quality of Life (WHOQOL-BREF), as a generic measure of QoL, which also presents an excellent conceptual and operational structure, psychometric development, reliability and cultural and language adaptation (Cardona-Arias & Higuita-Gutiérrez, 2014; Higginson & Carr, 2001; World Health Organization, 1996).

The increase in the ageing of the population in Spain, with the consequent increase in the need for care of the elderly in Nursing Homes (NHs), leads us to seriously consider finding out the current situation of the QoL of institutionalized older adults, so that their QoL can ultimately be improved through knowledge. Therefore, a systematic review of the literature on the QoL and well-being of Spanish older adults living in NHs has been proposed. This will allow to obtain new domains and dimensions, through the analysis of different studies, both quantitative and qualitative. On the one hand, by identifying the metrics used to determine these indicators, as this may help to modify the intervention methodology and to propose preventive guidelines. And on the other hand, promoting a debate and analysis of the current problem, which must be treated from the humanization of care for people. The results may contribute to shaping social and health policies, and help in the advancement of care practices centered on the person, his or her wishes and needs. To this end, we pose the following research question: What is the state of research on QoL and well-being of older adults living in NHs in Spain?

Taking this approach into account, we consider it important to transfer knowledge, generating debate in an interdisciplinary context, since the QoL of older adults living in NHs is linked to different areas of the social sciences.

Therefore, the dissemination of this study, which reflects a current social problem, contributes to the development of society and the improvement of the QoL of older adults in the population as a whole.

Methodology

Protocol

A systematic literature review (Grant & Booth, 2009) of studies has been conducted to obtain the research carried out on QoL and well-being of older adults living in NHs in Spain. An attempt was made to distinguish research related to relevant and general aspects that affect or measure the QoL in NHs for older adults in Spain, as opposed to specific actions to improve QoL.

This review was reported according to the Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) guidelines (Moher et al., 2009; Page et al., 2021). In addition, Chapter 20 of the Cochrane Handbook for Systematic Reviews of Interventions (Higgins & Green, 2011), and Chapter 2 of the Joanna Briggs Institute Reviewers' Manual (Lockwood et al., 2017), which provide methodological information for the development of the research, were used for the application of the review methods. The CADIMA web tool (Kohl et al., 2018) was used to perform the systematic review.

Search Strategy

The search strategy was developed in collaboration with the Social Work area of the University of *Blinded for review*, with expertise in care management for older adults. Factors such as population, context and phenomenon of interest to the research question were used. The different steps of this review were performed by two authors, with discrepancies being resolved by a third author.

In the searches conducted during the month of January 2022, the following databases were used to identify relevant studies for the review: Scopus, Web of Science, ProQuest, Wiley online library, PubMed, EBSCOhost, ERIC, Emerald and Dialnet plus. The search engine included other databases, such as MedLine, APA PsycInfo, Health & Medical Collection, Nursing & Allied Health Premium, among others (all accessible through ProQuest), and

MedLine, CINAHL Complete, Global Health, among others (all accessible through EBSCOhost). Likewise, the searches were conducted in English in all the databases, and also in Spanish in the Dialnet plus database. The set of relevant databases and the number of studies found are shown in Table 1.

An expert in bibliographic searches was consulted to develop an appropriate bibliographic search strategy. Terms related to "nursing homes" for "older adults", "quality of life" and "well-being" with their synonymous forms were used for searches in English and Spanish. In addition, the exclusion of terms related exclusively to "dementia" has been addressed when possible, due to the number of studies in the literature that are not significant for the objectives of this review, since they are specific studies of a particular health topic, which would lead to distort the results. For this reason, studies that only consider older people with dementia or other mental disorders have been considered as exclusion criteria. The exclusion criteria also include research that focuses on clinical trials, interventions or some other elements that aims to change, improve or modify the QoL of older adults after the intervention. Studies from 2011 to the present have been included due to the scarcity of similar studies in this period.

In order to specify the search for studies in Spain, the country of the authors can be a fundamental factor, but the location of the studies carried out is what finally determines whether they are research carried out in the geographic area under analysis.

Table 1 shows the search in a database as an example. All searches covered the time span between January 2011 and December 2021, and were performed on January 12 and 31, 2022. All were conducted in English, and the Dialnet plus database was searched in English and Spanish. An adaptation of the PICO tool (Riesenberg and Justice, 2014a, 2014b) was used to design the search strategy, although in this work the use of PICo (Population, Phenomenon of Interest, Context) is proposed to obtain the review question (Stern et al., 2014). This question is related to research in Spain on the QoL and well-being of older adults living in NHs (Table 2).

Table 1.
Example of search string and results of literature search and databases used (accessed on 2022-01-12 for the English searches and 2022-01-31 for the Spanish search on Dialnet plus)

Search string for Scopus	
TITLE-ABS-KEY(("nursing home" OR "care home" OR "retirement home" OR "old people home" OR "home for the elderly" OR "residency for the elderly" OR "residential care") AND ("quality of life" OR "life quality" OR "well-being") AND NOT("dementia" OR "mental disorder" OR "madness" OR "insanity")) AND (TITLE-ABS-KEY("Spain" OR "Spanish") OR AFFILCOUNTRY("Spain")) AND (PUBYEAR > 2010) AND (LIMIT-TO (SUBJAREA,"MEDI") OR LIMIT-TO (SUBJAREA,"NURS") OR LIMIT-TO (SUBJAREA,"SOCI") OR LIMIT-TO (SUBJAREA,"PSYC") OR LIMIT-TO (SUBJAREA,"HEAL") OR LIMIT-TO (SUBJAREA,"MULT"))	
Database or further sources	**Results**
Scopus	158
Web of Science	88
ProQuest, in all databases	160
Wiley online library	112
PubMed	55
EBSCOhost, in all databases	127
ERIC <1965 to May 2021>	1
Emerald	140
Dialnet Plus, search in English	66
Dialnet Plus, search in Spanish	324

Table 2.
PICo of the review question

PICo	
Population	Older People
Phenomenon of interest	Research in Spain about quality of life and well-being
Context	Living in nursing homes

Study Selection

The initial search results yielded a total of 1231 studies for analysis. For the elimination of duplicates, an approach was followed consisting of examining the quality of the records obtained for each study, studying the complexity of the records and selecting those that were most complete and correct (for example, in terms of author data or journal name). A duplicate check is performed by means of a script, after which the records marked as duplicates are manually reviewed, eliminating those with the poorest quality. In addition to the script for eliminating duplicates, a manual review was performed by two of the authors.

After elimination of duplicates (n=357), we obtained a total of 874 studies, which were independently reviewed by two authors by title and abstract, looking for the population, the phenomenon of interest, and the proposed context. Discrepancies were resolved by a third author. The screening phase was performed in a randomized fashion among the studies. In this step we obtained a set of studies for the full-text review according to the inclusion and exclusion criteria decided by the authors. The inclusion criteria for the full-text review were (1) older adults living in NHs; (2) research on QoL and well-being; (3) research in the Spanish population, or systematic reviews conducted by Spanish researchers; (4) studies comparing lifestyles and QoL of older adults living in NHs and those living with family members and/or at home; (5) validations/scales/questionnaires measuring QoL in NHs. The proposed exclusion criteria were: (1) no studies on interventions/trials; (2) no studies on physical illnesses/therapies/treatments/palliative care/death/heartache; (3) no specific studies on mental illnesses exclusively, such as dementia and/or Alzheimer's; (4) residential centers other than NHs for older adults; (5) studies in which the full text was not available or in a language other than English or Spanish; (6) research/models used in NHs for older adults outside Spain.

The full text of all records that met the inclusion criteria (based on title and abstract only) was obtained. In the next step, all full-text papers were reviewed following the inclusion criteria. The reasons for studies that did not meet the inclusion criteria at this stage were indicated. Then the remaining studies and successfully appraised were analyzed in depth.

Data Extraction

For consistency, one author extracted the data from each study included in this systematic review and inserted them into an Excel spreadsheet containing the characteristics of the studies and the main outcome of each study. A data extraction of the relevant information from these studies was performed before the final evaluation of all the selected studies. To complete this stage, the other two authors read and commented thoroughly and discrepancies were resolved by consensus among all authors. In addition, a standardized data collection form was used, following the methodological recommendations proposed by Butler et al. (2016). The information reflected in the extraction sheet included for each paper: place and year, title, authors, publication data, objective, study population, sample, methodology, and the main results related to QoL. Discrepancies were resolved by consensus, through a joint review among the authors.

Critical Appraisal

The included studies were evaluated using a standardized critical appraisal tool. For the selection of the tool first the authors performed a test for two of the included studies, using the Mixed Methods Appraisal Tool (MMAT) version 2018 (Hong et al., 2018) and Standard Quality Assessment Criteria (SQAC) to evaluate the quality of studies (Kmet et al., 2004). Both tools are validated and widely used for systematic reviews. Each tool was tested independently by the authors for two full-text documents. After testing and by consensus, the authors agreed that the SQAC tool, specific for the critical appraisal of methods from various fields, was the best validated tool for the studies included in this systematic review. While MMAT initially allows a broader set of categories to be selected for assessment, the set of questions in the SQAC is broader and more comprehensive, fully covering the questions posed by MMAT. This method is applicable to quantitative and qualitative studies.

The authors, by common agreement, established the thresholds for deciding on the inclusion of the studies. The studies to be evaluated were divided among the authors and each one assessed 20% of the other authors' batch, thus it was found that some included studies had gaps in relation to

methodological quality and identified findings, but still included useful details that contributed to the overall narrative synthesis and answered the research question posed. Thus, the methodological quality of the studies that met the inclusion criteria was assessed using the evaluation criteria developed by Kmet et al. (2004).

Content Synthesis

A narrative synthesis was used to identify the main findings of the included studies. Once the studies were selected, a thematic analysis was performed using the "Thematic Synthesis" protocol (Thomas & Harden, 2008) organizing into themes and subthemes and abstracting the findings related to research in Spain on QoL, well-being and related dimensions of older adults residing in NHs. For quantitative and qualitative studies, data were synthesized describing the objective, the methodology used, the sample and population, and the main results obtained.

Results

Selection of Studies

The bibliographic search and selection of studies can be seen in the PRISMA diagram in Figure 1. The initial search yielded 1231 documents from the databases used. After the elimination of duplicates, 874 documents were obtained and passed to the screening phase, in title and abstract.

In the screening phase 842 papers were eliminated. A total of 32 studies were selected for full-text review. Of these, 9 studies were excluded because they were trials or interventions, 2 were excluded because they were research focused exclusively on the dementia population, 1 because it was a systematic review of clinical trials and 1 because it was a doctoral thesis with the same content as a study already included. Finally, a total of 18 studies that make up this systematic review were analyzed in depth, since out of the 19 studies initially chosen based on the inclusion criteria, one of them did not pass the critical appraisal.

Figure 1.

Reporting items for Systematic Reviews and Meta-Analysis (PRISMA) flow chart

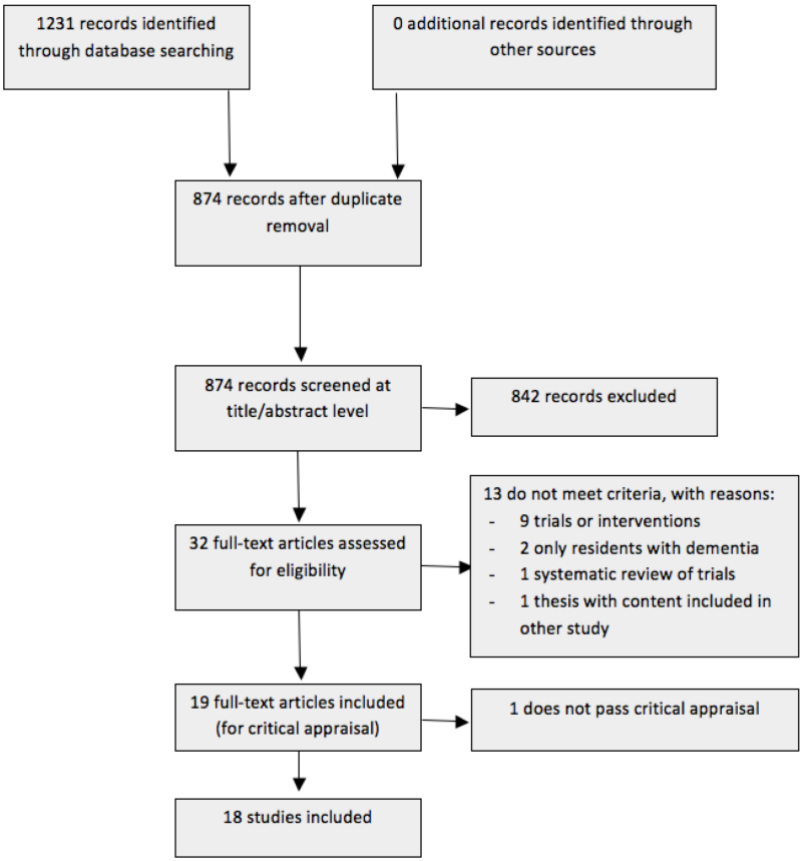

Table 3.
Quality assessment criteria scores for quantitative methodologies (Kmet et al., 2004)

Question	Lluesma-Vidal et al., 2021	Carcavilla González et al., 2021	Rojano i Luque et al., 2021	González Casas et al., 2020	Acevedo Alcaraz, 2015	Garrido-Abejar et al., 2012	Lucas-Carrasco et al., 2011	Pérez-Ros & Martínez-Arnau, 2020	Concheiro-Moscoso et al., 2019	Luque-Reca et al., 2015	Rodríguez-Blazquez et al., 2012	Acevedo Alcaraz, 2016	Huesa Andrade, 2020	Cuadros Bordal, 2013
1	2	2	2	1	2	2	2	2	2	2	2	2	2	2
2	2	1	2	1	2	2	2	2	1	2	2	1	1	1
3	1	2	2	2	1	2	2	2	0	2	2	1	2	2
4	2	1	2	2	1	2	2	1	0	2	2	2	2	1
5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8	2	2	1	1	2	2	2	2	1	2	2	2	2	2
9	1	2	2	2	2	2	2	2	2	2	2	2	2	1
10	2	2	1	1	2	2	2	2	1	2	2	2	1	2
11	2	2	2	2	2	2	2	2	2	2	2	1	2	2
12	2	N/A	0	0	0	0	2	2	0	2	0	0	0	2
13	2	2	1	2	2	2	2	2	1	2	2	2	2	2
14	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Score	**20**	**18**	**17**	**16**	**18**	**20**	**22**	**21**	**12**	**22**	**20**	**17**	**18**	**19**
Max.	22	20	22	22	22	22	22	22	22	22	22	22	22	22
%	**90**	**90**	**77**	**73**	**81**	**90**	**100**	**95**	**55**	**100**	**90**	**77**	**81**	**86**

1 Question / objective sufficiently described?
2 Study design evident and appropriate?
3 Method of subject/comparison group selection or source of information/input variables described and appropriate?
4 Subject (and comparison group, if applicable) characteristics sufficiently described?
5 If interventional and random allocation was possible, was it described?
6 If interventional and blinding of investigators was possible, was it reported?
7 If interventional and blinding of subjects was possible, was it reported?
8 Outcome and (if applicable) exposure measure(s) well defined and robust to measurement / misclassification bias? Means of assessment reported?
9 Sample size appropriate?
10 Analytic methods described/justified and appropriate?
11 Some estimate of variance is reported for the main results?
12 Controlled for confounding?
13 Results reported in sufficient detail?
14 Conclusions supported by the results?

Table 4.
Quality assessment criteria scores for qualitative methodologies (Kmet et al., 2004)

Question	Sarabia Cobo, 2014	Flecha García, 2019	Del Rocío Santana-Berlanga et al., 2020	Rodríguez Martín et al., 2011	Martín Aranda, 2019
1	2	2	2	2	2
2	1	2	2	1	1
3	2	1	2	1	2
4	1	2	2	2	1
5	2	1	2	1	1
6	2	2	2	2	2
7	2	2	2	1	2
8	0	2	2	1	0
9	2	2	2	2	2
10	2	1	2	2	1
Score	**16**	**17**	**20**	**15**	**14**
Max.	20	20	20	20	20
%	**80%**	**85%**	**100%**	**75%**	**70%**

1 Question / objective sufficiently described?
2 Study design evident and appropriate?
3 Context for the study clear?
4 Connection to a theoretical framework / wider body of knowledge?
5 Sampling strategy described, relevant and justified?
6 Data collection methods clearly described and systematic?
7 Data analysis clearly described and systematic?
8 Use of verification procedure(s) to establish credibility?
9 Conclusions supported by the results?
10 Reflexivity of the account?

Methodological Quality Assessment

A threshold of 70% was established for the quality of the studies included in the review following the SQAC method. All the studies finally selected (n=18) exceeded this threshold, both quantitative and qualitative, the latter being, in general, of poorer quality as they had a lower quality percentage, around 82% on average compared to 84.6% on average for the quantitative studies. The only study excluded was Concheiro-Moscoso et al. (2019) for being rated with 55%. Among the different items assessed, we can highlight that item 12

"controlled for confounding" in relation to quantitative studies, obtained the worst scores in general, because most of the analyzed works did not consider confounding or dependencies between variables. Among the qualitative studies, item 8 was the worst rated due to the lower use of verification procedures to establish credibility. The worst quantitative study included had a rate of 73% (González Casas et al., 2020) and the worst qualitative study had a rate of 70% (Martín Aranda, 2019). The quality assessment of the included studies is shown in Table 3 (quantitative) and Table 4 (qualitative).

Findings in the Studies

The following are the findings of this review. The studies included in the content analysis can be classified into four main groups:

1. Studies that describe or develop instruments or scales of QoL and specific measurement of the satisfaction of older adults residing in NHs (Carcavilla González et al., 2021; Del Rocío Santana-Berlanga et al., 2020; Lucas-Carrasco et al., 2011; Pérez-Ros & Martínez-Arnau, 2020; Rodríguez Martín et al., 2011).
2. Studies that focus on the analysis of health, clinical and sociodemographic variables and their influence on the QoL of older adults residing in NHs (Garrido-Abejar et al., 2012; Lluesma-Vidal et al., 2021; Luque-Reca et al., 2015; Martín Aranda, 2019; Rodríguez-Blazquez et al., 2012).
3. Studies that focus their research on the Person-Centered Care (PCC) model, mood states, functional capacity and social support, and QoL of older adults residing in NHs (Flecha García, 2019; González Casas et al., 2020; Rojano i Luque et al., 2021).
4. Research focused on the influence of institutionalization on the autonomy, the independence, and the QoL of older adults residing in NHs and those of people living with their relatives or in their own homes (Acevedo Alcaraz, 2015; Acevedo Alcaraz, 2016; Cuadros Bordal, 2013; Huesa Andrade, 2020; Sarabia Cobo, 2014).

These studies are summarized in Table 5, and Figures 2, 3, 4, 5.

Figure 2.

Type of study

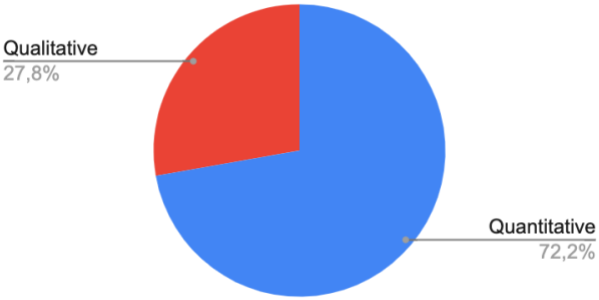

Figure 3.

Subjects of the studies analyzed

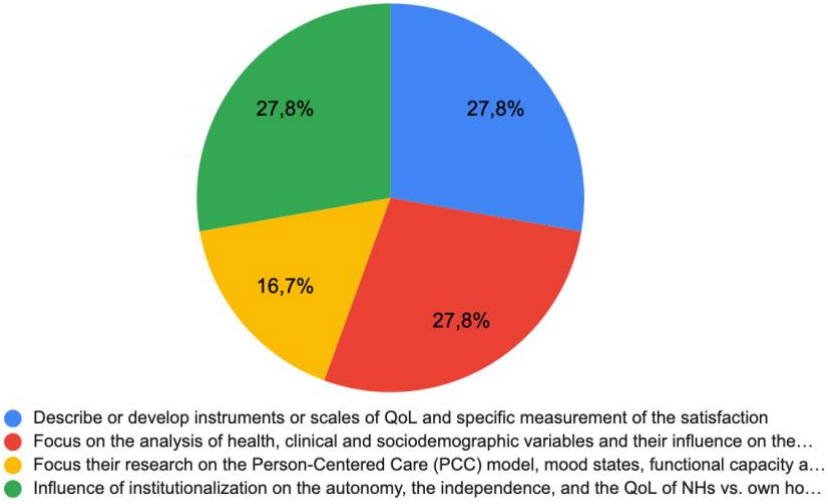

Figure 4.

Year of publication of the studies analyzed

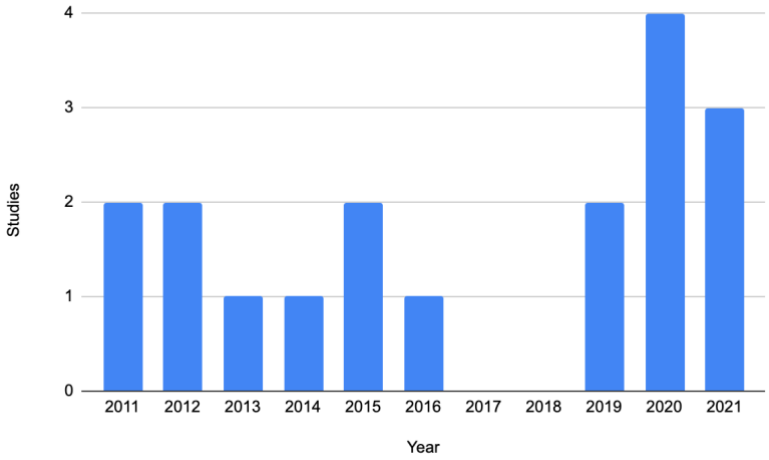

Figure 5.

Journal of the studies analyzed

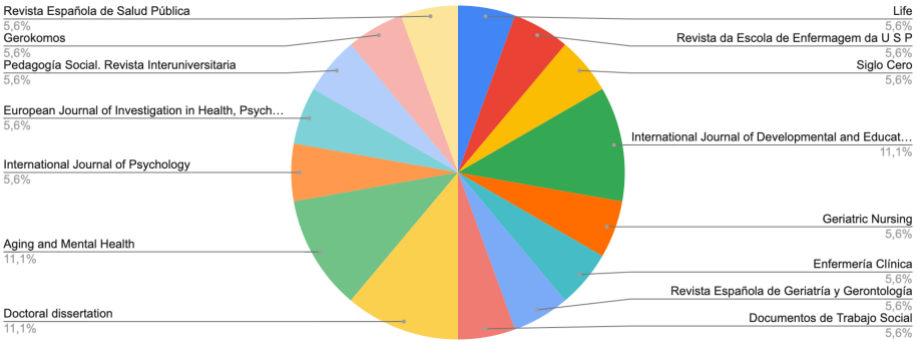

Table 5.
Summary of studies included in the review

Reference (Region)	Aim	Methodology / Design	Population / Sample	Main findings
Lluesma-Vidal et al., 2021 (Valencia y Teruel, Spain)	To analyze the relationship between sociodemographic and clinical variables in patients with cognitive impairment according to the place of residence (family home vs. institutions), comparing it with the self-perception of health status as a dimension of their QoL in both groups.	Cross-sectional observational comparative study.	Subjects residing in their homes and subjects residing in social-health centers. 71 subjects, 44 residing at home and day care center and 27 residing in a social-health center.	The main results show that despite the fact that patients who live at home have a worse cognitive status in relation to the MMSE (difference of 3.09 points; p = 0.003) and verbal fluency (difference of 3.05 points 5.32; p = 0.000), their self-perception of their health status is superior to those who live in a socio-health center (difference of 21.22 points; p = 0.000). It can be concluded that the subjects who live at home have a better self-perception of their health status than those who live in the social-health center, despite the fact that their cognitive status shows worse results. This aspect contributes to improving the use of the necessary resources in areas where care is more effective and improves the residents' QoL.
Carcavilla González et al., 2021 (Spain)	To achieve the design of a QoL assessment instrument in NHs for older adults.	Literature review. Pilot study. Factorial analysis of principal components, evaluation of the internal consistency for its reliability (Cronbach's alpha coefficient).	100-item version administered to 99 participants from three residences (36.4% professionals, 30.30% residents and 33.33% family members). 225 participants from other residences in Spain answered the questionnaire of 27 questions and 9 dimensions designed (62% professionals, 23% residents and 14% family members).	A validated and reliable questionnaire to measure QoL in NHs, contemplating the perception of residents, family members and professionals (with 27 questions and 9 dimensions).

Reference (Region)	Aim	Methodology / Design	Population / Sample	Main findings
Rojano i Luque et al., 2021 (Barcelona, Spain)	To study aspects of wellbeing, quality of life and ability to go forward of the older adults in two residential centers, one conventional and the other based on PCC.	Cross-sectional study. The impact on QoL, well-being, and ability to cope with health problems of a PCC model relative to the traditional model was evaluated using the adjusted effect size (Cohen's d), Charlson index, and presence of depression.	Older adults residing in the conventional center and residents in the PCC center. Overall participation was 78% of residents (59/77 people from the conventional center and 66/88 from the PCC).	The older adults in the PCC center presented better well-being (d = 0.378) and ability to go forward (d = 0.566). No differences were found in QoL. The PCC model may have a positive impact on well-being and ability to go forward in people living in NHs.
González Casas et al., 2020 (Asturias, Spain)	To study the QoL of people residing in care centers for people with disabilities and/or NHs linked to the increase of stable social support networks.	Interviews with people under tutelage in care centers for older adults with disabilities and/or residences for older adults.	People with disabilities and older adults. 125 interviews with people under tutelage residing in care centers for people with disabilities and/or residences for older adults. The results are analyzed according to sex, recognized degree of dependence and type of accommodation.	High relevance of the results regarding the correlation between QoL indexes and community social support. The aspects related to psychosocial well-being, which correlate significantly with QoL, obtain more deficient results with respect to the areas without the characteristics studied, which alludes to the need to implement mechanisms tending to strengthen the relationships of the people interviewed with their environments.
Flecha García, 2019 (Spain)	To determine the presence of self-acceptance and meaning/purpose in life as variables of well-being in older adult residents.	Phenomenological-qualitative. Information obtained through a semi-structured interview in order to know the life experiences of the older adults and answer questions about the presence of a positive attitude towards the self and the presence of goals that determine the purpose, direction and meaning of life.	66 residents	Most of the residents present a positive attitude towards the self, showing good self-esteem and self-acceptance. They express goals focused on the present, in values of experience and attitude that give meaning to their lives, highlighting those aimed at positive interpersonal relationships. They express values oriented to their own well-being and that of the community in which they live. The dimensions analyzed reveal, a good level of subjective psychological well-being of the residents, similar to that of the non-residents. A degree of well-being closely related to health conditions, especially functional health, personality, attitude towards living in these institutions, the quality of care, and to a context that allows them to cultivate their interests and possibilities.

Reference (Region)	Aim	Methodology / Design	Population / Sample	Main findings
Acevedo Alcaraz, 2015 (Murcia, Spain)	To compare the QoL, functional capacity, degree of dependence and depressive symptoms of institutionalized older adults in NHs with those of older adults living with their relatives.	Questionnaire that includes three different indexes (Barthel Index, Yesavage scale and WHOQOL-OLD questionnaire) to assess the degree of dependence.	400 people over 60 years of age, in NHs or living with family members.	A significant reduction in the QoL of the older adults living in NHs has been determined ($p<0.001$), with respect to the older adults who usually live with their relatives. The results show that the degree of physical and/or psychological dependence of older adults is the determining factor for their admission to a NH ($p>0.001$). The current model of NHs requires a change that allows us to respond to the real needs of institutionalized older adults.
Sarabia Cobo, 2014 (Santader, Spain)	To assess the influence of institutionalization on autonomy and perceived QoL among institutionalized older adults.	A quasi-experimental (interrupted time series) and longitudinal study. Two scales, the Barthel index and the Lawton index, were used to assess QoL and dependence.	104 older adults in three NHs in Santander, Spain	A significant relationship was observed between autonomy and independence and declined under institutionalization, such as physical and social aspects. The dependency of older adults is a complex phenomenon, which demands different types of intervention, including common support actions, which tend to cover the absence of autonomy in daily life, without resorting to institutionalization.
Garrido-Abejar et al., 2012 (Cuenca, Spain)	To analyze the association of comorbidity, functional capacity, mood and perception of social support with physical and mental dimensions of HRQOL, and to evaluate the differences between institutionalized older men and women without severe cognitive impairment in Cuenca, Spain.	Descriptive, cross-sectional study. Measurements: sociodemographic and clinical variables and standardized instruments: SF12v2, cognitive mini-examination, Barthel index, geriatric depression scale and social support perception scale. Differential multiple linear regression models for the physical and mental dimensions of the SF12 and by gender.	16 NHs in Cuenca. 281 residents. 55% were women, with an average age of 82.6; while the average age of men was 81.23 years.	Comorbidity was higher in women 1.96, but in the regression it was not associated with the physical dimension of HRQOL, but was associated with disability, depressive symptomatology and perception of social support. The worst HRQOL in women was found in the mental dimension, which was associated with depressive symptomatology and low perception of social support. Biological and functional factors were associated exclusively with the physical dimension and mood with both dimensions (physical and mental). The differential factor that could explain the worse HRQOL in institutionalized women was associated with a more negative experience of loss, both of functional capacity and of social support.

Reference (Region)	Aim	Methodology / Design	Population / Sample	Main findings
Lucas-Carrasco et al., 2011 (Spain)	To study the psychometric properties of the generic QoL measure WHOQOL-BREF and the specific module for older adults WHOQOL-OLD.	The following information was collected: demographic data, self-perception of health, depressive symptoms (Geriatric Depression Scale, GDS-30), functional status (SF-12) and QoL (WHOQOL-BREF and WHOQOL-OLD). The analysis was performed using classical psychometric techniques with SPSS v15.0.	Spanish older adults aged 60 years and over from community centers, primary care centers, family associations and NHs	No ceiling and floor effects were found, and missing data were low. Internal consistency measured by Cronbach's alpha was 0.90 for the WHOQOL-BREF total scale and 0.80 for the WHOQOL-OLD. A priori expected associations were found between the WHOQOL-BREF and WHOQOL-OLD with the SF-12 and GDS-30, indicating good construct validity. WHOQOL-BREF and WHOQOL-OLD domain scores differed between participants with lower and higher educational attainment, and between groups of older people (healthy vs. unhealthy; non-depressed vs. depressed; non-caregivers vs. caregivers; and non-residents vs. residents). The WHOQOL-BREF and WHOQOL-OLD questionnaires demonstrate acceptable psychometric performance in a convenience sample of Spanish older adults. They are valuable measures of QoL for use with older people.
Pérez-Ros & Martínez-Arnau, 2020 (Valencia, Spain)	To evaluate the psychometric properties of the EQ-5D self-report (including the EQ index and the visual analog scale [VAS]) in NH residents with cognitive impairment and to analyze its validity based on the scales included in the comprehensive geriatric assessment.	Cross-sectional, multicenter study analyzing the feasibility, acceptability, reliability and validity of the EQ-5D based on 251 self-administered questionnaires in a sample of NH residents with cognitive impairment. The reference scales were those of the comprehensive geriatric assessment, equivalent to the five dimensions of the EuroQol.	Seven NHs in Valencia, 195 participants aged 70 years or older with cognitive impairment diagnosed by the geriatrician after evaluation with the Mini Mental State Examination (MMSE), living in NHs in the province of Valencia.	The EQ index was 0.31 (0.37) and the EQ VAS was 35.96 (29.86), showing adequate acceptability and feasibility. Cronbach's alpha was 0.723. The EQ index and EQ VAS, as outcome variables for multiple linear regression models including the CGA rating scales, showed better validity for the EQ index than for the EQ VAS. As a self-administered generic scale, the EQ-5D-3L could be a good tool for the assessment of QoL in NH residents with cognitive impairment

Reference (Region)	Aim	Methodology / Design	Population / Sample	Main findings
Del Rocío Santana-Berlanga et al., 2020 (Spain)	To analyze the instruments available to measure the QoL of institutionalized older adults, the psychometric properties of these instruments and their use.	This review was based on six international databases. The quality of psychometric properties was assessed using the COSMIN checklist. Risk of bias was assessed using the QUADAS-2 tool.	Twenty-four instruments measuring QoL were analyzed.	The instruments evaluated are related to two areas, thus establishing two stages of the concept of QoL in the aging process. The Dementia QoL Scale (DQoL) and the FACIT-Sp Spiritual Well-Being Scale were found to be the instruments with the best combination of length, high methodological quality and bias control for use in older adults with and without cognitive impairment, respectively. Knowing which instruments have the highest quality will facilitate the assessment of aspects that influence QoL in geriatric institutions.
Luque-Reca et al., 2015 (Spain)	To explore the relationship between emotional intelligence (EI) and health-related QoL (HRQoL) in a sample of Spanish older adults institutionalized in long-term care (LTC) facilities.	Data analysis by hierarchical regression, obtained by questionnaire.	115 institutionalized persons aged 88.3±7.9 years from southern Spain.	After controlling for sociodemographic and personality variables, the dimensions of EI, emotional understanding, and emotional facilitation explained part of the variance in several facets of HRQOL. These dimensions could play an important role in the HRQOL of hospice residents. In addition, the use of a performance measure addresses the limitations of previous studies that have relied on self-report measures.

Reference (Region)	Aim	Methodology / Design	Population / Sample	Main findings
Rodríguez-Blazquez et al., 2012 (Spain)	To identify the differences and main factors influencing health status and well-being variables between institutionalized and non-institutionalized older adults, as well as the interaction effect of institutionalization and age.	Sociodemographic variables and measures of well-being (Personal Well-being Index, PWI), health status (EQ-5D), functional capacity (Barthel Index), depression (Hospital Anxiety and Depression Scale-Depression subscale), loneliness and comorbidity were used. Analyses of variance and Kruskal-Wallis tests were performed to examine differences between groups and multiple regression analyses were performed to identify factors associated with health and well-being.	468 older adults institutionalized and non-institutionalized aged 60 and over	Significant differences were detected between the groups in the health status variables, but not in well-being. Controlling for age, differences in health status (EQ-VAS) were found to be nonsignificant in both groups. In the non-institutionalized group, persons aged 78 years and older reported significantly lower well-being (PWI) than their younger counterparts. Depression, functional dependence, loneliness, and sex were associated with health status; whereas depression, health status, loneliness, and age-institutionalization interaction were related to well-being. The results suggest that age influences well-being in community-dwelling older adults to a greater extent than in institutionalized older persons. This finding has implications for the allocation of resources and interventions aimed at improving the health and well-being of older adults.
Rodríguez Martín et al., 2011 (Almería, Spain)	To know what residents think about the services they are receiving and consequently, maintain or improve each one, obtaining an improvement in their well-being or QoL.	Design of a questionnaire based on the opinion of different professionals with recognized experience in geriatrics. Sixteen evaluation questionnaires with 10 statements each, for the different services.	Older adult residents in NHs. Pilot study to 10 users of a geriatric residence in the province of Almería, in order to evaluate the items and the usefulness of the satisfaction scale. Different rounds to 10 experts and 10 users.	After the first round, the experts were in unanimous agreement with the suitability of the questions posed, finally ordering them according to the importance they gave to each one of them. At the end of this phase, the final questionnaire was drawn up and used in a sampling exercise to correct possible errors and finally obtain an instrument that was not only useful but also valid.

Reference (Region)	Aim	Methodology / Design	Population / Sample	Main findings
Acevedo Alcaraz, 2016 (Murcia, Spain)	To know the situation of the older adult institutionalized in NHs, comparing them with those living with their families in the geographical area of the Autonomous Community of the Region of Murcia, with Spain or countries of the closest environment (functional capacity, level of physical and psychological dependence, depressive symptoms and QoL).	Use of quantitative techniques (questionnaire elaborated through standardized indexes and scales) complemented with documentary statistical analysis.	The sociodemographic characteristics, functional capacity, level of dependence and depressive symptoms of 401 older adults aged 60 years or more and of both sexes distributed in two different groups were studied: 300 older adults institutionalized in a NH in which they live permanently, and another 101 older adults who live with their families. All of them reside in the Autonomous Community of the Region of Murcia.	The older adults institutionalized in NHs are more deteriorated than the older adults living with their families in practically all the areas evaluated. The quantitative results show that the QoL of the older adults living in NHs is significantly lower than that of the older adults living at home with their relatives. This study highlights that the degree of knowledge of Law 39/2006 (Dependency Law) among the older adults interviewed is very low, difficult to access and its applications are practically unknown. Severe physical/psychological dependence has been determined in the older adults institutionalized in NHs with respect to the older adults living with their families ($p<0.0005$). In addition, 44.3% of the older adults institutionalized in NHs are dependent for the BADLs, 80.7% are dependent for the IADLs, while only 4.7% are autonomous, showing significant differences in all cases with the older adults living with families.
Huesa Andrade, 2020 (Sevilla, Spain)	To study the characteristics of institutionalized and home patients, addressing their differences, mortality, QoL use of health resources.	Analytical observational prospective longitudinal cohort study.	1,314 older adults, of whom 1,061 were institutionalized in residential centers and 253 in home care in the province of Seville. Both homogeneous samples, according to their clinical characteristics.	Importance of promoting patient autonomy and longitudinality in patient follow-up, both at the residential level and at home.

Reference (Region)	Aim	Methodology / Design	Population / Sample	Main findings
Cuadros Bordal, 2013 (Jaén, Spain)	To study possible differences in subjective well-being and depression between older adults living in NHs and older adults living at home.	Descriptive cross-sectional study. Two instruments were applied to measure subjective well-being: Ryff scale and Lawton scale and Yesavage geriatric depression scale (abbreviated version).	Rural population of Beas de Segura (Jaén). Fifty older adults between 65 and 95 years.	There are no significant differences between the two groups in the variable Depression, but differences were found both in the Lawton index and in the six dimensions measured by the Ryff scale, i.e. in Self-acceptance, Relationships, Autonomy, Environmental Mastery, Personal Growth and Life Purpose, in the sense that participants living at home score higher in all variables. Autonomy, Mastery of the environment, Personal growth and Life purpose, in the sense that the participants living at home scored higher on all the variables.
Martín Aranda, 2019 (Zamora, Spain)	To analyze the levels of QoL in an institutionalized population by identifying the perception that these people have of their QoL.	Descriptive-explanatory, non-experimental, descriptive-exploratory study, with a cross-sectional design and quantitative-qualitative methodology. The FUMAT scale and the focus group technique were applied to deepen in the determinants of the QoL perceived by older adults and its relationship with the vital situation of staying in a geriatric institution.	112 residents of the "Los Tres Arboles" institution, in the province of Zamora	The levels of QoL found were high, with the most relevant dimension being that of physical well-being linked to functional independence, self-determination and social inclusion. These people attribute an improvement in their physical well-being to the fact of living in a NH, in which attention to physical activity is perceived by them as fundamental. The area of rights, self-determination, social inclusion and personal development were also important. Physical well-being, vitality and independence are, in the opinion of the participants, the main benefits derived from the practice of physical exercises, in particular revitalization exercises, as well as from the physiotherapy.

Instruments or scales of QoL and specific measurement of the satisfaction of older adults residing in NHs. The QoL construct integrates multiple dimensions in which objective and subjective aspects are distinguished. Objective aspects include quality of aspects such as nutritional status, quality of sleep states, physical condition and standards established by health and social experts. While subjective aspects refer to the quality of the experience such as satisfaction with the conditions in which the lives of the residents develop, well-being, satisfaction with the environment, etc. The

measurement of QoL in general is not a fully standardized process. The measures developed depend on multiple factors that in many cases are associated with a culture, region, country, type of society or a different understanding of the concept of QoL. In the case of the QoL of older adults living in NHs, there are additional factors and specific circumstances that lead to adapting the scales, the way of measuring QoL, or to develop new methods.

As discussed in previous sections, people are living longer and healthier than at any other time in history (Lucas-Carrasco et al., 2011). Therefore, it is necessary to take into account the different groups and consider control responses in all groups. In this sense, the study developed by Carcavilla González et al. (2021) provides a research line for further investigation in Spain. These authors state that the well-being and QoL of older adults residing in NHs has been studied for many years and is a growing issue of concern in recent times. They indicate that its evaluation requires tools that take into account the subjective needs and demands of residents, family members and professionals. On this basis, they propose a specific QoL questionnaire for Spanish NHs residents. Carcavilla González et al. (2021), endorses the scarcity of measures to cover the different aspects of QoL of older adults residing in NHs, considering all the groups of interest and contemplating their objective and subjective dimensions. In this sense, the research by Rodríguez Martín et al. (2011) focuses on the development of a questionnaire that measures the satisfaction of older adults living in NHs. However, unlike Carcavilla González et al. (2021), the opinion about the different facilities, and the degree of agreement or disagreement in the assessment and validation of the statements is contrasted by professionals in different rounds. By contrast, there is a significant lack of consultation with the residents. In order to obtain a more complete instrument to diagnose the degree of satisfaction of the residents, and thus verify their well-being, and to compare different centers according to quality criteria given by the users, it would be advisable to expand this research by extending it to the evaluation by the residents and their relatives.

The review of the literature indicates that the research carried out in this period (2011-2021) focuses on the analysis of the psychometric properties of the WHOQOL generic QoL measure: WHOQOL-BREF and the specific module for older adults WHOQOL-OLD, applied in Spanish older adults (Lucas-Carrasco et al., 2011). Pérez-Ros & Martínez-Arnau (2020), in turn,

focus on the EQ index for the evaluation of psychometric properties and the EVA visual analog scale, as well as the EQ-5D. Recently, Del Rocío Santana-Berlanga et al. (2020) conducted a systematic review in which they analyzed 24 instruments for measuring QoL (in general, not specifically QoL of older adults in NHs). In particular, they focus on the analysis of the instruments available to measure the QoL of institutionalized older adults, the psychometric properties of these instruments and their use. They indicate that the QoL scale for dementia (DQoL) and the spiritual well-being scale FACIT-Sp, are the instruments that best assess the longitudinal and methodological quality, as well as the bias control for use in older adults with and without cognitive impairment.

Analysis of health, clinical and sociodemographic variables and their influence on the QoL of older adults residing in NHs. Establishing QoL dimensions makes it possible to define relationships between these dimensions or variables. In addition, the specific circumstances of certain NHs or their residents, the region they live in, and other factors, mean that the measure of QoL and the factors that condition it are different and require different dimensions with greater or lesser importance depending on the case.

Dimensions related to personal, organizational, activity-related factors, as well as social satisfaction can be used to determine their relationship to residents' QoL. The perception of QoL obtained by residents should be taken into account as a priority, although other factors external to it are important, influential and delimiting factors. It is clear that QoL is a perception that depends to a large extent on the culture, territorial scope and therefore on the customs and wealth of a country, and also on clinical variables among which could be contemplated nutritional status, sleep states and times, physical condition, intelligence and emotional states and others such as environmental and sociodemographic factors. In this sense, Lluesma-Vidal et al. (2021), analyze the relationship between sociodemographic and clinical variables of older adults with cognitive impairment according to the place of residence and compare the self-perception of the health status of older adults residing in NHs and older adults residing in family environments. They conclude that people who live at home have a better self-perception of their state of health than those who live in social-health centers, despite the fact that their cognitive state reflects worse results. In this regard, it is clear that the environment is a

determining factor in the QoL and a reflection of the state of health, so it is important to consider the preferences of the older adults and the environment in which they wish to develop their lives.

Other variables that ratify the influence and improvement of QoL and that are manifested in health status are associated with the relationship between emotional intelligence and health-related QoL (HRQOL) (Luque-Reca et al., 2015). In this line, if we add the age factor, the health status and well-being of institutionalized and non-institutionalized older adults is considerably affected in the development of their lives (Rodríguez-Blázquez et al., 2012). Specifically, the research carried out by Garrido-Abejar et al. (2012), differentiating people by sex, indicates that the worst HRQOL is found in women, and is identified in the mental dimension associated with depressive symptoms and low perception of social support. This research shows that biological and functional factors are associated exclusively with the physical dimension, and mood is associated with both dimensions (physical and mental). The differential factor that could explain the worse HRQOL in institutionalized women is associated with a more negative experience of loss, both of functional capacity and social support. Thus, physical well-being, vitality and independence, linked to functional independence, self-determination and social inclusion, are the main benefits derived from the practice of physical exercise for older adult residents (Martín Aranda, 2019).

PCC model, mood states, functional capacity and social support, and QoL of older adults residing in NHs. Research on QoL for institutionalized persons is rigorously conducted in a variety of settings and in a variety of ways over time. When measuring QoL, there are different factors on which attention is focused depending on the research question(s) on which the research is focused. The QoL construct integrates multiple dimensions in which aspects such as people's desires and preferences are distinguished. In this regard, this literature review has identified several studies that manifest the importance of PCC. The PCC approach, allows obtaining a model for the improvement of the quality of care for the elderly and shows that most residents present a positive attitude towards the self, manifesting higher levels of self-esteem and self-acceptance, express goals focused on the present, on values of experience and attitude that give meaning to their lives, highlighting positive interpersonal relationships. They show values oriented to their own well-being

and that of the community in which they live (Flecha García, 2019). This approach fosters the autonomy, freedom and decision-making capacity of the individual. It allows giving the older adults a sense of self-esteem and purpose that reinforces their possibility of living meaningful lives (Van Biljon et al., 2015), generating a positive impact on well-being and the ability to go forward in older adults living in NHs (Rojano i Luque et al., 2021). Likewise, these new models have a high relevance linked to the increase of social support networks, i.e., closer synergies and more stable support are generated, which increases the QoL indexes (González Casas et al., 2020).

The transformation of NHs towards a person-centered approach, called NH culture change, is complex and multifaceted. However, determining the relationship between culture change in NHs and QoL is a growing topic (Duan et al., 2021), which has been a scientific issue for years (Burack et al., 2012).

Influence of institutionalization on the autonomy, the independence, and the QoL of older adults residing in NHs and those of people living with their relatives or in their own homes. This systematic review reflects significant differences with respect to older adults living in residential settings and those living with family members and/or in their own homes. Institutionalized older adults present greater deterioration than those who live with their families. This may be because they have fewer concerns, interests and needs covered, which leads to a deterioration by not exercising certain skills such as attention, concentration, cognitive and temporal aspects, etc., determining a severe physical and psychological dependence in older adults institutionalized in NHs with respect to older people living with their families (Acevedo Alcaraz, 2016). It is important to emphasize the importance of enhancing the autonomy of older adults, both at the residential level and at home (Huesa Andrade, 2020). In general, older adults who reside with their relatives or in their own homes tend to manifest worse QoL conditions in different dimensions (self-acceptance, relationships, autonomy, mastery of the environment, personal growth, purpose of life,...) (Acevedo Alcaraz, 2015; Cuadros Bordal, 2013; Sarabia Cobo, 2014). Thus, the current model of residences requires a change, allowing a real response to the needs of institutionalized older adults (Acevedo Alcaraz, 2015), taking into account that the dependence of older adults is a complex phenomenon, which demands different types of intervention, including common support actions that tend to

cover the absence of autonomy in daily life, without resorting to institutionalization (Sarabia Cobo, 2014).

Discussion

This systematic review has identified the main studies on QoL in the last decade in Spain related to the Spanish older adults living in NHs. Eighteen significant studies have been identified and analyzed in depth, two of them establishing new scales for measuring QoL for older adults living in NHs in Spain (Carcavilla González et al., 2021; Rodríguez Martín et al., 2011). Only one of them (Carcavilla González et al., 2021) considers the subjective needs of residents, taking into account family members, residents and professionals. We should highlight the importance of this work since the different scales available in the literature at the international level mostly contemplate objective aspects of measurement, and it is necessary, in order to effectively introduce a change in the NH culture and the implementation of a PCC model, to take into account the professional, family and resident perspectives, and to be able to assess objective and subjective aspects. If we establish a comparison with the research published by Meyer et al. (2019), in which is analyzed how residents interpret and process the response stimuli received from a subjective QoL questionnaire, we obtain methodological knowledge about how the survey instrument can adequately represent individual scores as well as expectations about different aspects of QoL. The use of different QoL measurement instruments not specific to older adults living in NHs can be used to obtain specific characteristics for this population, if we compare their QoL with older adults living in other settings.

Rodríguez Martín et al. (2011) developed a questionnaire based on the opinion of professionals. Three of the studies focus on the analysis of the QoL of older adults residing in Spanish NHs, based on generic QoL scales, such as the WHOQOL-BREF, the EQ-5D, DQoL. According to the results obtained, the design of a QoL scale that includes not only objective indicators of NHs, but also subjective aspects according to the perceptions of users, their relatives and professionals, allows a multiperspective evaluation of QoL (Carcavilla González et al., 2021). Taking into account that the different perspectives influence the development of care, attention and satisfaction of the daily activities of caregivers, residents and their relatives. Eleven studies identify

factors of QoL in NHs, their relationships and whether or not they are predictors of QoL in this context, taking into account sociodemographic and clinical variables, including physical exercise. It is important to take into account all the aspects, factors and characteristics that determine and influence the improvement of the state of health and therefore the improvement of the QoL of older adults in general and specifically of institutionalized older adults. The properties related to self-support, identity and continuity are crucial for a better QoL of residents in a very specific geographical area, and with defined clinical and sociodemographic variables. And finally, seven studies focus on promoting residential models as well as QoL models centered on the needs demanded by the residents, their integrity, criteria and opinion, promoting autonomy in residential environments and comparing the QoL of institutionalized older adults and those residing in other environments.

In the period considered, studies have been found that focus on obtaining relationships between factors associated with QoL, as well as predictors of QoL of residents. Among the studies that relate factors associated with QoL we can differentiate three subgroups (Table 6): on the one hand, those that establish dimensions related to different factors (Acevedo Alcaraz, 2015; Acevedo Alcaraz, 2016; Cuadros Bordal, 2013; Garrido-Abejar et al., 2012; Huesa Andrade, 2020; Lluesma-Vidal et al., 2021; Luque-Reca et al., 2015; Martín Aranda, 2019; Rodríguez-Blazquez et al., 2012; Sarabia Cobo, 2014); those using general QoL measurement instruments applied to NHs (Del Rocío Santana-Berlanga et al., 2020; Lucas-Carrasco et al., 2011; Perez-Ros & Martínez-Arnau, 2020); and finally those dealing with NH culture change or aspects that could influence it (Flecha García, 2019; González Casas et al., 2020; Rojano i Luque et al., 2021).

Table 6.
Subgroups of studies included in the review

Study	**Relations between dimensions, factors and QoL or Well-being**
Acevedo Alcaraz, 2015	Older adults who reside with their relatives or in their own homes tend to manifest worse QoL conditions in different dimensions (self-acceptance, relationships, autonomy, mastery of the environment, personal growth, purpose of life)
Acevedo Alcaraz, 2016	Improvement of physical and psychological dependence in older adults institutionalized in NHs with respect to older people living with their families
Cuadros Bordal, 2013	Older adults who reside with their relatives or in their own homes tend to manifest worse QoL conditions in different dimensions (self-acceptance, relationships, autonomy, mastery of the environment, personal growth, purpose of life)
Garrido-Abejar et al., 2012	Comorbidity associated with disability, depressive symptomatology and perception of social support. Biological and functional factors associated with physical dimension. Mood associated with physical and mental dimensions.
Huesa Andrade, 2020	Autonomy of older adults improves QoL
Lluesma-Vidal et al., 2021	Patients who live at home have a worse cognitive status, their self-perception of their health status is superior to those who live in a socio-health center
Luque-Reca et al., 2015	Dimensions of emotional intelligence, emotional understanding, and emotional facilitation explained part of the variance in several facets of HRQOL
Martín Aranda, 2019	Self-acceptance, Relationships, Autonomy, Environmental Mastery, Personal Growth and Life Purpose improves the well-being and QoL
Rodríguez-Blazquez et al, 2012	Depression, functional dependence, loneliness, and sex were associated with health status; whereas depression, health status, loneliness, and age-institutionalization interaction were related to well-being.
Sarabia Cobo, 2014	A significant relationship was observed between autonomy and independence and declined under institutionalization, such as physical and social aspects
Study	**QoL measurement instruments applied to NHs**
Del Rocío Santana-Berlanga et al., 2020	FACIT-Sp spiritual well-being scale. WHOQOL-OLD. Thriving of Older People Assessment Scale. CECAVIR. Tilburg Frailty Indicator. EQVILPI. Spiritual Distress Assessment Tool. Positive Valuation of

	Life Scale. Philadelphia Geriatric Center Morale Scale. Thriving in long-term care facilities. The Herth Hope Index. OPQOL. ICECAP-O. SF-36. Fluorishing Scale. ILSHP. NHAS. PERMA. QOL-D. QUALIDEM. Nottingham Health Profile. Casp-19. International Wellbeing Index. QOL-AD. WHOQOL-Bref/ WHOQOL-OLD. DQOL
Lucas-Carrasco et al., 2011	Geriatric Depression Scale (GDS-30). Functional status (SF-12). WHOQOL-BREF. WHOQOL-OLD
Perez-Ros & Martínez-Arnau, 2020	EQ-5D self-report (including the EQ index and the visual analog scale VAS)
Study	**Aspects that could influence NH culture change**
Flecha García, 2019	Self-acceptance and meaning/purpose in life
González Casas et al., 2020	The increase of stable social support networks
Rojano i Luque et al., 2021	PCC model may have a positive impact on well-being and ability to go forward in people living in NHs

The integration of the identified dimensions, together with those already established, allows a better definition of the QoL construct. The adaptation of general QoL measures to NHs requires a better understanding of these dimensions, but the studies initiated in this direction allow finding a subset of factors of these scales that are adapted to their context. These factors should be expanded in models that take into account the particular factors of the residents and the NHs. Knowing the relationships between QoL variables also allows us to establish the importance of these factors or their redundancy, as well as to identify and integrate new variables. If we also think about personalized factors, we have the so-called NH culture change, which will allow not only a personalized QoL, but also progress to improve the QoL of residents.

The studies considered have limitations. The results of this review revealed conceptual models of QoL for specific groups of older people in specific contexts, in this sense we could say that the results contribute to the improvement of the use of the necessary resources towards settings where care is more effective (Lluesma-Vidal et al., 2021). Models should be considered as an approximation to social reality rather than a complete and detailed description and representation of it.

The present study has conducted an exhaustive and systematic search of the literature, using a large number of databases over a long period of time in which no systematic reviews of the literature on QoL in NHs in Spain have been found in response to the research question posed in this study. This has allowed reflection on the current state of research on QoL in NHs, indicating not only the general lines of research in Spain, but also the integration of them in an advanced model on QoL adapted to NHs and to the older adult residents.

Conclusion

QoL is complex to define. It depends on multiple factors, both of the residents and of the environment, care setting, family, social environment, geographical area, among other aspects. It is necessary to obtain a way of measuring it that weighs the different dimensions of QoL and that is validated in wider environments than those considered. All these studies contribute to a standardized definition and bring us closer, to a certain extent, to the development of a specific QoL model for older adults living in NHs in Spain. This QoL model should integrate different variables and measures, such as health, psychological and social aspects of the residents, so that these models can be integrated as part of the QoL measurement for the older adult population. Therefore, it is necessary to continue with the research in this area and the implementation of new residential models in which the opinion, criteria and wishes of the older adults prevail.

The models developed for specific environments and validated in NHs for specific geographic settings remain valid models for these contexts. However, it is important to adapt the QoL questionnaires to specific domains in which specific objective and subjective aspects of the residents are taken into consideration. This is a first step towards a personalized and integrative model with specific dimensions that would allow the QoL of each individual to be assessed according to his or her specific circumstances. To this end, a QoL model should be developed for residents that adequately weighs various factors associated with their context and that can be personalized. To achieve this, we must consider the NH culture change.

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Antonia Rodríguez-Martínez is Interim Professor at the Area of Social Work and Social Services, Department of Psychology, University of Jaen, Spain

Yolanda María de la Fuente Robles is Full Professor at the Area of Social Work and Social Services, Department of Psychology, University of Jaen, Spain

María del Carmen Martín Cano isTitular Professor at the Area of Social Work and Social Services, Department of Psychology, University of Jaen, Spain

Email: armartin@ujaen.es