

**Living well with dementia: a systematic review and correlational meta-analysis of factors associated with quality of life, well-being, and life satisfaction in people with dementia**

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## **Abstract**

Current policy emphasises the importance of ‘living well’ with dementia, but there has been no comprehensive synthesis of the factors related to quality of life (QoL), subjective well-being or life satisfaction in people with dementia. We examined the available evidence in a systematic review and meta-analysis. We searched electronic databases to January 7th 2016 for observational studies investigating factors associated with QoL, well-being and life satisfaction in people with dementia. Articles had to provide quantitative data and include  $\geq 75\%$  people with dementia of any type or severity. We included 198 QoL studies taken from 272 articles in the meta-analysis. The analysis focused on 43 factors with sufficient data, relating to 37,639 people with dementia. Generally, these factors were significantly associated with QoL, but effect sizes were often small (0.1-0.29) or negligible ( $<0.09$ ). Factors reflecting relationships, social engagement and functional ability were associated with better QoL. Factors indicative of poorer physical and mental health (including depression and other neuropsychiatric symptoms) and poorer carer well-being were associated with poorer QoL. Longitudinal evidence about predictors of QoL was limited. There was considerable between-study heterogeneity. The pattern of numerous predominantly small associations with QoL suggests a need to reconsider approaches to understanding and assessing living well with dementia.

## Introduction

Dementia refers to a group of progressive brain disorders which result in multiple cognitive and behavioural impairments (Ballard *et al.*, 2011). Enabling people with dementia to 'live well' with the condition is a priority for policy and practice (Department of Health, 2009). Living well with chronic illness and disability is viewed by the Institute Of Medicine (2012) as 'the best achievable state of health that encompasses all dimensions of physical, mental and social well-being' such that 'to live well takes on a unique and equally important personal meaning, which is defined by a self-perceived level of comfort, function and contentment with life' (pg. 32). It is important to gain a clear understanding of the extensive range of factors that may influence ability to live well with dementia in order to identify potential targets for intervention.

In instances where it has been discussed explicitly (e.g. Small, 2007), the concept of 'living well' with dementia has been equated with experiencing a good quality of life (QoL). Living well can however mean more to an individual than current QoL. A sense of subjective well-being can be also associated with living well. Likewise, living well can encompass the experience of a life that is and has been lived well – life satisfaction. The constructs of QoL, subjective well-being and life-satisfaction are inter-related but encompass distinct elements (Clare *et al.*, 2014a).

Subjective well-being refers to both a positive cognitive appraisal of one's current situation and the experience of an appropriate balance of positive and negative emotions (Diener and Chan, 2011). In line with this definition, Kitwood's model of personhood (1997) emphasises the way in which interactions and environments contribute to enhancing or detracting from well-being for people with dementia. Subjective perceptions of satisfaction with life reflect the experience of meaning and purpose, the ability to experience continued personal growth, a sense of being in control of one's life, active social participation, and happiness (St. John and Montgomery, 2010).

QoL is sometimes conceptualised specifically in relation to health (health-related QoL, HRQoL) (Albert *et al.*, 2001). This is a narrow formulation, however, and given the pervasive effects of dementia there is likely to be considerable overlap between specific health-related and more generic elements of QoL (Wilson and Cleary, 1995). The World Health Organisation defines QoL much more broadly as ‘an individual’s perceptions of their position in life in the context of the culture and values systems in which they live and in relation to their goals, expectations, standards and concerns. It is a broad ranging concept, affected in a complex way by a person’s physical health, psychological state, personal beliefs, social relationships and their relationship to their environment’ (pg. 1) (World Health Organization, 1995). There is no single accepted theoretical model underlying the conceptualisation and assessment of QoL in dementia, but the most influential formulation is Lawton’s dementia-specific framework (1994), which recognizes that adequate measurement of QoL requires evaluation of multiple dimensions of a person’s life, presenting a broad conceptualisation that accords well with the WHO definition.

Life satisfaction and subjective well-being have not been studied in depth in people with dementia, with a few important exceptions (Zank and Leipold, 2001). QoL has been investigated more substantially, but it has been argued that nevertheless little is known about the QoL of people with dementia, particularly those with more severe conditions (Kane *et al.*, 2003, Banerjee *et al.*, 2009, Cordner *et al.*, 2010), or about whether QoL changes over time as dementia severity increases. In contrast, QoL can be assessed using either generic or dementia-specific measures, of which there are several available (Ready and Ott, 2003, Ettema *et al.*, 2005, Bowling *et al.*, 2015, Algar *et al.*, 2016, Missotten *et al.*, 2016). Although many of these measures share content themes and conceptual underpinnings (Missotten *et al.*, 2016), different measures may yield different results. These methodological limitations and complexities make it difficult to draw clear conclusions about factors associated with aspects of living well with dementia.

While life satisfaction is typically assessed by self-report and well-being is typically assessed by informant ratings, QoL in contrast may be assessed either directly by self-report or by means of informant or proxy ratings made by family or health care professionals. Self-report by people with mild (Woods *et al.*, 2014) and moderate to severe dementia (Hoe *et al.*, 2005) has been shown to be reliable, though reliability may depend on which measure is used (Ready and Ott, 2003) and dementia severity. Comparison of self- and informant ratings in situations where both can be obtained indicates that informant ratings are typically more negative than self-ratings (Beer *et al.*, 2010, Moyle and O'Dwyer, 2012, Crespo *et al.*, 2013), and this has implications for how we evaluate informant reports of QoL in people with very severe dementia where only informant or proxy ratings are possible. Furthermore, different informants may have different perspectives; for example, ratings made by family carers and paid/professional carers appear to be associated with different factors (Edelman *et al.*, 2005, Clare *et al.*, 2014b).

Previous reviews have focussed on specific aspects of QoL in dementia, including dementia-specific HRQoL (Banerjee *et al.*, 2009), measurement (Ready and Ott, 2003, Ettema *et al.*, 2005, Bowling *et al.*, 2015, Algar *et al.*, 2016, Missotten *et al.*, 2016), residential care (Lawrence *et al.*, 2012, Moyle and O'Dwyer, 2012, Beerens *et al.*, 2013, Robertson *et al.*, 2017), qualitative accounts (O'Rourke *et al.*, 2015a), and a recent narrative overview (Jing *et al.*, 2016). To date, however, there has been no comprehensive systematic review and meta-analysis of factors associated with QoL, well-being and life satisfaction for people with dementia. A careful and comprehensive review is needed to summarise the evidence. In this systematic review and meta-analysis we examined evidence from quantitative observational studies in order to identify factors associated with QoL, well-being and life satisfaction in people with dementia.

## **Method**

### **Search strategy**

We searched Pubmed, CINAHL, Web of Science, PsycNET, AgeInfo, Zetoc, Social Care Online, and OpenGrey for English-language publications to 7<sup>th</sup> January 2016. The search comprised two strings. The first string comprised: (well-being OR wellbeing OR life satisfaction OR quality of life OR \*QoL\* OR Health Status OR ADRQL OR Apparent Emotion Scale OR BASQID OR CDQLP OR Discomfort Scale OR Duke Health Profile OR DHP OR EQ-5D OR Health Utilities Index OR HUI\* OR Nottingham Health Profile OR NHP OR Pleasant Events Schedule-AD OR Progressive Deterioration Scale OR PWB-CIP OR SF-12 OR SF-36 OR ICECAP OR QUALIDEM OR QUALID) AND (dementia OR Alzheimer\* OR Parkinson\* OR Lewy OR Fronto). The second search string was designed to identify articles in residential care settings that may not mention dementia in the title or abstract and comprised: (well-being OR wellbeing OR life satisfaction OR quality of life OR \*QoL\* OR health status) AND (nursing home OR long term care OR assisted living OR residential living OR care home OR respite OR day care). Names of specific measures used in the searches were derived from two previous reviews (Ready and Ott, 2003, Ettema *et al.*, 2005). No date restrictions were imposed. We examined reference lists of review articles identified in the searches and searched online for additional publications by first authors of included studies. The review protocol was registered with PROSPERO: CRD42014013633.

### **Inclusion and exclusion criteria**

The population of interest was people with a diagnosis of dementia, irrespective of type, severity, age, or living situation. We included observational studies reporting cross-sectional and/or longitudinal associations between specific variables and scores on a standardised questionnaires or rating scales measuring QoL, life satisfaction or well-being. We excluded studies where fewer than 75% of participants had dementia, and intervention studies that did not provide baseline data.

## Procedure

Figure 1 shows the article selection process. Title, abstract and full text screening were conducted by two independent reviewers using a structured proforma, and any disagreements were referred to a third individual for resolution. Supplementary Table 1 provides a list of studies excluded at the full text screening stage, with reasons. Study quality was assessed by two independent reviewers using a checklist adapted from existing measures (DuRant, 1994, Downs and Black, 1998, Zaza *et al.*, 2000, Sanderson *et al.*, 2007); see Supplementary Table 2. Scores from the quality assessment of each article were summed; articles that scored 19 or lower were judged to be of poor quality, articles that scored between 20 and 25 were judged to be of satisfactory quality and articles that scored 26 or greater were judged to be of good quality. A structured proforma was used for data extraction.

A description of each outcome measure used in the included studies was taken from either the relevant measure development article or, if this was unavailable, from the most comprehensive description of the measure provided in an included study. Based on this description, each measure was classified as assessing either ‘general QoL’, ‘general HRQoL’, ‘dementia specific QoL/HRQoL’, ‘life satisfaction’, or ‘subjective well-being’. This process was conducted by three authors working independently, with any disagreements being referred to a fourth individual for resolution.

Where multiple articles reported data from the same study, details for each factor were taken from the article reporting the largest sample size. If an article included data from two sources (e.g. two different datasets were analysed separately (e.g. Trigg *et al.*, 2007, Li *et al.*, 2013) or data were analysed separately for mild and moderate dementia (e.g. Novelli and Caramelli, 2010)) these were classed as separate studies for the purposes of the analysis. We extracted correlational data provided in study reports or regression data, standardised betas (Peterson and Brown, 2005), odds ratios,  $p$



values, or  $t$  or  $F$  statistics converted to correlations, adopting a standardised correlation direction to facilitate comparison (Borenstein *et al.*, 2009).

((Figure 1 near here)))

### **Statistical analysis**

Meta-analysis for each factor was undertaken where comparable data were available from at least five studies. All computations were based on Fisher's  $z$  transformations and were conducted using Comprehensive Meta-Analysis 2 (Borenstein *et al.*, 2005) software which calculated average  $z$  scores and  $p$  values, weighted effect  $r$  values, and 95% confidence intervals. A two-sided 5% significance level was applied. Multiple within-study correlations were averaged to correct for violations of independence so that all available data could be included in the analysis. Between-study heterogeneity for each measure was assessed using the  $I^2$  index (Higgins *et al.*, 2003). Estimated effect sizes (subsequently 'effect sizes')  $\leq 0.09$  were considered negligible, 0.10-0.29 small, 0.30-0.49 moderate and  $\geq 0.50$  large (Cohen, 1988). A random-effects model (DerSimonian and Laird, 1986) was employed in view of anticipated high heterogeneity across studies.

Where comparisons were described simply as non-significant the correlation was set at zero. Where  $p$  values were given as a range, the value used to calculate the correlation was set at the upper limit of the range (e.g. for  $p < 0.05$  the value was set at  $p = 0.049$ ).

Separate analyses were conducted for each of the rating methods used in cross-sectional studies: self-rating by the person with dementia, informant rating by a family carer or health care professional (reflecting the informant's appraisal of the person with dementia), proxy rating by a family carer or health care professional (reflecting the appraisal that the proxy thinks the person with dementia

would make), and differences between parallel self- and informant ratings. Longitudinal studies were examined separately to identify baseline predictors at follow-up.

Pre-specified sub-group analyses examined whether associations of relevant factors with living well outcomes differed according to type of rating, type of dementia, living situation of the person with dementia, relationship with the carer, or type of measure.

Random-effects meta-regression analyses were used to investigate pre-specified moderating effects of age and cognitive status, indicated by Mini-Mental State Examination (MMSE) scores (Folstein *et al.*, 1975), on moderate associations where ten (Borenstein *et al.*, 2009) or more studies were available.

### **Sensitivity analysis**

To examine whether inserting a correlation of 0 for ‘non-significant’ *p* values influenced the findings we removed these insertions and repeated the meta-analysis. We also investigated the impact of poor-quality articles on the results. Fourteen articles judged to be of poor quality (seven of which were conference abstracts) were removed from the analysis.

### **Results**

We identified 307 articles for inclusion: 282 journal papers, 16 conference abstracts, three Health Technology Assessment reports, one book chapter, and five PhD theses (Figure 1). These reported findings from 213 individual studies from 36 countries mostly in Europe or North America; Supplementary Tables 3-9 provide details and quality ratings. Data on QoL were reported in 205 studies, well-being in five, and life satisfaction in three.

## Measures of QoL, well-being and life satisfaction

The studies utilised 45 measures of QoL, seven measures of well-being and four measures of life satisfaction (see Supplementary Table 10). The QoL-AD (Logsdon *et al.*, 2000) was the most frequently employed measure of QoL in studies where the focus was self-rated or informant-rated QoL or the difference between self-rated and informant-rated QoL, including longitudinal studies. DEMQOL-Proxy (Smith *et al.*, 2005) was the most frequently employed measure of proxy-rated QoL. Distributions of scores on QoL measures are shown in Supplementary Tables 11-12c. Self-ratings by people with dementia on the QoL-AD and EQ-5D were higher than the corresponding informant ratings. For all other measures, insufficient data were available to allow a comparison of different rating types.

## Studies included in the meta-analysis

In studies of well-being and life satisfaction, there was no overlap in the factors for which associations were examined; each study examined associations with a different set of factors, with the exception of depression which was included in two separate studies of well-being. Consequently it was not possible to conduct meta-analyses of factors associated with well-being and life satisfaction, and meta-analyses were conducted only for studies examining QoL. Data from 37,639 people with dementia in 198 studies reported in 272 articles were included (seven studies were excluded due to lack of any data that met criteria for inclusion in the meta-analysis). These studies examined associations of QoL with 159 individual factors relating to the person with dementia and 69 factors relating to the carer. Data on 33 factors relating to the person with dementia and 10 factors relating to the carer were included in the meta-analysis (Supplementary Tables 13a-17).

## Self-rated QoL

Self-ratings of QoL by the person with dementia were examined in 130 studies reporting associations with 110 factors relating to the person with dementia and 34 factors relating to the carer, of which 28 and 8 respectively were included in the meta-analysis, based on 129 studies (Figure 2 and Supplementary Tables 13a-b).

((Figure 2 near here))

## Informant-rated QoL

Informant ratings made by the carer were examined in 135 studies reporting associations with 114 factors relating to the person with dementia and 56 factors relating to the carer, of which 26 and 10 respectively were included in the meta-analysis, based on 130 studies (Figure 3 and Supplementary Tables 14a-b).

((Figure 3 near here))

## Proxy-rated QoL

Proxy ratings were examined in 27 studies reporting associations of 72 factors relating to the person with dementia and 23 factors relating to the carer, of which nine and one respectively were included in the meta-analysis, based on 22 studies (Figure 4 and Supplementary Tables 15a-b).

((Figure 4 near here))

## Difference between self- and informant-rated QoL

Scores reflecting differences between self-rated and informant-rated QoL were examined in 23 studies reporting associations with 30 factors relating to the person with dementia and 13 factors relating to the carer, of which 10 and three respectively were included in the meta-analysis, based on 22 studies (Figure 4 and Supplementary Tables 16a-b).

## Comparing self-rated and informant-rated effect sizes

For variables that were assessed in relation to more than one of the different rating methods of self-, informant and proxy ratings or discrepancies between self and informant ratings, the direction of association was consistent in all cases, although the strength of association varied. Supplementary Table 18a-b reports correlations between effect sizes where factors were examined in relation to both self-rated and informant-rated QoL.

## Factors associated with better QoL

Greater social engagement, better quality of current relationship with the carer, and religious beliefs/spirituality were moderately associated with better QoL across rating types. Better functional ability, self-rated health and awareness, white ethnicity, having a spouse carer and living in the community, and for people in residential settings, being cared for in a specialist dementia unit and receiving more person-centred care had small or mainly small associations. Small or negligible associations were found for cognitive test scores, self-rated memory functioning and being married. The only carer factor with small or moderate associations with better QoL in the person with dementia was the carer's self-rated QoL.

## Factors associated with poorer QoL

Depression and neuropsychiatric symptoms showed mainly moderate associations with poorer QoL across rating types. Greater severity of dementia, anxiety, pain, presence of unmet needs, presence of co-morbid conditions, and living alone showed mainly small associations. Use of medication, more advanced dementia, and longer duration of stay in residential care showed small or negligible associations. Carer burden/stress and distress at symptoms had moderate or small associations with poorer QoL, while small associations were found for carer depression, mental health and time spent caring.

## Factors not significantly associated with QoL

Non-significant or negligible associations with QoL were found across rating types for age, gender or educational level of the person with dementia and carer, income of the person with dementia, type of dementia, and disease duration.

## Factors predicting longitudinal trajectories of QoL

Baseline predictors of QoL outcomes were examined in 20 longitudinal studies reporting associations with 25 factors relating to the person with dementia and two factors relating to the carer, of which only eight factors pertaining to the person with dementia were included in the meta-analysis, based on 19 studies (Figure 4 and Supplementary Table 17). Follow-up ranged from two months to five years (mean 18.2 months). Non-significant or negligible associations were found for gender, age and more advanced dementia. Depression and neuropsychiatric symptoms in the person with dementia had small associations with worse QoL outcomes while better baseline QoL ratings, better functional ability and higher scores on cognitive screening tests had small associations with better QoL

outcomes. Where comparisons could be made the direction of associations was consistent with that found in cross-sectional studies.

### Heterogeneity and sub-group analyses

There was a moderate to large degree of between-study heterogeneity for the majority of factors. Sub-group analyses investigated the effects of (a) dementia sub-type by separately analysing studies that focussed specifically on people diagnosed with Alzheimer's disease and studies that did not focus specifically on people diagnosed with Alzheimer's disease; (b) living situation of the person with dementia (community and residential care settings); (c) type of carer completing the ratings of QoL (family member and health care professionals); and (d) type of QoL measure used (dementia-specific, health-related, and generic). Distinguishing sub-groups in this way had little impact on overall effect sizes or degree of heterogeneity (Supplementary Tables 19a-23j).

### Moderator variables

Meta-regressions for moderate effect sizes found no moderation effects of age or MMSE score (Supplementary Tables 24a-25d). Sensitivity analyses suggested that inserting 0 for non-significant  $p$  values and removing articles rated poor in quality had limited impact on the results (Supplementary Tables 26a-34).

## **Discussion**

To our knowledge this is the first comprehensive systematic review exploring factors associated with QoL, well-being and life satisfaction in people with dementia, and the first meta-analysis of factors associated with QoL. We found few studies that have investigated well-being or life satisfaction,

possibly because the policy focus on these constructs is relatively recent; therefore, meta-analyses could only be conducted for studies assessing QoL. The majority of studies were cross-sectional, with considerable between-study heterogeneity. Although most factors examined were significantly related to QoL, with the direction of association consistent across rating types, no factors were strongly associated, and most associations were small or negligible. Where moderate associations were found, confidence intervals were typically wide. Demographic and disease characteristics were largely unrelated to QoL, while social, health- and care-related factors were more likely to show associations. Factors reflecting relationships, social engagement and functional ability were associated with better QoL, along with living in the community and having a spouse carer, or receiving specialised and person-centred care in residential settings. Factors indicative of poorer physical and mental health, such as co-morbid conditions, pain, depression, anxiety, neuropsychiatric symptoms, more advanced dementia and for people in residential settings a longer duration of stay, were associated with poorer QoL, as were carer burden and distress. The moderate associations of carer burden and distress with informant-rated QoL suggests that subjective burden could be contributing to lower scores reported in carer-rated as opposed to self-rated QoL. Due to the small number of factors and heterogeneous follow-up periods, longitudinal evidence about predictors of QoL was limited, with self-rated QoL at baseline the strongest predictor of later QoL outcomes.

Our observation that demographic factors are largely unrelated to QoL is consistent with a previous narrative review of HRQoL (Banerjee *et al.*, 2009). Aside from this, the overall picture is one of a large number of factors showing occasionally moderate but mainly small or negligible, though statistically significant, associations with QoL. A recent narrative review also reported a complex picture of associations across domains (Jing *et al.*, 2016). Thus, QoL appears subject to many influences, some interrelated, which may co-vary in differing combinations to influence individual ratings.



In line with the current meta-analysis, the importance of positive relationships and health for QoL has been emphasised in a recent meta-synthesis of qualitative studies (O'Rourke *et al.*, 2015a). However, that review also highlighted the domains of agency and place (feeling settled or unsettled), as key elements of the experience of people with dementia associated with QoL; these factors have not been reflected in quantitative evaluations to date. This serves as a reminder that potential associations examined in quantitative studies may not necessarily reflect all those aspects of life that people with dementia find most relevant. The finding here of poorer physical and mental health being related to QoL is consistent with the emphasis on depression, neuropsychiatric symptoms and functional ability in Lawton's dementia-specific model of QoL (Lawton, 1994), and with evidence from qualitative research showing that people with dementia describe mood and functional ability as important for QoL (O'Rourke *et al.*, 2015a). However, the relevance of other factors included in Lawton's model, such as cognitive competencies, is less well supported by our findings. Our findings further indicate that, beyond the dimensions identified by Lawton, many other factors are associated with QoL, though to a lesser degree.

Our review found that numerous measures were employed to assess QoL, although the QoL-AD (Logsdon *et al.*, 2000) predominated. Several previous reviews have focused on measurement of QoL (Ready and Ott, 2003, Ettema *et al.*, 2005, Bowling *et al.*, 2015, Algar *et al.*, 2016, Missotten *et al.*, 2016). The absence of a clear shared definition and theoretical model of QoL is reflected in the wide variation in focus and content among available measures. Analysis of domains covered in commonly-used measures of dementia-specific QoL (Missotten *et al.*, 2016), however, indicates that items explore some of the same factors for which associations with QoL are typically examined, particularly affect, but also social interaction, functional ability, neuropsychiatric symptoms, cognition and physical health. This raises concerns about circularity and overlap in measurement. Furthermore, it is unclear whether the quantitative assessment of QoL adequately reflects the perspective of people with dementia (O'Rourke *et al.*, 2015b). While items in some measures are

based on data from qualitative interviews with people with dementia, many measures have been developed with little or no direct input from people with dementia (Bowling *et al.*, 2015) and few large-scale studies have been conducted that enable people with dementia to say what is important for their QoL (Clare *et al.*, 2014a).

Because of the breadth of included studies, we decided to statistically analyse only factors for which there was data available from five or more studies. Focusing the review in this way allowed us to summarise current understanding and reduce reporting of associations for which there was limited evidence. However, this precluded quantitative analyses for life satisfaction and well-being, and limited the number of factors in the analysis of longitudinal studies. We necessarily examined factors separately, and could not account for likely inter-correlations. A number of studies did not provide exact data for non-significant findings, so a potential limitation resulted from inserting zero correlations from those studies; however, this had a minimal effect on associations or heterogeneity. Most of the studies that did not focus exclusively on those diagnosed with Alzheimer's disease analysed responses from people with different dementia diagnoses as one group, which precluded separate analysis for different dementia sub-types. Methodologically, the widespread misuse of the term 'proxy' when researchers mean 'informant' created challenges for comparing findings between studies. For example, in DEMQOL-Proxy (Smith *et al.*, 2005), instructions allow informants to make either proxy or informant ratings, so ratings from this instrument were difficult to classify correctly. Our review highlights the need for application of clear and consistent terminology and the standardisation of methods (e.g. standard follow-up periods and sample size calculations), and a robust conceptual and methodological framework to guide work in this area.

The findings point to some limitations in how we understand and evaluate living well with dementia. Available measures may not capture what is most meaningful to each individual (Bowling *et al.*, 2015) or indeed everything that is relevant to living well. In this respect, broadening the perspective

to include subjective well-being and satisfaction with life may be informative; these constructs have rarely been assessed, and as yet evidence is limited (Clare *et al.*, 2014a). The pattern we observed of numerous small associations generally supports the idea that QoL is multifaceted, as suggested by Lawton's framework (1994). It might also reflect the operation of individual differences in what is deemed most important for QoL, so there may be value in considering more personalised approaches to assessment, particularly as no QoL measure includes all of the factors that our review suggests may be important to the QoL of people with dementia. However, developing and implementing personalised approaches would present significant challenges.

The findings raise questions about the use of QoL as an outcome measure in psychosocial intervention trials. First, if QoL is subject to many influences, changes in one area of life may have little effect on the overall picture, so it may not be reasonable to expect interventions that are effective in improving some primary outcomes to influence scores on QoL measures. Second, as noted above, potential circularity in measurement may create a distorted picture. Therefore, the relevance of QoL measures for assessing effectiveness of interventions may need re-evaluation.

## **Conclusion**

Our findings suggest that efforts to improve QoL might focus on supporting relationships, social engagement and everyday functioning, addressing poor physical and mental health, and ensuring high-quality care. However, there is a need for longitudinal evidence that can point to ways of maintaining or improving QoL over time and enable identification of people at risk of declining QoL, so that preventive interventions can be targeted to this group.

Conflicts of interest: none.

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### Author contributions.

AM: Developing and piloting search strategy; conducting searches; title screening; abstract screening; full-text screening; data extraction; assessment of study quality; planning and conducting analyses; interpretation of results; drafting review text.

LC: Developing concept for review; drafting protocol; title screening; abstract screening; full-text screening; assessment of study quality; planning analyses; interpretation of results; drafting review text.

RC & RL: Title screening; abstract screening; full-text screening; data extraction; assessment of study quality; interpretation of results; commenting on and approving text of review.

CH, JH, IRJ, RM, SMN, CQ, JR, JT, CRV, YTW: Abstract screening; interpretation of results; commenting on and approving text of review

Figure 2: Forest plot for factors associated with the quality of life self-ratings made by people with dementia

Note: negative scores indicate that factors were related to poorer QoL, and positive scores indicate that factors were related to better QoL

Figure 3: Forest plot for factors associated with informant ratings of the quality of life of the person with dementia

Note: negative scores indicate that factors were related to poorer QoL, and positive scores indicate that factors were related to better QoL

Figure 4: Forest plots for factors associated with proxy ratings of quality of life, the difference between self- and informant ratings of quality of life, and baseline factors associated with longitudinal studies of quality of life

Note: negative scores indicate that factors were related to poorer QoL, and positive scores indicate that factors were related to better QoL. Longitudinal studies included both self- and informant ratings of QoL.

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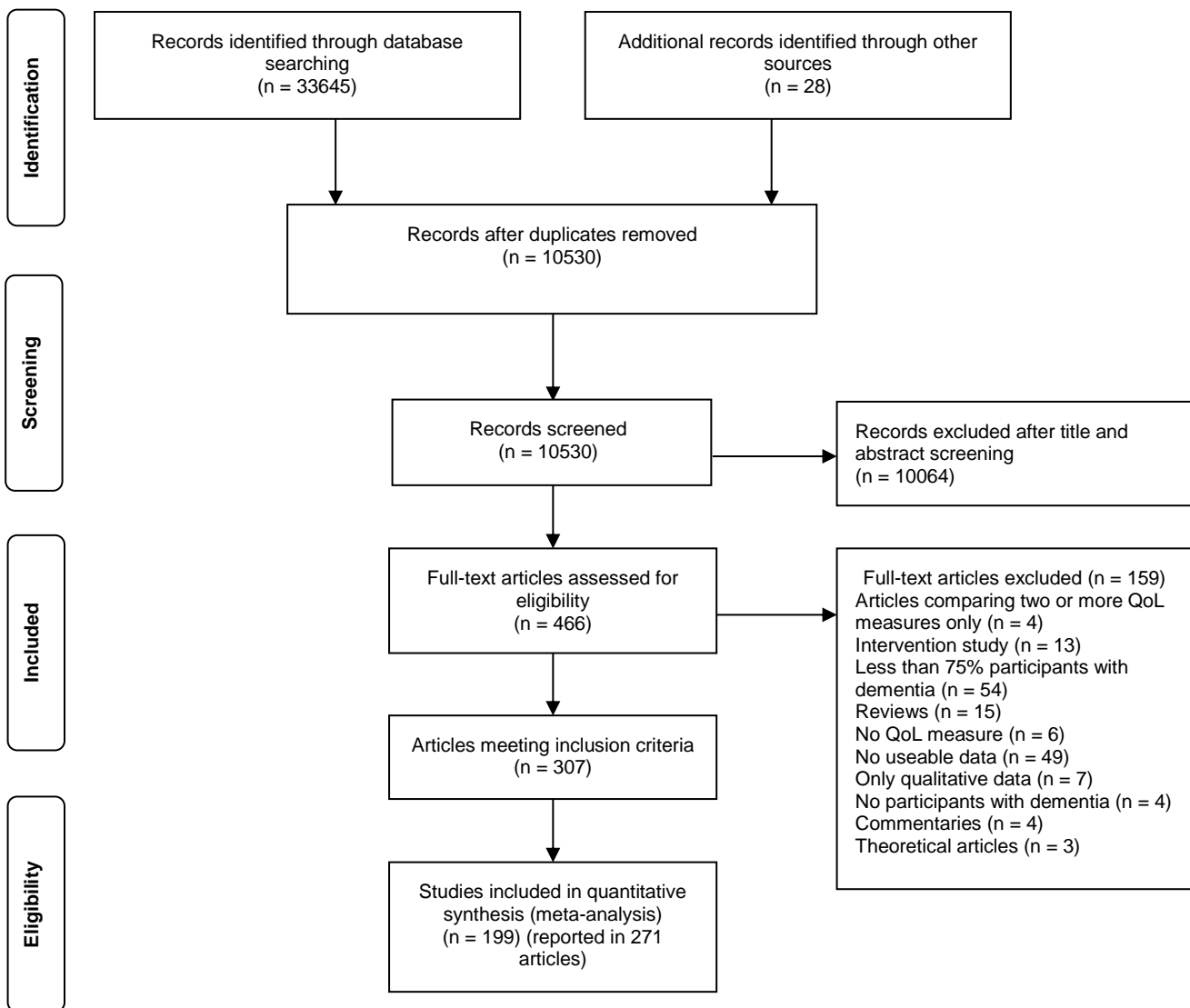
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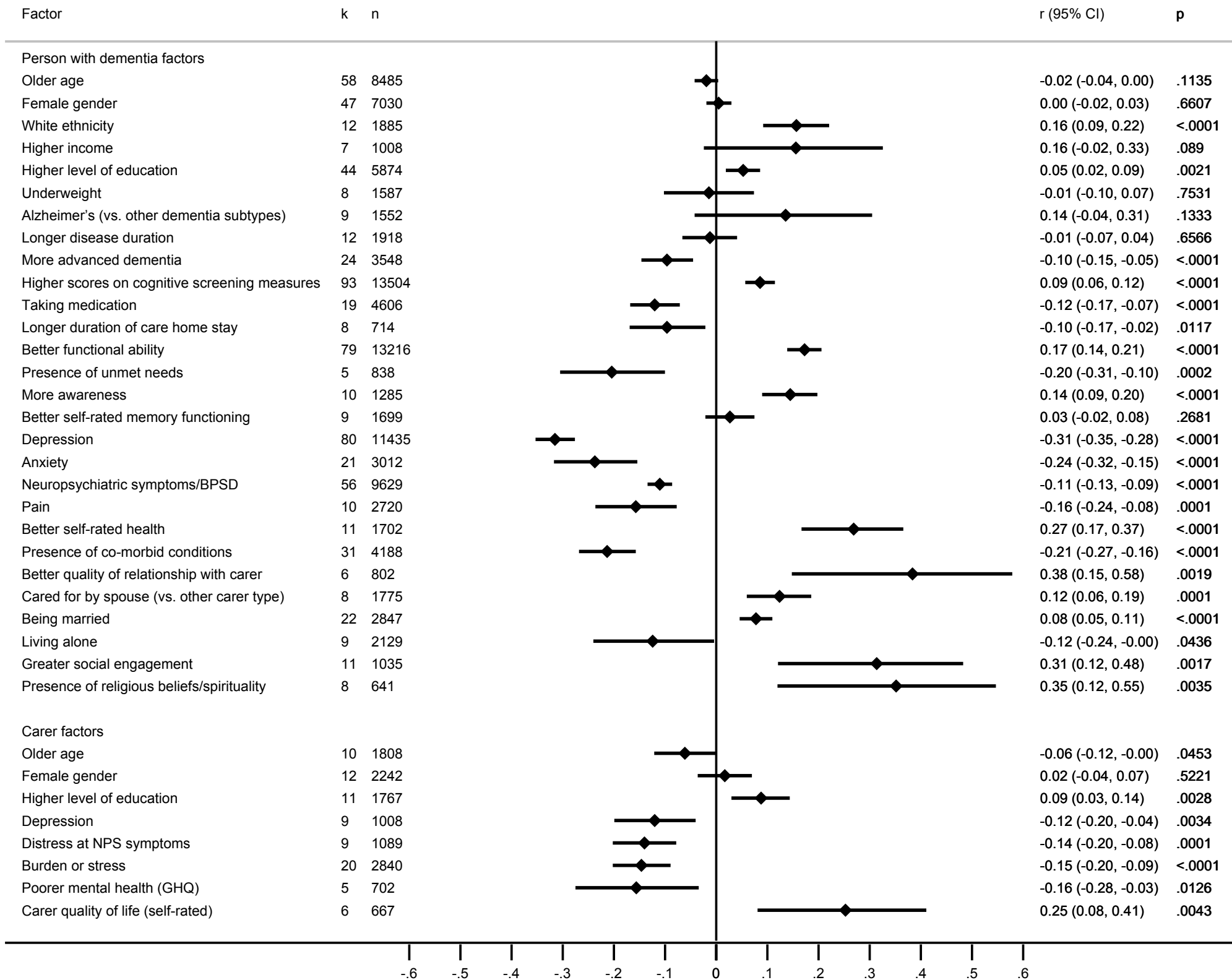
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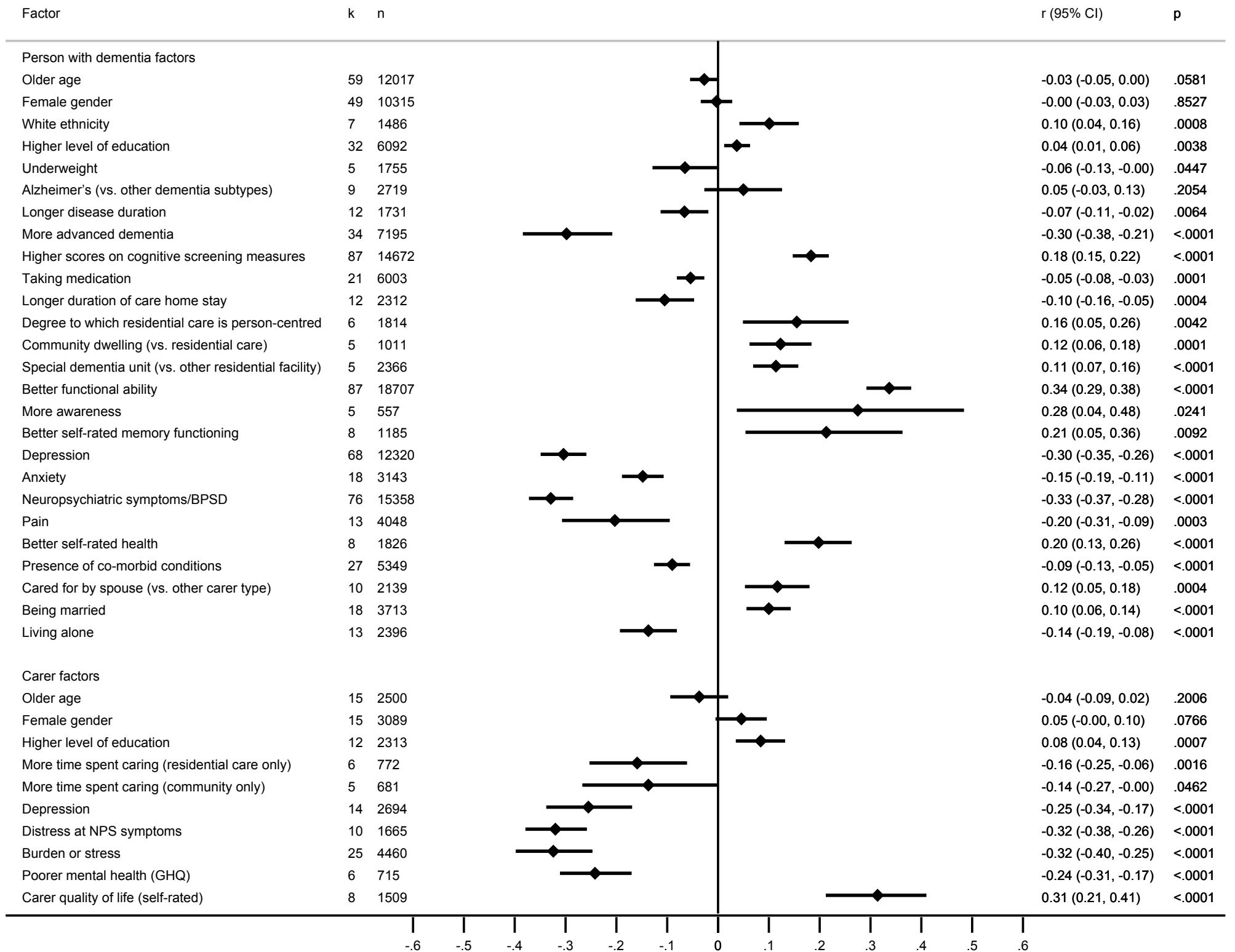
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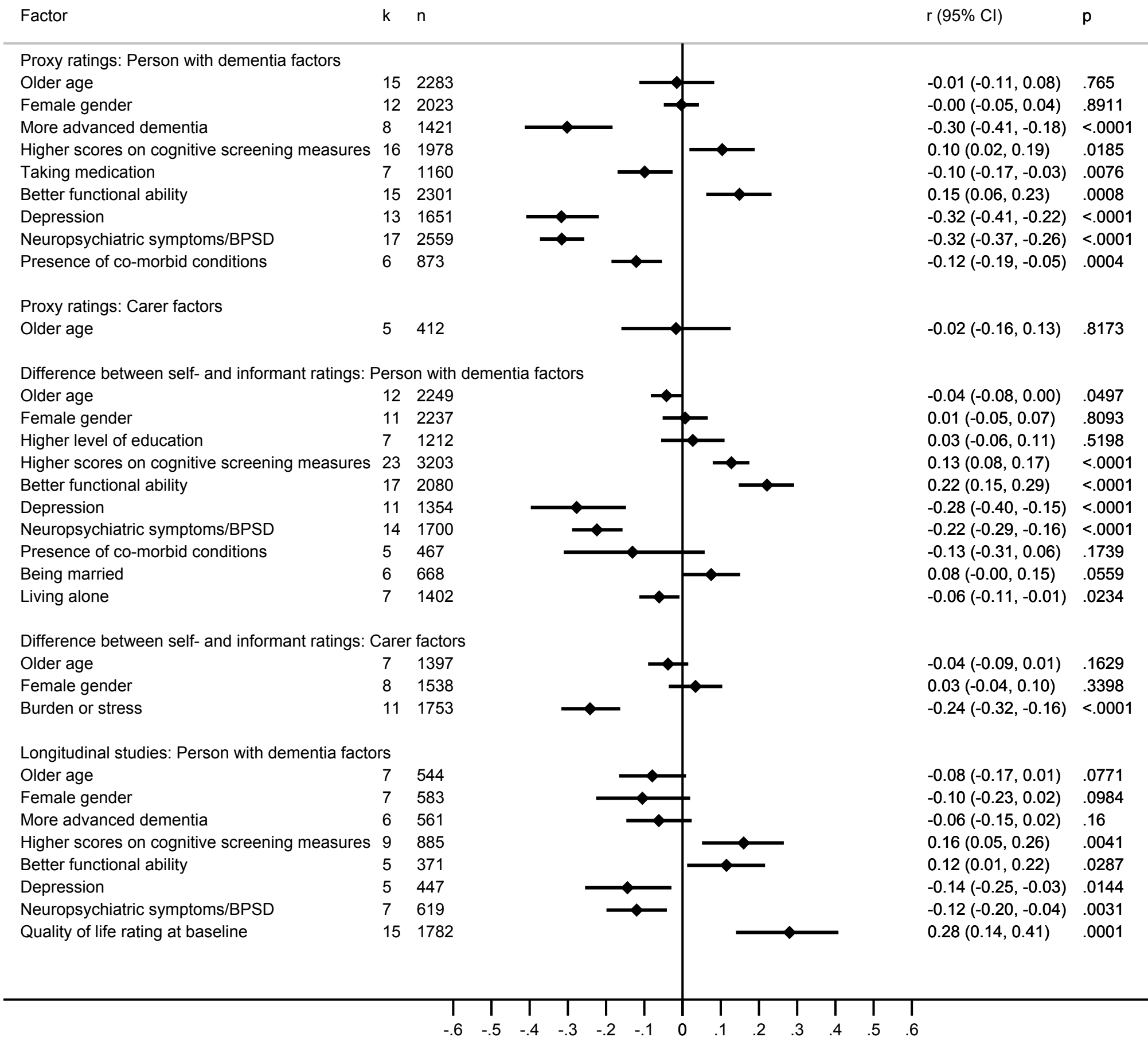
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Figure 1. Flow diagram showing process of study selection









**Supplementary Table 1: Articles excluded at the full-text screening stage**

Article only investigated comparisons between different QoL measures (Number of studies=4)	Crespo <i>et al.</i> (2012); Inouye <i>et al.</i> (2009); Kolanowski <i>et al.</i> (2007); Mador <i>et al.</i> (2002)
Article was an intervention study (Number of studies=13)	Albert (2004); Birks and Cochrane Neurological Network (2005); Caramelli <i>et al.</i> (2014); Charras and Gzil (2013); Gitlin <i>et al.</i> (2010); Jo and Song (2015); Kwok <i>et al.</i> (2012); Larsson <i>et al.</i> (2011); Lee <i>et al.</i> (2008); Meguro <i>et al.</i> (2008); Mowrey <i>et al.</i> (2013); te Boekhorst <i>et al.</i> (2013); Yokota <i>et al.</i> (2006)
People with dementia constituted less than 75% of the sample (Number of studies=54)	Abrahamson <i>et al.</i> (2012); Abrahamson <i>et al.</i> (2013); Afzal <i>et al.</i> (2010); Almomani <i>et al.</i> (2014); Baró <i>et al.</i> (2006); Berwig <i>et al.</i> (2009); Bilotta <i>et al.</i> (2012); Bishop <i>et al.</i> (2008); Byrne and MacLean (1997); Calero and Navarro (2011); Chaput (2000); Charles <i>et al.</i> (2015); Chekani <i>et al.</i> (2016); Comijs <i>et al.</i> (2005); Custers <i>et al.</i> (2013); Degenholtz <i>et al.</i> (2008); Ding <i>et al.</i> (2009); Fernández-Mayoralas <i>et al.</i> (2015); Goodrow <i>et al.</i> (1979); Jetten <i>et al.</i> (2010); Kane <i>et al.</i> (2003); Lalic <i>et al.</i> (2016); Lee <i>et al.</i> (2015a); Leroi <i>et al.</i> (2012); Li <i>et al.</i> (2013a); Llácer <i>et al.</i> (2002); Lucas-Carrasco and March (2010); Luzny and Ivanova (2009); Martín-García <i>et al.</i> (2013); Morgan <i>et al.</i> (1987); Moyle <i>et al.</i> (2012); Murphy <i>et al.</i> (2009); Müther <i>et al.</i> (2010); Oliva-Moreno <i>et al.</i> (2010); Olsson <i>et al.</i> (2013); Oudman and Zwart (2012); Parsaik <i>et al.</i> (2012); Patterson <i>et al.</i> (2006); Ready <i>et al.</i> (2002a); Ready <i>et al.</i> (2006); Ready and Ott (2007); Richter <i>et al.</i> (2008); Richter <i>et al.</i> (2004); Schwartz <i>et al.</i> (2011); Scocco <i>et al.</i> (2006); Shippee <i>et al.</i> (2015a); Shippee <i>et al.</i> (2015b); Shippee <i>et al.</i> (2016); St. John and Montgomery (2010); Suwalska <i>et al.</i> (2002); Terada <i>et al.</i> (2015); Tommis <i>et al.</i> (2007); Waldemar <i>et al.</i> (2004a, 2004b)
Review articles (Number of studies=15)	Homma (2003); Kasai and Meguro (2013); Korczyn and Davidson (1999); Logsdon <i>et al.</i> (2007); Lund <i>et al.</i> (2005); Mills Jr and Glendenning (2014); Russell (1996); Sefton <i>et al.</i> (2008); Selai and Trimble (1998); Selai <i>et al.</i> (2001b); Teri and Logsdon (1991); Torrington (2006); Whitehouse and Rabins (1992); Whitehouse (1999); Whitehouse <i>et al.</i> (2003)
The article did not include a measure of QoL (Number of studies=6)	Carvalho-Bos <i>et al.</i> (2007); Cicciu <i>et al.</i> (2013); Cipher and Clifford (2004); Hickey and Bourgeois (2000); Trudeau <i>et al.</i> (2003); Wimo <i>et al.</i> (1990)
The article did not include any data that could be converted to a correlation (Number of studies=49)	Arons <i>et al.</i> (2012); Asakawa <i>et al.</i> (2008); Bureau-Chalot <i>et al.</i> (2002); DeJong <i>et al.</i> (1989); Dello Russo <i>et al.</i> (2008); Dichter <i>et al.</i> (2015); Elliott <i>et al.</i> (2009); Engel <i>et al.</i> (2006a, 2006b); Forstmeier <i>et al.</i> (2013); Gómez-Gallego <i>et al.</i> (2014); González-Vélez <i>et al.</i> (2015); Gross <i>et al.</i> (2015); Hassani Mehraban <i>et al.</i> (2014); Hewitt <i>et al.</i> (2013); Holst and Edberg (2011); Hongisto <i>et al.</i> (2015); Hurley <i>et al.</i> (1992); Inouye <i>et al.</i> (2010a); Inouye <i>et al.</i> (2010b); Jensen-Dahm <i>et al.</i> (2012); Karlawish <i>et al.</i> (2004c); Koopmans <i>et al.</i> (2009); Kuhn <i>et al.</i> (2002); Kurz <i>et al.</i> (2003); Lem (2015); Leon <i>et al.</i> (2000); Livingston <i>et al.</i> (2006); López-Bastida <i>et al.</i> (2006); Martin-Cook <i>et al.</i> (2005); Matano (2000); Miller <i>et al.</i> (2010b); Missotten <i>et al.</i> (2009); Naglie <i>et al.</i> (2012); Navarro-Gil <i>et al.</i> (2014); Neumann <i>et al.</i> (1999); Peitsch <i>et al.</i> (2015); Roberts (2007); Sano <i>et al.</i> (1999); Senanarong <i>et al.</i> (2008); Smit <i>et al.</i> (2014); University Of Kent Personal Social Services Research Unit (2015a, 2015b); Villar <i>et al.</i> (2015); Ward and Ashaye (2008); Wettstein <i>et al.</i> (2014); Willemse <i>et al.</i> (2015); Yeardley <i>et al.</i> (1995); Zbrozek <i>et al.</i> (2004)



The article included only qualitative analyses (Number of studies=7)	Cahill <i>et al.</i> (2004); du Toit and Surr (2011); Fukushima <i>et al.</i> (2005); Innes and Surr (2001); Katsuno (2005); Morioka <i>et al.</i> (2005); Steultjens and van't Leven (2008)
The sample did not include any participants with dementia (Number of studies=4)	Allerhand <i>et al.</i> (2014); Cuijpers <i>et al.</i> (1999); Hodgson and Cutler (1997); Papastavrou <i>et al.</i> (2012)
The article was a commentary on other studies (Number of studies=4)	Ballard (2009); Banerjee (2007); Forbes (2004); Hess (2009)
The article was a theoretical paper (Number of studies=3)	Jonker <i>et al.</i> (2004); Lawton (1994); Lawton (1997)

## Supplementary Table 2: Data quality proforma

The checklist has been designed to act as a traffic light system:

- If you think that the criteria are met fully this will be graded as green and given a score of 3.
- If you think that the criteria are partly met or if you can't tell from the information provided this will be graded as amber and given a score of 2.
- If you think that the criteria are not met this will be graded as red and given a score of 1.

Checklist items:

1) Is there a clear description of the research question?

Green: The hypotheses/aim(s) or research question(s) of the study were well described and clear.

Amber: The hypotheses/aim(s) or research question(s) of the study were adequately described or slightly unclear.

Red: The hypotheses/aim(s) or research question(s) of the study were poorly described, unclear or non-existent.

2) Is there a clear description of the inclusion and exclusion criteria?

Green: The inclusion/exclusion criteria of the study were well described and clear.

Amber: The inclusion/exclusion criteria of the study were adequately described or slightly unclear.

Red: The inclusion/exclusion criteria of the study were poorly described, unclear or non-existent.

3) Is there an appropriate description of the sampling method and source of recruitment?

Green: The sampling method and source of recruitment of the study were well described and clear (e.g. participants were 'recruited from memory clinics' or were 'community-dwelling').

Amber: The sampling method and source of recruitment of the study were adequately described or slightly unclear.

Red: The sampling method and source of recruitment of the study was poorly described, unclear or non-existent (i.e. there was no description of how or where participants were recruited).

4a) Was there an appropriate description of the participants' age and sex?

Green: The mean age or age stratification was provided and the number of fe/males was provided.

Amber: Either the mean age or age stratification or the number of fe/males was provided.

Red: Neither the mean age or age stratification nor the number of fe/males was provided.

4b) Was there an appropriate description of the participants' diagnoses?

Green: The diagnosis was provided for all participants. Analysis included only people diagnosed with dementia.

Amber: Diagnostic information was provided but analysis included people without dementia, including those diagnosed with MCI.

Red: There was a vague description of the sample (i.e. "dementia" without specific diagnostic categories).

4c) Was there an appropriate description of the participants' dementia severity and details of the MMSE score or equivalent?

Green: Both a description of dementia severity (mild, moderate, severe) and MMSE (or equivalent, e.g. CDR score or MoCA, 3MS, DRS etc.) was provided.

Amber: Either a description of dementia severity (mild, moderate, severe) or MMSE (or equivalent, e.g. CDR score or MoCA, 3MS, DRS etc.) was provided.

Red: Neither a description of dementia severity (mild, moderate, severe) nor MMSE (or equivalent, e.g. CDR score or MoCA, 3MS, DRS etc.) was provided.

5) Is the sample size large enough to test the hypothesis objectively? Was an *a priori* power calculation reported in the paper?

Green: There was an *a priori* power calculation reported irrespective of sample size.

Amber: The sample was larger than 30 but there was no *a priori* power calculation reported.

Red: The sample was less than 30 and there was no *a priori* power calculation reported.

6) Did the study use standardised measures (or if new measures were used had they undergone reliability and validity testing)?

Green: The study used standardised measures (or if new measures were used they had undergone reliability and validity testing).

Amber: The study used some standardised measures (or if new measures were used they had not undergone reliability and validity testing).

Red: The study used no standardised measures (or if new measures were used they had not undergone reliability and validity testing).

7) Was appropriate statistical testing employed (i.e. suitable covariates used, repeated measures in longitudinal studies)? (See Table e1 for appropriate statistical tests)

Green: The study used appropriate statistical tests (see extra guidance below for what would be considered appropriate statistical tests for cross-sectional and longitudinal studies).

Amber: The study used some appropriate statistical tests.

Red: The study used inappropriate statistical tests.

**Table e1. Appropriate statistical tests for cross-sectional and longitudinal studies**

Study questions	Statistical analysis
<b>(1) Cross-sectional study</b>	
(1.1) Compare difference in QoL between 2/3 groups	t test ANOVA Univariable regression Multivariable regression Non-parametric analysis
(1.2) Relationship between QoL and other continuous variables	Correlation Univariable regression Multivariable regression Non-parametric analysis
(1.3) QoL (Binary measure) and categorical variables	Logistic regression (binary outcome) Chi-square test Non-parametric analysis
<b>(2) Longitudinal study</b>	
(2.1) Change in QoL across different groups	ANCOVA Univariable regression Multivariable regression Non-parametric analysis
(2.2) Adjusting for correlation of repeated measures (QoL)	Multilevel modelling Generalised estimating equation Time series analysis
(2.3) Mediator/effect Modifier	Structural Equation Modelling (SEM)

8) If multicentre data were used, did the researchers compare the results from multiple sources (e.g. multiple centres) before pooling the data for final analysis?

Green: The multicentre study had compared the results from different centres and had taken this into consideration in the analysis.

Amber: The multicentre study had compared the results from different centres but had not taken this into consideration in the analysis.

Red: The multicentre study did not report a comparison of the results from different centres.

9) Longitudinal studies only: have the characteristics of participants lost to follow-up been described?

Green: The characteristics of participants lost to follow-up were well described or there were no participants lost to follow-up.

Amber: The characteristics of participants lost to follow-up were adequately described or the number of participants lost to follow-up was so small that the findings would not have been affected by their inclusion.

Red: The characteristics of participants lost to follow-up were poorly described or not mentioned at all.

10) Were any conflicts of interest declared that could have biased the findings of the study?

Green: Conflicts of interest were declared but could not have biased the findings of the study.

Amber: There was no statement concerning conflict(s) of interest in the paper.

Red: Conflicts of interest were declared and could have biased the findings of the study (e.g. authors receive royalties from measures used in the study).

Q8 and Q9 were not included in the data quality scoring as these did not apply to the majority of studies.

**Supplementary Table 3. Studies utilising self-ratings of quality of life by people with dementia**

Study	Country of study	n	Females	Mean age	Severity	Dementia type	Living situation	QoL measure	Factors included in the meta-analysis	Quality rating
Allan <i>et al.</i> (2006)	UK	198	84	76 (6.2)	CAMCOG 67.8 (13.76)	AD 40, PDD 46, DLB 32, VaD 38, Controls 42	Not specified	SF-36	Co-morbidity	Good
Andersen <i>et al.</i> (2004)	Denmark	211	122	78.1 (5.47)	21.0 (4.75)	Mostly AD	Mostly community	EQ-5D	Age, ADL, Gender, Diagnosis, Living alone, CSM	Good
Andrieu <i>et al.</i> (2016)	France	534	331	79.6 (5.9)	19.5 (3.9)	AD	Community	QoL-AD	Age, Anxiety, ADL, NPS, Depression, Gender, Education, Co-morbidity, Diet, Relationship, Living alone, CSM, Medication, Duration, Burden, Age C, Gender C	Good
Arlt <i>et al.</i> (2008)	Germany	100	54	70.49 (8.49)	22.74 (4.37)	AD (58%), Mixed and MCI (11%), bvFTD (9%), VaD (7%), Semantic dementia (1%)	Community 98, Nursing home 2	WHO-8	Depression, GDS, CSM	Good
Azcurra (2012)	Argentina	44	30	85.3 (5.6)	13.2 (1.2)	AD	Long-term care residents (intervention)	SRQLS	Anxiety, ADL, Depression, Education, Religion, Co-morbidity, Care home stay, CSM, Social engagement, Medication, Burden	Good
		44	27	86.4 (4.9)	14.1 (1.4)	AD	Long-term care residents (active control)			
		44	29	85.8 (5.1)	14.6 (1.4)	AD	Long-term care residents (passive control)			
Bakker <i>et al.</i> (2014)	Netherlands	215	102	61.1 (5.4)	Not specified	AD 117, bvFTD 27, PPA 13, VaD 24, Mixed 8, Other 16	Community	QoL-AD	Age, NPS, Depression, Gender, Unmet needs, GDS	Good
Beer <i>et al.</i> (2010)	Australia	226	not specified	85.3 (7.9)	14 (median)	Dementia	Residential care facilities	QoL-AD	Age, NPS, Gender, Diet, Pain, CSM, Medication, Distress	Satisfactory
Beerens <i>et al.</i> (2014)	England, Estonia, Finland,	791	74%	84.1 (6.4)	11.9 (6.3)	Dementia	Long-term care residents	QoL-AD	Depression, Pain, Medication	Satisfactory
		1123	63%	82.2 (6.6)	14.3 (6.6)	Dementia	Home care			
Giebel <i>et al.</i> (2015a)	France, Germany,	122	71.30%	83 (6.5)	13.37 (2.27)	AD 44, VaD 39, mixed 8, FTD 2, DLB 5	Community 63, Nursing home 59	QoL-AD	Age, ADL, NPS, Diagnosis, CSM	Good
Giebel <i>et al.</i> (2015b)	Netherlands, Spain,	126	71.30%	82 (6.8)	4.9 (3.1)	AD 44, VaD 39, mixed 8, FTD 2, DLB 5	Community 214, Nursing home 197	QoL-AD	None	Good
Giebel <i>et al.</i> (2016b)	Sweden	957	596	82.3 (6.5)	14.5 (6.6)	AD 514, VaD 153, Mixed 53, Other 227	Community (home care)	QoL-AD	None	Good
		581	423	84.3 (6.1)	12.1 (6.2)	AD 248, VaD 127, Mixed 35, Other 171	Nursing home (long term care)	QoL-AD	None	
Berwig <i>et al.</i> (2011)	Germany	16	8	78.5 (4.5)	20.3 (2.7)	AD	Community	DEMQOL	Depression	Good

Bhattacharya <i>et al.</i> (2010)	Denmark	321	54.80%	76.2 (7.1)	24.0 (2.6)	AD (72.4%), Mixed (24.8%)	Community	EQ-5D EQ-5D VAS QoL-AD	ADL, NPS, Depression, CSM	Satisfactory
Black <i>et al.</i> (2012)	US	220	65%	83.6 (5.9)	17.8 (7.6)	Dementia	Community	QoL-AD	Age, ADL, NPS, Depression, Gender, Education, Co-morbidity, Ethnicity, CSM, Medication, Distress	Good
Black <i>et al.</i> (2013)		254	65%	83.6 (5.9)	17.8 (7.6)	265 AD, 38 MCI	Community	QoL-AD	Unmet needs	Good
Bosboom <i>et al.</i> (2012a)	Australia	226	169	85.9 (7.7)	15.9 (5.9)	Dementia	Residential aged care facilities	QoL-AD	Medication	Satisfactory
Bosboom <i>et al.</i> (2012b)	Australia	80	67.50%	78.3 (7.9)	Not specified	AD	Community	QoL-AD	Age, Anxiety, Awareness, ADL, NPS, Depression, Gender, Education, Living alone, Medication, Being married, Memory rating, Distress, Age C, Gender C	Good
Bosboom and Almeida (2014)		47	72.30%	78.7 (8.2)	15.1 (5.6)	AD	Community	QoL-AD	CSM	Good
Bosboom <i>et al.</i> (2013)		47	72.30%	78.7 (8.2)	15.1 (5.6)	AD	Community	QoL-AD	None	Satisfactory
Bosboom and Almeida (2016)		80	67.50%	78.3 (7.9)	Not specified	AD	Community	QoL-AD	None	Good
Brod <i>et al.</i> (1999)	US	95	59%	78.7 (7.43)	Mild 45, Moderate 50	Dementia	Community 89, Health care facility 6	DQoL	Depression, CSM	Good
Bruvik <i>et al.</i> (2012)	Norway	230	123	78.4 (7.5)	21.3 (3.6)	Dementia	Community	QoL-AD	Age, ADL, NPS, Depression, Gender, Education, CSM, Duration, Being married	Good
Buckley <i>et al.</i> (2012)	US	71	151	85.60 (5.77)	19.78 (7.25)	AD 181, remainder not specified	Not specified	Single global QoL question (rated self as excellent)	ADL, NPS, Health, Gender, Education, GDS, CSM, Duration	Good
		123						Single global QoL question (rated self as good)		
Buffum <i>et al.</i> (2001)	US	33	1	78.5 (7.2)	14 (9.6; n = 19)	Dementia	Nursing home	Discomfort Scale	NPS, GDS, Pain, CSM	Good
Burgener <i>et al.</i> (2015)	US	31	26	78.3 (8.3)	20.4 (6.1)	Dementia	Community	SF-36	Education, CSM, Social engagement	Satisfactory
Caddell and Clare (2012)	Wales	50	26	77.8 (7.4)	23.7 (2.7)	AD 38, VaD 9, Mixed 3	Community	QoL-AD	Memory rating, Social engagement	Good
Camici <i>et al.</i> (2013)	England	10	5	75 (6.7)	19 (7.9)	AD 6, VaD 2, Mixed 1, MCI 1	Community	DEM-QOL	NPS	Satisfactory
Campbell <i>et al.</i> (2008)	US	149	93	78.7 (8.5)	19.8 (6.2)	AD 101, VaD 15, FTD 1, Mixed 7, Other 22, 10 Unreported	Not specified	Single question - How would you rate your general health?	Awareness, Ethnicity	Good

Castro-Monteiro <i>et al.</i> (2016)	Spain	208	82.67%	85.57 (6.73)	13.24 (8.07)	Non-specific dementia (49.7%), AD (36.4%), VaD (6.5%), Mixed (4.4%), Alcohol-related dementia (1.1%), DLB (1.1%), PDD (.8%)	14 Residential care facilities	QoL-AD	Age, ADL, Depression, Gender, Co-morbidity, GDS, CSM, Social engagement	Good
Chan <i>et al.</i> (2011)	Hong Kong	111	80	77.7 (7.4)	15.8 (4.7)	AD	Community	QoL-AD	Age, Depression, Gender, Education, Co-morbidity, Income, Living alone, CSM, Being married	Good
Chiu <i>et al.</i> (2008)	Taiwan	71	61.20%	75.23 (8.03)	17.61 (3.78)	AD	Not specified	DQoL	Age, ADL, NPS, Depression, Education, CSM, Depression C	Satisfactory
Cines <i>et al.</i> (2015)	US	104	68	77.55 (8.03)	24.19 (2.64)	AD	Not specified	QoL-AD	Age, Awareness, Gender, Education, Ethnicity	Good
Conde-Sala <i>et al.</i> (2009)	Spain	236	157	77.8 (6.9)	Mild 76, Moderate 154, Severe 6	Dementia	Community	QoL-AD	Anxiety, ADL, NPS, Education, Living alone, CSM, Being married, QoL C, Burden	Good
Conde-Sala <i>et al.</i> (2010)		251	166	77.4	18.05	Dementia	Community	QoL-AD	Age, Depression, Gender, Relationship, Education C, Gender C	Satisfactory
Conde-Sala <i>et al.</i> (2014b)		119	76	77.0 (6.7)	18.9 (3.6)	Dementia	Community	QoL-AD	Depression, Awareness	Good
Conde-Sala <i>et al.</i> (2013a)		164	98	77.6 (7.2)	17.9 (5.8)	AD	Not specified	QoL-AD	ADL, CSM	Good
Conde-Sala <i>et al.</i> (2014a)		141	83	77.6 (7.2)	17.6 (5.9)	AD	Not specified	QoL-AD	Depression, Burden, Gender C	Good
Conde-Sala <i>et al.</i> (2016)		221	140	77.8 (0.4)	18.3 (0.3)	AD	Not specified	QoL-AD	Awareness, NPS, GDS	Good
Crespo <i>et al.</i> (2013)		102	79.40%	86.07 (6.46)	13.3 (5.88)	Dementia	Nursing home	QoL-AD	Age, ADL, NPS, Depression, Gender, Diet, GDS, CSM, Medication, Care home stay	Good
Dawson <i>et al.</i> (2013)	US	131	55.70%	77.15 (9.45)	22.48 (5.84)	AD 50%, Mixed .8%, MCI 5.9%, VaD 5.1%, Other 24.6%, other memory diagnosis 13.6%	Community	QoL-AD	Anxiety, ADL, NPS, Depression, Gender, Education, Ethnicity, Relationship, CSM	Satisfactory
Dourado <i>et al.</i> (2014)	Brazil	201	130	75.6 (7.3)	20.3 (3.8)	AD	Not specified	QoL-AD	Awareness	Good
Dourado <i>et al.</i> (2016)		69	72%	76.8 (7.3)	21.4 (3.5)	AD	Not specified	QoL-AD	Age, ADL, NPS, Depression, Gender, Education, CSM, Duration, Burden, Education C, Age C, Gender C	Good
Nogueira <i>et al.</i> (2015)		54	18	73.1 (6.3)	20.4 (4.15)	AD	Community	QoL-AD	QoL C	Good
de Sousa <i>et al.</i> (2013)		41	28	77.3 (7.8)	21.0 (3.93)	AD	Community	QoL-AD	None	Good

de Sousa <i>et al.</i> (2015)		69	72	76.8 (7.3)	21.4 (3.5)	AD	Not specified	QoL-AD	None	Satisfactory
Duhig <i>et al.</i> (2012)	France, Italy, Spain, UK, US	379	Not specified	Not specified	Not specified	AD	Not specified	EQ-5D	Age, ADL, NPS, Memory rating	Poor
Edelman <i>et al.</i> (2004a)	US	36	58.30%	80.5 (5.8)	16.7 (4.5)	Dementia	Adult day centres	DQoL QoL-AD	None	Satisfactory
Edelman <i>et al.</i> (2005)		27	80.00%	85.3 (5.4)	16.5 (3.5)	Dementia	Assisted living facility	QoL-AD DQoL	ADL, Depression, Co-morbidity, CSM	
		38	85.50%	86.0 (6.8)	15.1 (4.0)	Dementia	Special care facilities	QoL-AD DQoL		
Ettema <i>et al.</i> (2007b)	Netherlands	67	49	84.59 (6.04)	GDS 5.28 (.79)	Dementia	Nursing home	COOP/WONCA	ADL, NPS, Depression, Co-morbidity, Social engagement	Good
Fleming <i>et al.</i> (2016)	Australia	275	211	84.33 (8.66)	GDS2 10, GDS3 45, GDS4 55, GDS5 67, GDS6 98	Controls 51, Dementia 75, AD 1, DLB 1, FTD 1, Huntingtons 11, Korsakoffs 5, PDD 29, VaD 13, Mixed 86, unspecified 2	Nursing home	DEMQOL	Age, ADL, Gender, Co-morbidity, Diagnosis, Ethnicity, GDS, Care home stay, Medication, Being married, Memory rating	Satisfactory
Fonseca <i>et al.</i> (2015)	Brazil	28	19	77.1 (5.6)	15.8 (3.9)	AD	Community	QoL-AD	Age, ADL, NPS, Depression, Education, CSM	Satisfactory
Fuh and Wang (2006)	Taiwan	81	49	77.2 (6.8)	20.1 (4.5)	AD	Not specified	QoL-AD	Age, ADL, NPS, Depression, Education, Co-morbidity, CSM, Distress	Satisfactory
Gallrach (2010)	New Zealand	53	22	77.7	CDR.5 19, CDR1 25, CDR2 8, CDR3 1	AD 31, VaD 14, Mixed 8	Community	QoL-AD	ADL, NPS, Depression, Co-morbidity, Diagnosis, GDS, CSM, QoL C, Burden, Distress	Good
Gerritsen <i>et al.</i> (2005)	Netherlands	92	79%	79.4	18.4 (6.6)	Dementia	Nursing home	Single question - Overall, how would you rate the quality of your life at the moment?	NPS, CSM	Satisfactory
Gerritsen <i>et al.</i> (2007)		43	78%	80.5 (9.26)	11.8 (9.26)	Dementia	Nursing home (low cognition group only)	Single question - Overall, how would you rate the quality of your life at the moment?	Depression	
Geschke <i>et al.</i> (2013)	Germany	60	38	78.7 (6.4)	20.2 (6.0)	AD 46, VaD 6, Unspecified dementia 8	Community	QoL-AD SF-36	Depression, Co-morbidity, CSM	Poor
Gitlin <i>et al.</i> (2014)	US	88	46	81.7 (8)	17.7 (4.6)	Dementia	Community	QoL-AD	NPS, Co-morbidity, Unmet needs, Pain, CSM, Depression C	Satisfactory

Gómez-Gallego <i>et al.</i> (2012a)	Spain	102	70	78.09 (7.02)	Mild 38, Moderate 56, Severe 8	AD	Community	QoL-AD	Anxiety, ADL, NPS, Depression, CSM, Medication, Burden, Distress	Good
Gómez-Gallego <i>et al.</i> (2012b)		102	70	78.09 (7.02)	18.51 (5.99)	AD	Community	QoL-AD	Gender, Education, Relationship, Being married, Gender C	Good
Gómez-Gallego <i>et al.</i> (2017)		192	118	75.8 (6.14)	20.41 (3.7)	AD	Community	QoL-AD	ADL	Good
Gómez-Gallego <i>et al.</i> (2015)	Spain	81	68.60%	72.09 (6.39)	18.51 (4.29)	AD	Community	DEMQOL	Depression, Co-morbidity, Pain, CSM	Good
Gräske <i>et al.</i> (2012)	Germany	49	76	79 (9.5)	11.5 (9.6)	Dementia (83.7%)	Community living in shared housing	QoL-AD	Age, ADL, NPS, Gender, Care home stay, CSM	Satisfactory
Harvey <i>et al.</i> (2005)	US	183	51.90%	78.8	Not specified	AD 171, DLB 5, VaD 7	Community	QoL-AD	ADL, GDS	Good
Heggie <i>et al.</i> (2012)	Canada	102	75	74.4 (9.5)	3MS 70.6 (18.7)	Dementia	Community (rural and remote settings)	QoL-AD	Age, ADL, NPS, Depression, Education, GDS, CSM, Burden	Good
Hoe <i>et al.</i> (2005)	England	37	58	80.0 (8.8)	7.0 (3.2)	AD	Nursing home	QoL-AD	Age, Education	Good
Hoe <i>et al.</i> (2007)		191	160	81	14.7 (8.3)	AD	Lived alone 51, Lived with others 91, Lived in care home 82	QoL-AD	Anxiety, ADL, NPS, Depression, CSM, Medication	Satisfactory
Livingston <i>et al.</i> (2008)		195	160	81.1 (7.5)	16.7 (6.9)	AD	Not specified	QoL-AD life as whole item	Health, GDS	Good
Hoe <i>et al.</i> (2006)	England, Wales	119	192	86.5 (7.4)	8.7 (7.8)	Dementia	Nursing home	QoL-AD	Anxiety, ADL, NPS, Depression, Unmet needs, GDS, CSM	Satisfactory
Huang <i>et al.</i> (2009)	Taiwan	120	58	78.40 (9.13)	18.64 (6.23)	AD	Community	QoL-AD	NPS, Relationship quality, Co-morbidity, GDS, CSM, QoL C	Satisfactory
Huang <i>et al.</i> (2015)	Taiwan	106	64	80.29 (7.86)	15.39 (5.22)	Dementia	Community 58, Nursing home 48	QoL-AD	Age, Depression, Gender, Education, Relationship quality, Relationship, GDS, CSM, Being married, Depression C, Education C, Age C, Gender C	Good
Hurt <i>et al.</i> (2008)	France, England, Greece	46	Not specified	78	20.80 (5.4)	Dementia	Community	QoL-AD	Age, Anxiety, NPS, Depression, CSM, Duration	Good
Hurt <i>et al.</i> (2010)	England, Finland, France, Greece, Italy, Poland	174	107	77.2 (6.5)	20.6 (4.9)	AD	Not specified	DEMQOL	Age, Awareness, ADL, NPS, Depression, Education, CSM, Duration, Being married	Good
James <i>et al.</i> (2005)	US	181	113	76.7 (8.3)	17.0 (7.1)	AD	Community	Single question - How would you rate your overall quality of life at present?	Age, Depression, Gender, Education, Ethnicity, GDS, CSM, Being married	Satisfactory



Karlawish <i>et al.</i> (2001a)		91	Not specified	Not specified	Not specified	Not specified	Community	Single question - How would you rate the overall quality of your relative's life at present?	None	Satisfactory
Johnson <i>et al.</i> (2014)	US	104	70.20%	77.8 (9.8)	23.4 (4.24)	Dementia or MMSE <26	Not specified	QoL-AD	CSM	Satisfactory
Jones <i>et al.</i> (2015)	England	150	53.80%	79.7 (8.5)	14.6 (6.8)	AD	Community 86%, Residential home 14%	EQ-5D DEMQL BASQID	ADL, NPS, CSM	Good
Trigg <i>et al.</i> (2012a, 2012b)		166	53.80%	79.7 (8.5)	14.6 (6.8)	AD	Community 86%, Residential home 14%	BASQID EQ-5D DEMQL	ADL	Good
Trigg <i>et al.</i> (2015)		70	39	78.19 (8.48)	19.40 (4.67)	AD	Community	EQ-5D DEMQL	None	Good
Jönsson <i>et al.</i> (2006)	Sweden, Denmark, Finland, Norway	208	62.30%	75.9	19.2	AD	Community	QoL-AD EQ-5D VAS EQ-5D	CSM	Good
Kamchatnov <i>et al.</i> (2002)	Russia	56	Not specified	50-59	Mild	VaD	Not specified	SF-36	Anxiety, Depression, CSM	Poor
Karim <i>et al.</i> (2008)	England	36	18	78	Mild 6, Moderate 30	Dementia	Not specified	DQoL	Health, CSM	Satisfactory
Karlawish <i>et al.</i> (2004b)	US	68	Not specified	Not specified	20.3 (4.5)	AD	Not specified	EQ-5D DDI HUI2 SF-12	Awareness, ADL, Depression, CSM	Poor
Karlawish <i>et al.</i> (2008a)		93	51	76.8 (2.7)	21.3 (4.3)	AD	Community	EQ-5D HUI2	Awareness, ADL, Depression, Ethnicity, CSM	Good
Zbrozek <i>et al.</i> (2006)		110	Not specified	Not specified	Not specified	AD	Community	HUI2	ADL, Depression, CSM	Satisfactory
Karttunen <i>et al.</i> (2011)	Finland	228	51.30%	75.1 (6.6)	21.5 (3.4)	AD	Community	QoL-AD 15D	Age, ADL, NPS, Gender, Education, Income, CSM, Medication, Being married, Depression C	Good
Kasper <i>et al.</i> (2009)	US	146	≥80%	60% ≥80	75.9% >18	AD	Community	ADRQL	ADL, Co-morbidity, Relationship, Living alone, CSM, Duration, QoL C, Education C, Age C, Gender C	Satisfactory
Katsuno (2003)	Japan	22	18	79.0 (6.2)	20.8 (2.8)	AD 18, VaD 3, unspecified 1	Community 20, Assisted living 2	QLI	Religion	Satisfactory
Kaufman <i>et al.</i> (2007)	Canada	70	69%	78.43 (8.64)	23.66 (3.86)	AD	Not specified	QoL-AD EQ-5D VAS	Age, Gender, Education, Religion, CSM	Good
Knorr <i>et al.</i> (2007)	Germany	179	61%	79	Not specified	Dementia	Not specified	DEMQL	Age, Depression, Duration, Memory rating	Poor

Kosteniuk <i>et al.</i> (2014)	Canada	148	99	74.5 (8.8)	3MS 75.2 (14.7)	AD 110, Other 55	Community	QoL-AD	Depression	Satisfactory
Kunz (2010)	Germany	335	67.50%	80.2 (6.7)	18.6 (3.8)	Dementia	Community	EQ-5D	ADL, CSM	Satisfactory
Lacey <i>et al.</i> (2015)	Austria, Canada, Germany, US	2204	1188	72.4 (8.94)	21.0 (3.22)	AD	Community	QoL-AD	ADL, NPS, CSM	Good
Lai <i>et al.</i> (2015)	Hong Kong	125	71	81.34 (7.81)	15.75 (6.62)	"Cognitively impaired" 99	Nursing home	WHOQOL-100	Age, Gender, Diet, Pain, Memory rating	Satisfactory
Lapid <i>et al.</i> (2011)	US	34	27	94.1 (2.7)	19.1 (4.5)	Dementia with stroke and Parkinsonism	Community	LASA	Depression, CSM	Good
		41	37	94.2 (2.8)	17.7 (5.7)	Dementia	Community			
León-Salas <i>et al.</i> (2011a)	Spain	40	88.10%	83.2 (6.3)	12.0 (4.5)	AD 86.8%, Mixed 13.2%	Nursing home	QoL-AD	ADL, NPS, Depression, GDS, Care home stay, CSM, Duration	Good
Li <i>et al.</i> (2013b)	China	200	112	77.62 (7.79)	Not specified	Dementia	Community 180, Hospital 20	DQoL	NPS, Co-morbidity, Being married	Satisfactory
	Japan	205	168	85.49 (6.89)	Not specified	Dementia	Nursing home 27, Care home 34, Group home 26, Day service 48, Other 70		NPS, Depression, Education, Diet	
Logsdon <i>et al.</i> (2000)	US	77	47%	78.3 (6.1)	17.1 (5.6)	AD	Community	QoL-AD	Depression, Education, Depression C	Satisfactory
Logsdon <i>et al.</i> (2002)		155	44%	77.2 (6.8)	18.1 (5.9)	AD	Community	QoL-AD	ADL, Depression, CSM, Burden, Depression C	Good
Logsdon <i>et al.</i> (2005)		95	66%	79.9 (7.7)	14.0 (7.0)	AD	Community	QoL-AD	Age, Anxiety, Gender, Duration	Satisfactory
Lucas-Carrasco <i>et al.</i> (2010)	Spain	102	67	79.2 (7.0)	19.49 (4.45)	MCI 19, AD 47, VaD 14, Mixed 10, Other 6, Unknown 6	Community	DEMQOL	Age, ADL, Depression, Health, Gender, Education, Diagnosis, CSM, Being married	Good
Lucas-Carrasco <i>et al.</i> (2011a)		101	68	79.3 (7)	19.5 (4.2)	AD 47, VaD 13, Mixed 10, Unspecified 14, Other 17	Community	DQoL	Age, ADL, Depression, Gender, Education, CSM, Being married	Good
Lucas-Carrasco <i>et al.</i> (2011b)		104	62.50%	78.6 (7.2)	18.3 (4.3)	AD 47, VaD 13, Mixed 10, Unspecified 14, Other 17	Community	WHOQOL-BREF	Age, ADL, Depression, Health, Gender, Education, Co-morbidity, CSM, Being married	Good
Mate <i>et al.</i> (2012)	Australia	167	90	83.5 (4.8)	CAMCOG-R 71.1 (10.7)	Dementia	Community	WHOQOL-BREF	Age, ADL, Depression, Gender, Diagnosis, CSM, Being married	Good
Matsui <i>et al.</i> (2006)	Japan	140	84	72.4 (7.3)	20.3 (4.2)	AD	Community	QoL-AD	Age, ADL, NPS, Gender, Education, CSM, Memory rating	Good
Menne <i>et al.</i> (2009)	US	211	51%	76.07 (8.95)	22.01 (4.67)	Dementia	Community	QoL-AD	Age, Depression, Gender, Education, Relationship quality, Co-morbidity, Diagnosis, Ethnicity, Relationship, CSM	Satisfactory

Menne <i>et al.</i> (2012)		210	49.50%	75.8 (9.23)	22 (4.64)	Dementia	Community	QoL-AD	ADL, Health, Religion, Diet, Income, Duration, Social engagement	Good
Miranda-Castillo <i>et al.</i> (2010a)	England	152	78	79.2 (6.8)	19.13 (7.2)	Dementia	Community	QoL-AD	Unmet needs	Good
Miranda-Castillo <i>et al.</i> (2010b)		129	78	79.85 (6.4)	19.1 (7.2)	Dementia	Community	QoL-AD	Living alone	Good
Mo <i>et al.</i> (2004)	Canada	319	Not specified	Not specified	Not specified	Dementia	Not specified	HUI3	Diagnosis	Poor
Mulhern <i>et al.</i> (2013)	England	325	220	79.4 (8.5)	18.1 (6.6)	AD	Community 305, Nursing home 50	DEMQOL-short DEMQOL EQ-5D	ADL, NPS, Depression, CSM	Good
Naglie <i>et al.</i> (2006)	Canada	60	37	78.6	18.9 (4.5)	AD	Own home 49, Senior's apartment 4, Retirement home 6, Nursing home 1	EQ-5D EQ-5D VAS QWB QoL-AD	Age, ADL, Depression, Health, Co-morbidity, CSM	Good
Naglie <i>et al.</i> (2011a)	Canada	369	179	80.7 (7.8)	22.3 (4.3)	AD	Community	EQ-5D EQ-5D VAS QWB QoL-AD	Age, ADL, NPS, Depression, Gender, Education, Co-morbidity, CSM, Being married	Good
Naglie <i>et al.</i> (2011c)		272	50.2%	82.2	20.2	AD	Community	EQ-5D EQ-5D VAS QWB QoL-AD	None	Satisfactory
Nagpal <i>et al.</i> (2015)	US	111	59	76.80 (8.90)	20.7 (3.80)	Dementia	Community	QoL-AD	Education, Religion, Ethnicity, CSM, Being married, Burden, Education C	Satisfactory
Nakanishi <i>et al.</i> (2011)	Japan	116	Not specified	86.2 (6.0)	15.1 (4.2)	Dementia	Nursing home	QoL-AD	Age, Anxiety, ADL, NPS, Depression, Gender, Care home stay, GDS, CSM	Satisfactory
Nikmat <i>et al.</i> (2015a)	Malaysia	219	108	72.61 (4.74)	short MMSE 5.52 (2.47)	Cognitive impairment	Home care 109, Nursing home 110	WHO-8	Age, ADL, Depression, Health, Gender, Education, Relationship quality, Co-morbidity, Ethnicity, Income, Living alone, CSM, Being married, Social engagement	Good
Nikmat <i>et al.</i> (2015b)		49	27	70.11	5.915	Dementia	Nursing home 30, Community 19	WHO-8 AQoL-8	Depression	Good
Novella <i>et al.</i> (2001a)	Belgium, France,	108	120	81.8 (7.0)	12.75	AD 107, VaD 18, Alcohol 6, other 17	Not specified	DHP	Co-morbidity	Satisfactory
Novella <i>et al.</i> (2001b)	Luxembourg, Switzerland	125	76	82.7	13	AD 68.42%, VaD 16.54%, Mixed 8.27%, Metabolic/alcohol 2.26%, DLB 1.5%, Other 3%	Community 22.5%, Hospital 36.8%, Institution 40.7%	SF-36	Co-morbidity	Good

Ankri <i>et al.</i> (2003)		130	113	82.9 (8.32)	12.8 (5.6)	AD (70.4%)	Community 22.5%, Hospital 36.8%, Institution 40.7%	EQ-5D EQ-5D VAS	Age, ADL, CSM	Good
Novelli and Caramelli (2010)	Brazil	30	73.30%	75.5 (6.7)	20.2 (2.6)	AD	Not specified	QoL-AD	None	Good
		30	66.70%	76.2 (6.2)	14.0 (2.8)	AD	Not specified	QoL-AD	None	
Novelli <i>et al.</i> (2010)		60	42	75.85	17.1	AD	Not specified	QoL-AD	Age, ADL, NPS, Depression, Education, CSM, QoL C, Depression C, Age C	Good
Oremus <i>et al.</i> (2012)	Canada	216	106	80	Not specified	AD	Not specified	EQ-5D	Education C	Good
Orgeta <i>et al.</i> (2015a)	England, Wales	478	238	75.5 (7.3)	CDR Mild 74.6%, CDR Moderate 25.4%	Dementia	Community	EQ-5D EQ-5D VAS	Anxiety, ADL, Depression, Relationship, GDS, Being married, Burden	Satisfactory
Orgeta <i>et al.</i> (2015b)		463	238	77.6	CDR Mild 74.6%, CDR Moderate 25.4%	Dementia	Community	QoL-AD	Age, Anxiety, ADL, Depression, Health, Gender, Education, Living alone, GDS, Being married, GHQ, Burden, Education C, Age C, Gender C	Good
Woods <i>et al.</i> (2012)		479	242	77.53 (7.3)	CDR Mild 74.6%, CDR Moderate 25.4%	AD 106, VaD 23, DLB 1, Mixed 17, Unknown 36	Community	QoL-AD EQ-5D EQ-5D VAS	Memory rating	Good
Perales <i>et al.</i> (2014)	England	110	63.60%	86.6 (3.6)	21.3 (4.8)	AD 76, VaD 4, Mixed 25, Other dementia 2, AD 2, 1 VaD with delirium 1	House/flat 78, Sheltered/warden 18, Nursing home 13, Hospital 1	DEMQOL	Age, ADL, Health, Gender, Education, CSM, Being married	Good
Rummel (2012)	US	27	35	83.89 (6.78)	7.94 (7.49)	Dementia	Memory care unit 52%, Skilled nursing facility 35%, Adult day program 13%	QoL-AD	Anxiety, ADL, NPS, Depression, CSM, Burden	Good
Sanchez-Arenas <i>et al.</i> (2014)	Mexico	109	70	78.52 (7.09)	Not specified	53 AD, 29 VaD, 13 Mixed, 1 Temporal lobe, 1 FTD, 2 Semantic Dementia, 1 CBD, 2 PDD, 4 other	Not specified	EQ-5D EQ-5D VAS	ADL, Co-morbidity, CSM	Good
Schölzel-Dorenbos <i>et al.</i> (2011)	Netherlands	168	106	78 (6)	22.7 (3.9)	AD 105, VaD 15, Mixed or other 55	Community	EQ-5D VAS	Age, ADL, NPS, Depression, Gender, Co-morbidity, GDS, CSM, Distress, Depression C, Education C, Age C, Gender C	Good
Schulz <i>et al.</i> (2010)	US	105	63	77.3 (8.2)	≤15 26, 16-23 37, ≥24 42	AD	Community	QoL-AD DEMQOL SF-12	None	Satisfactory
Schulz <i>et al.</i> (2013)		79	27	76.0 (8.5)	23.1 (3.6)	AD	Community	SF-12	Age, Gender, Education, Ethnicity, Income, CSM, Being married, Burden,	Good

									Depression C, Education C, Age C, Gender C	
Selai <i>et al.</i> (2001a)	England	22	10	65 (8)	≥10	Mostly AD	Community	QOLAS	Age, ADL, Depression, Gender, CSM, Social engagement, GHQ	Satisfactory
Shata <i>et al.</i> (2015)	Egypt	100	56	67.61 (6.41)	11.86 (1.97)	Dementia	Community	QoL-AD	ADL, Depression	Good
Sheehan <i>et al.</i> (2012)	England	48	83	85	CDR 0.5 = 2, CDR 1 = 14, CDR 2 = 64, CDR 3 = 29.	Dementia	General hospital inpatients	QoL-AD EQ-5D	Age, ADL, Depression, Gender, GDS, GHQ	Satisfactory
Shin <i>et al.</i> (2005)	US	62	36	75.53 (7.87)	19.36 (5.22)	AD	Community	QoL-AD	Anxiety, NPS, Depression	Good
Siedlecki <i>et al.</i> (2009)	France, US	277	56.70%	75.79 (7.82)	mMMSE 41.60 (6.23)	AD	Community	AAIQoL	Age, ADL, Depression, CSM	Good
Sloane <i>et al.</i> (2005)	US	78	79%	85	Mild 12%, Moderate 25%, Severe 27%, Very severe 37%	AD 54%, VaD 4%, Mixed 5%, Other 37%	Nursing home	AAIQoL DQoL QoL-AD	ADL, NPS, Depression, Pain, CSM	Good
Smith <i>et al.</i> (2005)	England	69	59	78.65 (8.30)	16.01 (8.53)	Dementia	Community	DEMQOL DQoL QoL-AD SF-12	Age, ADL, Depression, Gender, CSM	Good
Smith <i>et al.</i> (2007)		64	43	78.49 (8.32)	19.93 (4.84)	Dementia	Community	DEMQOL DQoL QoL-AD	None	Satisfactory
Snow <i>et al.</i> (2005)	US	89	0	74.0 (9.37)	DRS scores <46 9, 47-102 39, 102-139 45	Dementia	Community	QoL-AD	ADL, NPS, Depression, Pain, CSM, Depression C	Satisfactory
de Sousa and do Amaral (2014)	Portugal	73	42	77.9 (7.7)	Not specified	AD	Not specified	QoL-AD	Diet	Satisfactory
Spector and Orrell (2006)	England	76	67	85.2 (7.4)	13 (4.8)	Dementia	Nursing home	QoL-AD	None	Good
Spector <i>et al.</i> (2016)	England	50	20	78.40 (6.97)	20.92 (5.20)	Dementia	Community	QoL-AD	Relationship quality	Good
Stewart-Archer (2012)	US	136	98	85 (7.15)	16.87 (4.08)	Dementia	Nursing home 89, Community 35, Supportive housing 12	QoL-AD	Age, Depression, Gender, Education, Income, CSM, Being married	Good
Struttmann <i>et al.</i> (1999)	France	27	26	73.2 (8.0)	Not specified	Dementia	Neurology hospital ward	WHOQOL-100	Age	Poor
Sura <i>et al.</i> (2015)	US	112	64	65-79 59, ≤80 53	Not specified	Dementia	Not specified	SF-12	Age, ADL, Health, Gender, Education, Ethnicity, Income, Medication, Being married	Satisfactory
Trigg <i>et al.</i> (2007)	England	47(sample 1)	32	<65 7, 65-74 24, 75-84 19, ≤85 10	18.44 (4.07)	AD 49, VaD 8, FTD 3	Living alone 8, Living with spouse 45, Living with relative/other 5, Residential 2	BASQID	Depression	Good

	England	143(sample 2)	88	<65 8, 65-74 29, 75-84 85, ≤85 28	18.06 (4.63)	AD 123, VaD 19, FTD 8	Living alone 25, Living with spouse 93, Living with relative/other 21, Residential 11	BASQID	Age, CSM	
Trigg <i>et al.</i> (2011)	England	69	30	<65 3, 65-74 10, 75-84 49, ≤85 7	22.43 (2.44)	AD 54, VaD 7, FTD 5, DLB 3	Living alone 14, Living with spouse 49, Living with relative/other 6	BASQID	Age, Awareness, ADL, Gender, CSM	Good
Trigg <i>et al.</i> (2012c)		53	30	78.77 (6.53)	21.96 (2.89)	AD 45, VaD 9, FTD 3, DLB 3	Living alone 14, Living with spouse 49, Living with relative/other 6	BASQID	None	Good
Vogel <i>et al.</i> (2006)	Denmark	48	Not specified	77.0 (5.8)	24.9 (2.3)	AD	Community	QoL-AD EQ-5D VAS	Age, NPS, Depression, Gender, CSM	Good
Voigt-Radloff <i>et al.</i> (2012)	Germany, Netherlands	285	163	77.3 (7.2)	20.8 (3.5)	AD or VaD	Community	DQoL	ADL, Depression, CSM	Good
Whitlatch <i>et al.</i> (2005)	US	97	60	77 (9)	20.7 (3.8)	AD 42%, Non-specific dementia 25%, stroke 11%, Other dementia 11%, PD 8%, Other 3%	Community	QoL-AD	Social engagement	Satisfactory
Winter <i>et al.</i> (2011)	Russia	98	64	77.5 (8.8)	≤14 83	AD or VaD	Not specified	EQ-5D VAS EQ-5D	Age, Gender	Satisfactory
Wlodarczyk <i>et al.</i> (2004)	Australia	69	60	71.7 (8.5)	21.09	AD	Australian elderly care centres	AQoL	ADL, CSM	Good
Wolak <i>et al.</i> (2009)	France, Switzerland	120	77	82.2 (6.0)	20.8 (4.5)	AD	Living alone 28, Living with spouse 70, Institution/sheltered 18, Other 3	QoL-AD	ADL, NPS, Co-morbidity, CSM, Burden, Distress	Satisfactory
Wolak <i>et al.</i> (2010)		155	98	81.8 (6.0)	20.8 (4.4)	AD 122, Other 33	Living alone 28, Living with spouse 70, Institution/sheltered 18, Other 3	DQoL	Burden	Good
Wolak <i>et al.</i> (2011)		150	98	81.8 (6.0)	20.8 (4.4)	AD 122, Other 33	Mix community and institution	DQoL	ADL, NPS, Depression, GDS, CSM	Good
Wolak-Thierry <i>et al.</i> (2015)		123	63.40%	82.0 (6.0)	MMSE ranged between 11-29	AD	Not specified	QoL-AD DQoL	NPS, Depression, GDS	Good
Barbe <i>et al.</i> (2017)		121	78	82.0 (6.2)	20.7 (4.5)	AD	Community 103	DQoL	Age, Anxiety, ADL, Education, Diet, Medication	Good
Woods <i>et al.</i> (2006)		England	201	158	85.3 (7.0)	14.4 (3.8)	Dementia	Residential 172	QoL-AD	Anxiety, NPS, Depression, GDS, CSM
Thorgrimsen <i>et al.</i> (2003)	201		158	85.3 (7.0)	14.4 (3.8)	Dementia	Residential 172	QoL-AD	None	Good
Selwood <i>et al.</i> (2005)	24		42	81.5 (6.0)	9.8 (7.4)	Dementia	Inpatient, Day hospital, Nursing home, Residential home	DQoL	None	Good
Woods <i>et al.</i> (2014)	Wales	98	54	78.7 (7.7)	24.2 (2.8)	AD 51, VaD 30, Mixed 20	Community	QoL-AD	Age, Anxiety, Awareness, ADL, NPS, Depression, Education, Relationship quality, CSM, GHQ, Distress, Age C, Religion*	Good

									Co-morbidity*, Diagnosis*, Being married*, Education C*, Gender C*	
Nelis <i>et al.</i> (2012)		97	46	77.98 (7.68)	24.43 (2.64)	AD 59, VaD 25, Mixed 13	Community	QoL-AD	Gender	Good
Clare <i>et al.</i> (2013)		95	49	78.56 (7.91)	24.13 (2.87)	AD 49, VaD 29, Mixed 17	Community	QoL-AD	None	Good
Clare <i>et al.</i> (2014b)		51	25	76.75 (7.88)	24.5 (2.80)	AD 31, VaD 11, Mixed 9	Community	QoL-AD	Medication	Good
Yap <i>et al.</i> (2008)	Singapore	67	45	78.4 (7.5)	16.1 (5.4)	AD 58.6%, mixed 32.8%, VaD 6.9%, PDD 1.7%	Live with spouse 81.7%	QoL-AD	ADL, Depression, GHQ	Satisfactory
Yeager and Hyer (2008)	US	25	60%	77	Not specified	AD or Dementia	Community	5 items from GDS-15	NPS	Satisfactory
Yeaman <i>et al.</i> (2013)	US	10	0	82.5 (4.99)	17.8 (6.07)	AD	Community	QoL-AD	ADL	Satisfactory
Yu <i>et al.</i> (2013)	China	195	48%	73.6 (7.7)	MoCA 7.26 (5.51)	AD	Community	QoL-AD	Anxiety, ADL, Depression	Good
Zimmerman <i>et al.</i> (2005)	US	71	Not specified	Not specified	7.5	Dementia	Residential care or Assisted living	DQoL AAIQoL QoL-AD	Medication	Good
Zucchella <i>et al.</i> (2015)	Italy	135	93	78.2 (5.9)	15.3 (7.5)	AD	Live with carer 56.3%	QoL-AD	ADL, Depression	Satisfactory

Note: articles were judged to be of poor quality if scored  $\leq 20$  or below, satisfactory scored between  $>20$  and  $<26$ , good scored  $\geq 26$ . Shading indicates articles using the same study data. "Severity" refers to Mini-Mental State Examination score unless otherwise specified. \* indicates data not reported in articles

Quality of life measure abbreviations: 12-Item Short Form Health Survey (SF-12), 15-dimensional (15D), 36-Item Short Form Health Survey (SF-36), Activity and Affect Indicators of QOL (AAIQoL), Alzheimer's Disease Related Quality of Life (ADRQL), Assessment of Quality of Life (AQoL), Bath Assessment of Subjective Quality of Life in Dementia (BASQID), Dartmouth COOP Functional Health Assessment charts/WONCA (COOP/WONCA), Dementia Quality of Life Questionnaire (DEMQOL), Dementia Quality of Life Instrument (DQoL), Disability and Distress Index (DDI), Duke Health Profile (DHP), EuroQol five dimensions questionnaire (EQ-5D), Geriatric Depression Scale-15 (GDS-15), Health Utility Index (HUI), Linear Analogue Self Assessment (LASA), Quality of Life Assessment Schedule (QOLAS), Quality of Life Index (QLI), Quality of Life in Alzheimer's Disease (QoL-AD), Quality of Well-Being scale (QWB), Self-Reported Quality of Life Scale (SRQLS), Visual Analogue Scale, (VAS), World Health Organization (WHO), World Health Organization Quality of Life (WHOQOL)

Severity abbreviations: Cambridge Cognition Examination (CAMCOG), Clinical Dementia Rating (CDR), Dementia Rating Scale (DRS), Global Deterioration Scale (GDS), Mini-Mental State Examination (MMSE), Modified Mini-Mental State Examination (3MS), Modified Mini-Mental State Examination (mMMSE), Montreal Cognitive Assessment (MoCA)

Dementia type abbreviations: Alzheimer's disease (AD), Behavioural-variant frontotemporal dementia (bvFTD), Corticobasal degeneration (CBD), Dementia with Lewy bodies (DLB), Frontotemporal Dementia (FTD), mild cognitive impairment (MCI), Parkinson's Disease Dementia (PDD), Primary Progressive Aphasia (PPA), Vascular dementia (VaD)

Factors included in the meta-analysis abbreviations: Alzheimer's (vs. other dementia subtypes) (Diagnosis), Better functional ability (ADL), Better quality of relationship with carer (Relationship quality), Better self-rated health (Health), Better self-rated memory functioning (Memory rating), Burden or stress (Burden), Cared for by spouse (vs. other carer type) (Relationship), Carer Depression (Depression C), Carer quality of life (self-rated) (QoL C), Distress at NPS symptoms (Distress), Female gender (Gender), Female gender carer (Gender C), Greater social engagement (Social engagement), Higher income (Income), Higher level of education (Education), Higher level of carer education (Education C), Higher scores on cognitive screening measures (CSM), Longer duration of care home stay (Care home stay), Longer disease duration (Duration), More advanced dementia (GDS), More awareness (Awareness), Neuropsychiatric symptoms/BPSD (NPS), Older age (Age), Older age carer (Age C), Poorer mental health (General Health Questionnaire (GHQ)) (GHQ), Presence of co-morbid conditions (Co-morbidity), Presence of religious beliefs/spirituality (Religion), Presence of unmet needs (Unmet needs), Taking medication (Medication), Underweight (Diet), White ethnicity (Ethnicity)



**Supplementary Table 4. Studies utilising informant ratings of quality of life in people with dementia**

Study	Country of study	Relationship of informant to person with dementia	n	Females	Mean age	Severity	Dementia type	Living situation	QoL measure	Factors included in the meta-analysis	Quality rating
Albert <i>et al.</i> (2000)	US	Mix	145	Not specified	76 (8.7)	Not specified	AD	Mostly community	AAIQoL	ADL, GDS, CSM	Satisfactory
	US	Mix	196	Not specified	83.5 (7.5)	Not specified	AD	Mostly community	AAIQoL	ADL, GDS	
Albert <i>et al.</i> (1996)	US	Mix	130	60.50%	72.4 (8.1)	37.8 (5.9)	AD	Mostly community	AAIQoL	None	Satisfactory
Albert <i>et al.</i> (2001)		Mix	150	Not specified	74.18 (8.05)	Not specified	AD	Mostly community	AAIQoL	NPS	Good
Andrieu <i>et al.</i> (2016)	France	Family	526	331	79.6 (5.9)	19.5 (3.9)	AD	Community	QoL-AD	Age, Anxiety, ADL, NPS, Depression, Gender, Education, Co-morbidity, Diet, Relationship, Living alone, CSM, Medication, Duration, Burden, Age C, Gender C	Good
Arismendi Arismendi <i>et al.</i> (2013)	Spain	Family	58	37	81.2 (6.3)	Not specified	AD	Not specified	EQ-5D VAS	Age, Gender, Co-morbidity, Relationship, Medication, Duration	Satisfactory
Arlt <i>et al.</i> (2008)	Germany	Family	97	54	70.49 (8.49)	22.74 (4.37)	AD 58%, Mixed and MCI 11%, bvFTD 9%, VaD 7%, Semantic dementia 1%	Community 95, Nursing home	WHO-8 SF-12	Depression, GDS, CSM	Good
Arons <i>et al.</i> (2013)	Netherlands	Family	175	106	78.6 (5.7)	Not specified	AD 105, VaD 15, Mixed 49, Other 6	Not specified	EQ-5D VAS EQ-5D	Age, Gender	Good
Barca <i>et al.</i> (2011)	Norway	Family	156	103	82.9 (7.7)	11.1 (8.2)	AD 107, VaD 18, Other 31	Nursing homes 82, Geriatric psychiatry departments 74	QUALID	Age, ADL, Depression, Gender, Co-morbidity, Living alone, GDS, CSM, Being married	Satisfactory
Beer <i>et al.</i> (2010)	Australia	Health care professional	324	Not specified	85.3 (7.9)	14 (median)	Dementia	Residential care facilities	QoL-AD ADRQL	Age, NPS, Gender, Diet, Pain, CSM, Medication, Distress	Satisfactory
		Family	292								
Beerens <i>et al.</i> (2014)	England, Estonia, Finland,	Health care professional	791	74%	84.1 (6.4)	11.9 (6.3)	Dementia	Long-term care residents	QoL-AD	Depression, Pain, Medication	Good
		Family	1123	63%	82.2 (6.6)	14.3 (6.6)	Dementia	Home care			

Giebel <i>et al.</i> (2014)	France, Germany, Netherlands, Spain, Sweden	Mix	263	154	82.6 (5.6)	21.8 (1.4)	AD 139, VaD 41, Mixed 14, FTD 2, DLB 9, Other 58	Care home or community but at risk of care home within 6 months	QoL-AD	Age, ADL, NPS, Diagnosis	Good
		Mix	521	365	82.7 (6.6)	15 (2.9)	AD 282, VaD 81, Mixed 35, FTD 2, DLB 8, Other 105				
		Mix	242	156	81.2 (6.9)	4.8 (3.5)	AD 122, VaD 52, Mixed 12, DLB 5, Other 50				
Giebel <i>et al.</i> (2015a)		Mix	122	71.30%	83 (6.5)	13.37 (2.27)	AD 44, VaD 39, Mixed 8, FTD 2, DLB 5	Community 63, Care home 59	QoL-AD	Living alone, CSM, Age C	Good
Giebel <i>et al.</i> (2015b)		Mix	414	71.30%	82 (6.8)	4.9 (3.1)	dementia	Community 214, Care home 197	QoL-AD	None	Good
Giebel <i>et al.</i> (2016b)		Family	957	596	82.3 (6.5)	14.5 (6.6)	AD 514, VaD 153, Mixed 53, Other 227	Community (home care)	QoL-AD	None	Good
		Family	581	423	84.3 (6.1)	12.1 (6.2)	AD 248, VaD 127, Mixed 35, Other 171	Nursing home (Long term care)	QoL-AD		
Benhabib <i>et al.</i> (2013)		Canada	Health care professional	31	2	85.8 (3.7)	8.7 (6.7)	AD	Long-term care residents	QUALID	Anxiety, NPS, Depression, GDS
Bhattacharya <i>et al.</i> (2010)	Denmark	Family	321	54.80%	76.2 (7.1)	24.0 (2.6)	AD 72.4%, Mixed 24.8%	Community	EQ-5D EQ-5D VAS QoL-AD	ADL, NPS, Depression, CSM	Satisfactory
Vogel <i>et al.</i> (2012)		Family	102	76 (7.1) Baseline	76 (7.1) Baseline	22.7 (0.41) 12 months; 18.0 (0.75) 18 months	AD	Community (91% at 12-month, 86.3% at 36-month)	QoL-AD EQ-5D VAS	None	Good
Black <i>et al.</i> (2012)	US	Family	254	65%	83.6	17.8	Dementia	Community	QoL-AD ADRQL	Age, ADL, NPS, Depression, Health, Gender, Education, Co-morbidity, Ethnicity, Relationship, CSM Medication, QoL C, Burden, Distress, Depression C, Education C, Age C, Gender C, Time caring (community)	Good
Black <i>et al.</i> (2013)		Family	254	65%	83.6 (5.9)	17.8 (7.6)	265 AD, 38 MCI	Community	QoL-AD ADRQL	None	Good
Bosboom <i>et al.</i> (2012b)	Australia	Family	80	67.50%	78.3 (7.9)	Not specified	AD	Community	QoL-AD	Age, Anxiety, Awareness, ADL, NPS, Depression, Gender, Education, Living alone, Medication, Being	Good

										married, Memory rating, Distress, Age C, Gender C	
Bosboom and Almeida (2014)		Family	47	72.30%	78.7 (8.2)	15.1 (5.6)	AD	Community	QoL-AD	CSM	Good
Bosboom <i>et al.</i> (2013)		Family	47	72.30%	78.7 (8.2)	15.1 (5.6)	AD	Community	QoL-AD	None	Satisfactory
Bosboom and Almeida (2016)		Family	80	67.50%	78.3 (7.9)	Not specified	AD	Community	QoL-AD	None	Good
Boyer <i>et al.</i> (2004)	Belgium, France, Luxembourg, Switzerland	Family Health care professional	95	76	81.8 (8.2)	15.7 (4.1)	AD 68, VaD 16, Mixed 8, Other 8	Community 20%, Hospital 40%, Institution 40%	NHP	Age, ADL, Gender, Living alone, CSM, Duration	Good
Brvik <i>et al.</i> (2012)	Norway	Family	230	123	78.4 (7.5)	21.3 (3.6)	Dementia	Community	QoL-AD	Age, ADL, NPS, Depression, Gender, Education, CSM, Duration, Being married	Satisfactory
Bryan <i>et al.</i> (2005)	England	Family Health care professional	64	36	76 (53-91)	18 (5.8) (3-26)	AD or VaD	Community	EQ-5D	Anxiety, ADL, NPS, Depression	Good
Buckley <i>et al.</i> (2012)	US	Family	81	151	85.60 (5.77)	19.78 (7.25)	AD 181, remainder not specified	Not specified	Single global QoL question (rated self as excellent)	ADL, NPS, Health, Gender, Education, GDS, CSM, Duration	Good
			144						Single global QoL question (rated self as good)		
Castro-Monteiro <i>et al.</i> (2016)	Spain	Mix	525	434	85.57 (6.73)	13.24 (8.07)	Non-specific dementia (49.7%), AD (36.4%), VaD (6.5%), Mixed (4.4%), Alcohol-related dementia (1.1%), DLB (1.1%), PDD (.8%)	Residential care facilities	QoL-AD QUALID	Age, ADL, Depression, Gender, Co-morbidity, GDS, CSM	Satisfactory
Castro-Monteiro <i>et al.</i> (2014)		Health care professional	274	224	84.70 (6.51)	12.96 (8.51)	Dementia	Residential care	EQ-5D QoL-AD	None	Satisfactory
Díaz-Redondo <i>et al.</i> (2014)		Mix	525	434	85.57 (6.73)	13.24 (8.07)	Mostly AD	Nursing home	EQ-5D EQ-5D VAS	Age, Depression, Gender, Education, Co-morbidity, GDS, CSM	Good
Chan <i>et al.</i> (2011)	Hong Kong	Family	111	80	77.7 (7.4)	15.8 (4.7)	AD	Community	QoL-AD	Age, Depression, Gender, Education, Co-morbidity, Living alone, CSM, Being	Good

										married, Time caring (community)	
Chiu <i>et al.</i> (2008)	Taiwan	Family	51	61.20%	75.23 (8.03)	17.61 (3.78)	AD	Not specified	DQoL	Age, ADL, NPS, Depression, Education, CSM, Depression C	Satisfactory
Clare <i>et al.</i> (2014a)	Wales	Family Health care professional	105	72	81.47 (8.63)	FAST 6 25, FAST 7 80	Dementia 40, AD 26, VaD 19, Mixed 6, FTD/Picks 3, CADASIL 1, Not stated 10	Nursing home	QUALID	Age, ADL, NPS, Gender, Relationship, Care home stay, Medication, Memory rating, PCC	Good
Cohen-Mansfield <i>et al.</i> (2015)	US	Health care professional	179	72.10%	86.08 (8.62)	8.79 (6.44)	Dementia	Nursing home	SDS	ADL, Pain, CSM, Memory rating	Good
Conde-Sala <i>et al.</i> (2009)	Spain	Family	236	157	77.8 (6.9)	Mild 76, Moderate 154, Severe 6	Dementia	Community	QoL-AD	Age, Anxiety, NPS, Depression, Gender, Education, Living alone, CSM, Being married, QoL C, Burden	Good
Conde-Sala <i>et al.</i> (2010)		Family	251	166	77.4	18.05	Dementia	Community	QoL-AD	ADL, Relationship, Education C, Gender C	Satisfactory
Conde-Sala <i>et al.</i> (2014b)		Family	119	76	77.0 (6.7)	18.9 (3.6)	Dementia	Community	QoL-AD	None	Good
Conde-Sala <i>et al.</i> (2013b)	Spain	Family	221	140	78.6 (74.4-82.5)	19.0 (15.0-22.5)	AD	Not specified	QoL-AD	Depression, Gender, Education, GDS, CSM, Being married, QoL C, Burden	Good
Conde-Sala <i>et al.</i> (2013a)		Family	164	98	77.6 (7.2)	17.9 (5.8)	AD	Not specified	QoL-AD	Awareness, ADL	Good
Conde-Sala <i>et al.</i> (2014a)		Family	141	83	77.6 (7.2)	17.6 (5.9)	AD	Not specified	QoL-AD	Gender C	Good
Conde-Sala <i>et al.</i> (2016)		Family	221	140	77.8 (0.4)	18.3 (0.3)	AD	Not specified	QoL-AD	Awareness, NPS	Good
Cordner <i>et al.</i> (2010)	US	Family Health care professional	119	65	81.6 (6.8)	SIRS 10.3 (6.7)	Dementia	Nursing home	Single question - How would you rate [resident's] overall quality of life in the past two weeks? ADRQL	Age, NPS, Gender, Education, Comorbidity, Ethnicity, GDS, Care home stay, Duration	Satisfactory
Crespo <i>et al.</i> (2013)	Spain	Family Health care professional	197	79.40%	86.07 (6.46)	13.3 (5.88)	Dementia	Nursing home	QoL-AD	Age, ADL, NPS, Depression, Gender, Diet, GDS, Relationship, Care home stay, CSM,	Good

										Medication, Dementia unit, Burden, Depression C, Age C, Gender C	
Dooley and Hinojosa (2004)	US	Family	40	24	77.08 (8.86)	Not specified	AD	Community	AAIQoL	Burden	Satisfactory
Dourado <i>et al.</i> (2016)	Brazil	Family	69	72%	76.8 (7.3)	21.4 (3.5)	AD	Not specified	QoL-AD	Age, Awareness, ADL, NPS, Depression, Gender, Education, CSM, Duration, Burden, Education C, Age C, Gender C	Good
de Sousa <i>et al.</i> (2013)		Family	41	28	77.3 (7.8)	21.0 (3.93)	AD	Community	QoL-AD	None	Good
de Sousa <i>et al.</i> (2015)		Family	69	72	76.8 (7.3)	21.4 (3.5)	AD	Not specified	QoL-AD	None	Satisfactory
Edelman <i>et al.</i> (2005)	US	Health care professional	55	80.00%	85.3 (5.4)	11.1 (6.8)	Dementia	Assisted living facility	QoL-AD ADRQL	ADL, Depression, Co-morbidity, CSM, Dementia unit	Satisfactory
		Health care professional	117	85.50%	86.0 (6.8)	7.9 (6.8)	Dementia	Special care facilities	QoL-AD ADRQL	ADL, Depression, Co-morbidity, CSM	Satisfactory
Edelman <i>et al.</i> (2004a)		Health care professional	54	58.30%	80.5 (5.8)	16.7 (4.5)	Dementia	Adult day centres	QoL-AD ADRQL	None	Satisfactory
Falk <i>et al.</i> (2007)	Sweden	Health care professional	169	148	86 (6)	10 (7)	AD, DLB and VaD 39, Multi-infarct dementia, Cerebrovascular infarcts, Postsubarachnoidal bleeding 39, Mixed 8, Non-specified dementia 83.	Dementia special care units	QUALID	NPS, Depression, CSM, Medication	Good
Fuh and Wang (2006)	Taiwan	Family	81	49	77.2 (6.8)	20.1 (4.5)	AD	Not specified	QoL-AD	Age, ADL, NPS, Depression, Education, Co-morbidity, CSM, Distress	Satisfactory
Gallrach (2010)	New Zealand	Family	53	22	77.7	CDR.5 19, CDR1 25, CDR2 8, CDR3 1	AD 31, VaD 14, Mixed 8	Community	QoL-AD	ADL, NPS, Depression, Co-morbidity, Diagnosis, GDS, CSM, QoL C, Burden, Distress, Time caring (community)	Good
Garre-Olmo <i>et al.</i> (2010)	Spain	Health care professional	160	123	82.6 (11.6)	4.1 (6.3)	Dementia	Long-term care	QUALID	NPS, Pain, CSM	Good

Garre-Olmo <i>et al.</i> (2012)		Health care professional	160	123	82.6 (11.6)	4.1 (6.3)	Dementia	Long-term care	QUALID	ADL, Pain	Good
Geschke <i>et al.</i> (2013)	Germany	Family	60	38	78.7 (6.4)	20.2 (6.0)	Dementia	Community	QoL-AD SF-36	Depression, Co-morbidity, CSM	Good
Giebel <i>et al.</i> (2016a)	England	Family	20	8	77 (8.3)	23.6 (2.26)	AD 40%, Not specified 60%	Community	QoL-AD	ADL, GHQ	Good
Gitlin <i>et al.</i> (2014)	US	Family	88	46	81.7 (8)	17.7 (4.6)	Dementia	Community	QoL-AD	NPS, Co-morbidity, Pain, CSM, Depression C	Satisfactory
Goldfeld <i>et al.</i> (2012)	US	Health care professional	319	86.20%	85.4	Not specified	Dementia	Nursing home	HUI2	Co-morbidity	Satisfactory
Gómez-Gallego <i>et al.</i> (2012a)	Spain	Family Health Care Professional	102	70	78.09 (7.02)	38 mild >20, 56 moderate 11-20, 8 severe <11	AD	Community	QoL-AD	Anxiety, ADL, NPS, Depression Relationship, CSM, Being married, Burden, Distress	Satisfactory
Gómez-Gallego <i>et al.</i> (2012b)		Family Health Care Professional	102	70	78.09 (7.02)	18.51 (5.99)	AD	Community	QoL-AD	Age, Gender, Education, Medication, Being married, Gender C	Satisfactory
González-Salvador <i>et al.</i> (2000)	US	Health care professional	120	96	81.6 (7.9)	5.8 (6.9)	AD 78, VaD 26, Other 16	Long term care	ADRQL	Age, NPS, Depression, GDS, Care home stay, CSM, Medication, Age C, Time caring (care home)	Satisfactory
Gräske <i>et al.</i> (2012)	Germany	Health care professional	104	76	79 (9.5)	11.5 (9.6)	Dementia (83.7%)	Community in shared housing	QoL-AD	ADL, NPS,	Satisfactory
Gräske <i>et al.</i> (2014b)		Family	104	73%	79.0 (9.5)	GDS	Dementia (83.6%)	Not specified	ADRQL QoL-AD QUALIDEM	Age, Gender, GDS, CSM	Good
Gräske <i>et al.</i> (2014a)	Germany	Health care professional	133	105	85.4 (7.2)	GDS4 2, GDS5 4, GDS6 29, GDS7 98	Dementia	Care home	ADRQL QUALIDEM	NPS, Gender, GDS, Burden, Time caring (care home)	Good
Harvey <i>et al.</i> (2005)	US	Family	183	51.90%	78.8	Not specified	AD 171, DLB 5, VaD 7	Community	QoL-AD	ADL, GDS	Good
Heggie <i>et al.</i> (2012)	Canada	Family	114	75	74.4 (9.5)	3MS 70.6 (18.7)	Dementia	Community (rural and remote settings)	QoL-AD	Age, ADL, NPS, Depression, Education GDS, CSM, Burden	Good
Hendriks <i>et al.</i> (2014)	Netherlands	Health care professional	330	67%	85.2 (7.4)	Not specified	AD 43%, VaD 24%, Mixed 19%, DLB/PDD 6%, Other 9%	Nursing home	QUALID	NPS, Pain	Good
Hoe <i>et al.</i> (2006)	England, Wales	Health care professional	224	192	86.5 (7.4)	8.7 (7.8)	Dementia	Residential care homes	QoL-AD	Anxiety, ADL, NPS, Depression, GDS, CSM	Satisfactory

Hoe <i>et al.</i> (2007)	England	Mix Family 167 Health Care Professional 24	191	160	81	14.7 (8.3)	AD	Lived alone 51, Lived with others 91, Lived in care home 82	QoL-AD	Anxiety, ADL, NPS, Depression, CSM, Medication, Depression C, Time caring (care home)	Satisfactory
Huang <i>et al.</i> (2009)	Taiwan	Family	120	58	78.40 (9.13)	18.64 (6.23)	AD	Community	QoL-AD	NPS, GDS, CSM	Satisfactory
Huang <i>et al.</i> (2015)	Taiwan	Family	106	64	80.29 (7.86)	15.39 (5.22)	Dementia	Nursing home 48, Community 58	QoL-AD	Age, Depression, Gender, Education, Co-morbidity, Relationship, GDS, CSM, Being married, Community vs residential, QoL C, Depression C, Education C, Age C, Gender C, Time caring (care home)	Good
Hurt <i>et al.</i> (2008)	France, England, Greece	Family	116	104	74.80 (8.36)	16.5 (6.79)	Dementia	Community	QoL-AD	Age, Anxiety, NPS, Depression, CSM, Duration, Distress, Time caring (community)	Good
James <i>et al.</i> (2005)	US	Family	173	113	76.7 (8.3)	17.0 (7.1)	AD	Community	Single question - How would you rate the overall quality of your relative's life at present?	Age, Depression, Gender, Education, Ethnicity, GDS, CSM, Being married	Satisfactory
Karlawish <i>et al.</i> (2001b)		Family	40	27	74.9 (8.0)	16.3 (7.8)	AD	Community	Single question - How would you rate the overall quality of your relative's life at present?	NPS, Health, Burden, Depression C, Age C, Gender C	Satisfactory
Jönsson <i>et al.</i> (2006)	US	Family	208	62.30%	75.9	19.2	AD	Community	QoL-AD EQ-5D VAS EQ-5D	Age, NPS, Gender, Education, Living alone, CSM, Medication, Community vs residential	Good
Bostrom <i>et al.</i> (2007)		Family	34	15	77.4	17.3	DLB	Community	EQ-5D	ADL, Living alone	Good
Karlawish <i>et al.</i> (2004a)	US	Family	68	Not specified	Not specified	20.3 (4.5)	AD	Not specified	EQ-5D DDI HUI2 SF-12	ADL, CSM, Burden, Depression C	Poor

Karlawish <i>et al.</i> (2008b)		Family	100	Not specified	76.8 (2.7)	20.83 (4.44)	AD	Community	EQ-5D HUI2	ADL, CSM, Burden	Good
Zbrozek <i>et al.</i> (2006)		Family	110	Not specified	Not specified	Not specified	AD	Community	HUI2	ADL, CSM, Depression C	Satisfactory
Karttunen <i>et al.</i> (2011)	Finland	Family	240	51.30%	75.1 (6.6)	21.5 (3.4)	AD	Community 70% with spouse, 30% alone	VAS QoL-AD	Age, ADL, GDS, Medication, Depression C	Good
Kavirajan <i>et al.</i> (2009)	US	Family	408	224	80 (7)	Not specified	AD 304, VaD 31, Other 63	Community 387	HUI2 HUI3	NPS, Depression, Co-morbidity, GDS	Good
Kazui <i>et al.</i> (2008)	Japan	Health care professional	91	73.60%	84.1 (6.9)	Not specified	AD 28, VaD 31, Other 2, Unknown 30	Care home	QLQD	Age, Gender, GDS, Care home stay	Poor
Kerner <i>et al.</i> (1998)	US	Family	159	35.70%	73.7 (7.1)	Not specified	AD	Community	QWB	CSM, NPS	Satisfactory
Khoo <i>et al.</i> (2013)	Singapore	Family	627	459	78 (8)	CDR.5 53, CDR1 256, CDR2 302, CDR3 56	AD 320, AD with CVD 241, VaD 84, Other 22	Not specified	QoL-AD	Anxiety, NPS, Depression	Good
Kolanowski <i>et al.</i> (2009)	US	Researcher	87	77%	85.7 (6.3)	14.2 (4.5)	Dementia	Nursing home	Activity engagement	CSM	Good
Kolanowski <i>et al.</i> (2014)		Researcher	128	77%	86.11 (6.0)	14.2 (4.5)	Dementia	Nursing home	Activity engagement	None	Satisfactory
Kolanowski <i>et al.</i> (2002)	US	Researcher	1	0	79	4	AD	Dementia care unit	OERS	None	Good
Kunz (2010)	Germany	Family	351	67.50%	80.2 (6.7)	18.6 (3.8)	Dementia	Community	EQ-5D	ADL, CSM	Satisfactory
Kuo <i>et al.</i> (2010)	Taiwan	Family	140	69	79.7	Mild 33, Mild-moderate 42, Moderate 30, Severe 35	Dementia	Community 89, Care home 51	EQ-5D	ADL, CSM, Community vs residential, Time caring (care home)	Satisfactory
Lacey <i>et al.</i> (2015)	Austria, Canada,	Family	2204	1188	72.4 (8.94)	21.0 (3.22)	AD	Community	QoL-AD HUI3	ADL, NPS, CSM	Good
McLaughlin <i>et al.</i> (2010)	Germany, US	Family	166	93	75.9 (6.8)	20.3 (4.6)	AD	Community	QoL-AD HUI3	GDS	Good
Lapid <i>et al.</i> (2011)	US	Family	41	37	94.2 (2.8)	17.7 (5.7)	Dementia	Community	LASA	Depression, CSM	Good
		Family	34	27	94.1 (2.7)	19.1 (4.5)	Dementia with stroke and Parkinsonism	Community			
Lawton <i>et al.</i> (1996)	US	Researcher	237	Not specified	87.82 (5.83)	Not specified	Dementia	Nursing home	OERS	NPS, Depression, CSM	Satisfactory
Lee <i>et al.</i> (2015b)	US	Researcher	171	135	83.64 (6.39)	7.35 (7.20)	Dementia	Nursing home 110, Assisted living 67	ODAS	Co-morbidity, Pain	Satisfactory
León-Salas <i>et al.</i> (2011a)	Spain	Family	101	88.10%	83.2 (6.3)	7.2 (6.1)	AD 81.2%, Mixed 18.8%	Nursing home	QoL-AD	ADL, NPS, Depression, GDS, Care home stay, CSM, Duration	Good
León-Salas <i>et al.</i> (2011b)		Family	92	54	73.8 (6.7)	14.1 (6.6)	AD	Community	ADRQL	Age, ADL, NPS, Depression,	Good



										Education, Co-morbidity, GDS, Living alone, CSM, Medication, Duration, Being married, Burden, Education C, Age C	
León-Salas <i>et al.</i> (2013)		Health care professional	108	87%	83.9 (6.2)	7.0 (6.2)	AD	Nursing home	ADRQL	Age, ADL, NPS, Depression, Education, GDS, CSM, Duration, Community vs residential	Good
León-Salas <i>et al.</i> (2015)	Spain	Health care professional	475	396	85.8 (6.8)	Not specified	Dementia	Nursing home	EQ-5D	Age, ADL, Gender, Education, Co-morbidity, Being married, Memory rating	Satisfactory
Logsdon <i>et al.</i> (2000)	US	Family	77	47%	78.3 (6.1)	17.1 (5.6)	AD	Community	QoL-AD	Depression, Depression C	Satisfactory
Logsdon <i>et al.</i> (2002)		Family	155	Not specified	77.2 (6.8)	18.1 (5.9)	AD	Community	QoL-AD	ADL, NPS, Depression, CSM, Memory rating, Burden, Depression C	Good
Logsdon <i>et al.</i> (2005)		Family	95	66%	79.9 (7.7)	14.0 (7.0)	AD	Community	QoL-AD	Age, Anxiety, Gender, Education, Duration	Satisfactory
Logsdon and Teri (1997)	US	Family	42	21	74.0 (8.0)	18.4 (6)	AD	Community	PES-AD	CSM	Good
Lucas-Carrasco <i>et al.</i> (2013)	Spain	Family	100	66	79.18 (7.09)	17.68 (4.19)	AD 61, VaD 17, Mixed 14, Unspecified 8	Community	CBSQLD	Age	Good
Makai <i>et al.</i> (2012)	Netherlands	Family Health Care Professional	96	68.00%	82 (9.1)	Not specified	dementia	Nursing home	ICECAP-O EQ-5D EQ-5D VAS	Age, ADL, Gender, Education C	Satisfactory
Makai <i>et al.</i> (2014)	Germany	Health care professional	95	56.80%	76.7 (8.5)	Mild 5.3%, Moderate 34.7%, Severe 60%	AD 60%, Other 40% (ICD-10, F01; VaD; F02 other specified dementias)	Nursing home	ICECAP-O	Age, ADL, Gender, Diagnosis, Care home stay, CSM, Being married, Time caring (care home)	Satisfactory
Marventano <i>et al.</i> (2015)	Spain	Health care professional	429	352	85.8 (6.7)	CDR mild 64, CDR moderate 110, CDR severe 255	Dementia	Nursing home	QoL-AD	Age, ADL, Depression, Gender, Education, Care home stay, GDS	Good
Matsui <i>et al.</i> (2006)	Japan	Family	140	84	72.4 (7.3)	20.3 (4.2)	AD	Community	QoL-AD	Age, ADL, NPS, Gender, Education, CSM, Memory rating	Good

Miller <i>et al.</i> (2008)	US	Family	407	55.80%	77.860 (7.462)	15.002 (5.801)	AD	Community	HUI3	Age, ADL, NPS, Gender, Education, Ethnicity, CSM, Being married, Distress	Good
Miller <i>et al.</i> (2009)		Family	421	55.80%	77.9 (7.5)	15.00 (5.80)	AD	Community	ADRQL	ADL, NPS	Good
Miller <i>et al.</i> (2010a)		Family	413	56%	77.9 (7.5)	15.00 (5.80)	AD	Community and Assisted living	ADRQL HUI3	None	Good
Miller <i>et al.</i> (2012)		Family	409	56.00%	77.9 (7.5)	15 (5.8)	AD	Community	HUI3	Burden, Depression C	Satisfactory
Miranda-Castillo <i>et al.</i> (2010a)	England	Family	128	78	79.2 (6.8)	19.13 (7.2)	Dementia	Community	QoL-AD	None	Good
Miranda-Castillo <i>et al.</i> (2010b)		Family	119	78	79.85 (6.4)	19.1 (7.2)	Dementia	Community	QoL-AD	Living alone	Good
Missotten <i>et al.</i> (2008b)	Belgium	Family	357	303	84.19 (7.14)	8.56 (6.81)	Dementia	Long-term care 83%	ADRQL	Age, ADL, NPS, Gender, GDS, CSM, Community vs residential	Good
Missotten <i>et al.</i> (2007)		Family	127	109	82.42 (7.01)	8.46 (7.21)	Dementia	Institution 114	ADRQL	None	Good
Missotten <i>et al.</i> (2008a)		Family	42	100	84.57 (6.31)	(MMSE 0-3)	Dementia	Nursing home or Home care	ADRQL	None	Good
			23	47	84.23 (7.18)	(MMSE 4-8)					
			45	69	84.83 (7.73)	(MMSE 9-13)					
	42		59	83.51 (7.19)	(MMSE 14-18)						
18	21	84.76 (6.8)	(MMSE 19-23)								
Mjørud <i>et al.</i> (2014b)	Norway	Health care professional	661	472	85.34 (8.63)	Not specified	AD 353, VaD 26, Mixed 12, DLB 22, other/unspecified 221, FTD 27	Nursing home	QUALID	Age, ADL, NPS, Health, Gender, Care home stay, GDS, Medication, Dementia unit	Good
Mjørud <i>et al.</i> (2014c)		Health care professional	198	156	87 (7.7)	CDR1 49, CDR2 73, CDR3 76	AD 94, Other 104	Nursing home	QUALID	NPS, Medication	Satisfactory
Mjørud <i>et al.</i> (2014a)		Health care professional	661	472	85.34 (8.63)	CDR1 149, CDR2 222, CDR3 290	AD 353, VaD 26, mixed 12, DLB 22, FTD 27, unspecified 221	Nursing home	QUALID	None	Good
Mougiias <i>et al.</i> (2011)	Greece	Family	161	109	76.87 (7.03)	11.5 (7.08)	AD 101, VaD 32, DLB 13, FTD 13, PDD 2	Community	ADRQL	Age, ADL, NPS, Depression, Gender, Education, Co- morbidity, Diagnosis, GDS, Relationship, Living alone, CSM, Medication, Being married, Burden, Depression C,	Good

										Education C, Age C, Gender C, Time caring (community)	
Mulhern <i>et al.</i> (2013)	England	Family	325	220	79.4 (8.5)	18.1 (6.6)	AD	Community 275, Nursing home 50	EQ-5D	ADL, NPS, Depression, CSM	Good
Murman <i>et al.</i> (2002), Murman <i>et al.</i> (2009)	US	Family	149	54%	76.75 (8.62)	14.94 (8.35)	AD 89.26%, DLB 10.74%	Not specified	QWB EQ-5D HUI2	Age*, ADL*, NPS*, Education*, Co-morbidity*, GDS*, CSM*, Burden*, Distress*, Age C*	Satisfactory
Naglie <i>et al.</i> (2006)	US	Family	60	37	78.6	18.9 (4.5)	AD	Own home 49, Senior's apartment 4, Retirement home 6, Nursing home 1	QWB HUI3 EQ-5D EQ-5D VAS QoL-AD SF-36	ADL, Depression, Health, Co-morbidity, CSM	Good
Naglie <i>et al.</i> (2011b)	US	Family	410	208	80.7 (7.9)	20.8 (6.2)	AD	Community	QWB HUI3 EQ-5D EQ-5D VAS QoL-AD SF-36	Age, ADL, NPS, Depression, Gender, Co-morbidity, CSM, Being married, Burden, Depression C	Good
Naglie <i>et al.</i> (2011c)		Family	272	50.2%	82.2	20.2	AD	Community	EQ-5D EQ-5D VAS QWB QoL-AD HUI3 SF-36	None	Satisfactory
Nagpal <i>et al.</i> (2015)	US	Family	111	59	76.80 (8.90)	20.7 (3.80)	Dementia	Community	QoL-AD	Education, Ethnicity, CSM, Being married, Burden, Education C	Satisfactory
Nakanishi <i>et al.</i> (2011)	Japan	Health care professional	116	Not specified	86.2 (6.0)	15.1 (4.2)	Dementia	Nursing home	QoL-AD	Age, Anxiety, ADL, NPS, Depression, Gender, Care home stay, GDS, CSM	Satisfactory
Nakanishi <i>et al.</i> (2012)	Japan	Health care professional	1366	83.20%	85.56 (7.43)	4.15 (.87) out of 6, higher is worse	Dementia	Nursing home	ADRQL	ADL	Satisfactory
Neumann <i>et al.</i> (2000)	US	Family	679	67%	81 (9)	CDR.5 7%, CDR1 29%, CDR2 34%, CDR3 21%, CDR4 7%, CDR5 2%	AD	Community 52%, assisted living 24%, Nursing home 24%	HUI2 HUI3	GDS	Poor
Novelli <i>et al.</i> (2010)	Brazil	Family	60	42	75.85	17.1	AD	Not specified	QoL-AD	ADL, NPS, Depression, CSM, QoL C, Depression	Good

										C, Education C, Gender C	
Novelli and Caramelli (2010)		Family	30	73.30%	75.5 (6.7)	20.2 (2.6)	AD	Not specified	QoL-AD	None	Good
		Family	30	66.70%	76.2 (6.2)	14.0 (2.8)	AD	Not specified	QoL-AD	None	
Orgeta <i>et al.</i> (2015a)	England, Wales	Family	488	238	75.5 (7.3)	CDR mild 74.6%, CDR moderate 25.4%	Dementia	Community	EQ-5D EQ-5D VAS	Age, Anxiety, Depression, Relationship, GDS, GHQ, Burden, Age C	Satisfactory
Orgeta <i>et al.</i> (2015b)		Family	488	238	77.6	CDR mild 74.6%, CDR moderate 25.4%	Dementia	Community	QoL-AD	Age, Anxiety, Depression, Health, Gender, Education, Relationship, Living alone, GDS, Being married, GHQ, Burden, Education C, Age C, Gender C	Good
Woods <i>et al.</i> (2012)		Family	488	242	77.53 (7.3)	CDR mild 74.6%, CDR moderate 25.4%	AD 106, VaD 23, DLB 1, Mixed 17, Unknown 36	Community	QoL-AD EQ-5D EQ-5D VAS	ADL, QoL C, Depression C	Good
Pelletier and Landreville (2007)	Canada	Health care professional	49	89.80%	82.7 (7.8)	FAST 3 4.1%, FAST 4 2%, FAST 5 16.3%, FAST 6 53.1%, FAST 7 24.5%	AD	Not specified	Discomfort Scale	NPS	Good
Porzolt <i>et al.</i> (2004)	Austria	Health care professional	217	173	84 (61-105)	GDS 5.7 (1.1)	AD 34.5%, VaD 61.5%, other 4%	Nursing home	The Vienna List	ADL, GDS	Satisfactory
Rabins (2000)	US	Family	61	Not specified	Not specified	Not specified	Dementia	Not specified	ADRQL	Depression, GDS, CSM	Poor
Røen <i>et al.</i> (2015)	Norway	Mix	169	117	84.9 (6.7)	14.0 (6.0)	Dementia	Nursing home	QUALID	Age, ADL, NPS, Depression, Gender, GDS	Satisfactory
Rummel (2012)	US	Family Health care professional	48	35	83.89 (6.78)	7.94 (7.49)	Dementia	Memory care unit 52%, Skilled nursing facility 35%, Adult day program 13%	QoL-AD	Anxiety, ADL, NPS, Depression, CSM, PCC, Burden	Good
Salek <i>et al.</i> (1996), Salek <i>et al.</i> (1999)	Wales	Family	70	34	75.3 (52-90)	Not specified	AD 45, Mixed 25	Community	CDQLP	CSM	Satisfactory
Samus <i>et al.</i> (2005)	US	Health care professional	134	108	86.1 (6.7)	14.64 (7.67)	AD 78, VaD 17, DLB 1, Mixed/Not specified 38	Nursing home	ADRQL	Age, Anxiety, NPS, Depression, Health, Gender, Education, Co-morbidity, Ethnicity, Care home stay, CSM, Being married	Satisfactory

Samus <i>et al.</i> (2006)		Health care professional	198	156	86.1 (6.7)	13.6 (3.1)	AD 78, VaD 17, DLB 1, Mixed/Not specified 38, no dementia 64	Nursing home	ADRQL	None	Good
Bicket <i>et al.</i> (2010)		Health care professional	194	77.80%	85.4 (8.8)	Not specified	Dementia	Assisted living	ADRQL	None	Satisfactory
Schulz <i>et al.</i> (2010)	US	Family	105	63	77.3 (8.2)	≤15 26, 16-23 37, ≥24 42	AD	Community	QoL-AD	None	Satisfactory
		Family	121	Not specified	Not specified	≤15 82, 16-23 25, ≥24 10	AD	Community	QoL-AD	None	
Selai <i>et al.</i> (2001a)	England	Family	22	10	65 (8)	≥10	Mostly AD	Community	QOLAS	ADL, NPS, Gender	Satisfactory
Shata <i>et al.</i> (2015)	Egypt	Family	100	56	67.61 (6.41)	11.86 (1.97)	Dementia	Community	QoL-AD	ADL, Depression	Good
Sheehan <i>et al.</i> (2012)	England	Family	109	83	85	CDR.5 2, CDR1 14, CDR2 64, CDR3 29	Dementia	General hospital inpatients	QoL-AD EQ-5D	Age, ADL, Depression, Gender, GDS, GHQ	Good
Shin <i>et al.</i> (2005)	US	Family	62	36	75.53 (7.87)	19.36 (5.22)	AD	Community	QoL-AD	Anxiety, NPS, Depression	Good
Siedlecki <i>et al.</i> (2009)	France, US	Family	277	56.70%	75.79 (7.82)	mMMSE 41.60 (6.23)	AD	Community	AAIQoL	Age, ADL, NPS, Depression, CSM	Good
Sixsmith <i>et al.</i> (2008)	Estonia, Finland, Germany, Sweden, UK	Health care professional	394	292	83.86 (8.37)	5.4	Dementia	Residential care 320, Community 74	QUALID	ADL, Gender, Co-morbidity, Diet, Pain, Medication	Poor
Sjögren <i>et al.</i> (2013)	Sweden	Health care professional	1245	870	85.0 (7.5)	Not specified, but mostly severe	Dementia	Nursing home	QUALID	PCC	Satisfactory
Edvardsson <i>et al.</i> (2014)		Health care professional	1257	872	86 (7.5)	GRS 11.30	Dementia	Nursing home	QUALID	None	Satisfactory
Sloane <i>et al.</i> (2005)	US	Health care professional	246	79%	85	Mild 12%, Moderate 25%, Severe 27%, Very severe 37%	Dementia	Nursing home	AAIQoL ADRQL QoL-AD	ADL, NPS, Depression, Pain, CSM	Good
Dobbs <i>et al.</i> (2005)		Health care professional	329	Not specified	84.7	Not specified	Dementia	Residential care or Assisted living	AAIQoL	ADL, NPS, Depression, Diet, Pain, CSM	Satisfactory
Winzelberg <i>et al.</i> (2005)		Health care professional	335	268	85.25	7.5	Dementia	Residential care or Assisted living	QoL-AD	Age, ADL, NPS, Depression, Gender, Ethnicity, Pain, CSM, PCC	Satisfactory
Zimmerman <i>et al.</i> (2005)		Health care professional	241	333	203 under 85, 206 85 and over	7.5	Dementia	Residential care or Assisted living	ADRQL	Medication, PCC	Good
Smith <i>et al.</i> (2005)	England	Family	48	59	78.65 (8.30)	16.01 (8.53)	Dementia	Not specified	QoL-AD SF-12	Age, ADL, Depression, Gender, CSM, GHQ, Age C, Gender C	Good

Smith <i>et al.</i> (2007)		Family	77	43	78.49 (8.32)	19.93 (4.84)	Dementia	Community	QoL-AD	GHQ	Satisfactory
		Family	21	16	79.23 (8.42)	2.9 (3.6)	Dementia	Community	QoL-AD	None	
Snow <i>et al.</i> (2005)	US	Family	89	0	74.0 (9.37)	DRS scores <46 9, 47-102 39, 102-139 45	Dementia	Community	QoL-AD	ADL, NPS, Depression, Pain, CSM, Depression C	Satisfactory
Snow <i>et al.</i> (2009)		Family	171	52	75.81 (6.19)	Not specified	Dementia	Community	PES-AD	Pain	Good
Ball <i>et al.</i> (2010)		Family	171	3%	76 (6.04)	Not specified	Dementia	Community	PES-AD	None	Satisfactory
Spector <i>et al.</i> (2016)	England	Family	50	20	78.40 (6.97)	20.92 (5.20)	Dementia	Community	QoL-AD	None	Good
Telenius <i>et al.</i> (2013)	Norway	Health care professional	166	125	86.9 (7.36)	15.6 (4.9)	Dementia	Nursing home	QUALID	Age, ADL, Gender, Co-morbidity, Care home stay, CSM, Medication	Good
Terada <i>et al.</i> (2002)	Japan	Mix (Health care professional 90%)	264	180	81.5 (7.9)	Moderate to Severe dementia	AD 119, VaD 79, Mixed 37, Other 27	Geriatric health services 112, Hospital 104, Nursing home 11%, home 7%, Group home 1%	QLQD	ADL, CSM	Good
Terada <i>et al.</i> (2013)		Health care professional	112	80	80.9	Not specified	AD 70, VaD 35, Other 7	Geriatric health services facilities	QLQD	PCC	Satisfactory
		Health care professional	104	59	80.9	Not specified	AD 56, VaD 29, Other 19	Hospital		None	
Thomas <i>et al.</i> (2006)	France	Health care professional	100	64	80.2 (6.8)	12.8 (5.8)	AD 84, Mixed 9, DLB 7	Community	ADRQL	Age, ADL, NPS, Depression, Diagnosis, CSM, Duration, QoL C, Age C	Satisfactory
Trigg <i>et al.</i> (2011)	England	Family	68	30	<65 3, 65-74 10, 75-84 49, ≤85 7	22.43 (2.44)	AD 54, VaD 7, FTD 5, DLB 3	Living alone 14, Living with spouse 49, Living with relative/other 6	ADRQL	Awareness, ADL, CSM	Good
Trigg <i>et al.</i> (2015)	England	Family	145	88	77.78 (9.24)	12.64 (8.57)	AD	Community	EQ-5D DEMQOL	ADL, NPS, CSM	Good
Vogel <i>et al.</i> (2006)	Denmark	Family	48	Not specified	77.0 (5.8)	24.9 (2.3)	AD	Community	QoL-AD EQ-5D VAS	Age, NPS, Depression, Gender, CSM	Good
Volicer <i>et al.</i> (1999)	US	Researcher	57	77.20%	82.7 (7.5)	5.2 (4.8)	AD	Nursing home	OERS	NPS, Depression	Satisfactory
Warden <i>et al.</i> (2003)	US	Health care professional	19	Not specified	78.1 (5)	2.8 (4.5)	Dementia	Nursing home	Discomfort Scale	Pain	Satisfactory
Weiner <i>et al.</i> (2000)	US	Health care professional	41	28	80.6	11.53 (6.23)	AD	Nursing home	QUALID	Anxiety, ADL, NPS, Depression, CSM	Satisfactory
Weyerer <i>et al.</i> (2010)	Germany	Health care professional	725	600	83.15	dementia score 9.9 (1 no	Dementia	Nursing home	AAIQoL	Dementia unit	Satisfactory

						impairment - 16 severe)					
Whitlatch <i>et al.</i> (2005)	US	Family	111	60	77 (9)	20.7 (3.8)	AD 42%, non-specific dementia 25%, stroke 11%, Other dementia 11%, PD 8%, Other 3%	Community	QoL-AD	None	Satisfactory
Wlodarczyk <i>et al.</i> (2004)	Australia	Family	78	60	71.7 (8.5)	20.2 (5.6)	AD	Australian elderly care centres	AQoL	ADL, CSM	Good
Wolak <i>et al.</i> (2009)	France, Switzerland	Family	120	77	82.2 (6.0)	20.8 (4.5)	AD	Living alone 28, Living with spouse 70, Institution/sheltered 18, other 3	QoL-AD	ADL, NPS, Co-morbidity, Burden, Distress	Satisfactory
Wolak-Thierry <i>et al.</i> (2015)		Family	123	63.40%	82.0 (6.0)	MMSE between 11-29	AD	Not specified	QoL-AD	Depression, GDS, CSM	Good
Wolfs <i>et al.</i> (2007)	Netherlands	Family	196	150	77.8 (6.7)	20.21 (5.78)	AD 97, VaD 26, Mixed 21, Other 20	Community	EQ-5D EQ-5D VAS	CSM	Satisfactory
Yamamoto-Mitani <i>et al.</i> (2004)	Japan	Health care professional	623	477	81.7 (7.9)	Early 92, Moderate 209, Severe 186, Very severe 136	AD 184, VaD 281, Mixed 43, Other 115	Nursing home 185, Hospital 81, Geriatric health services facilities 114, Day care 243	ADRQL	Age, ADL, Gender, Diagnosis, GDS, Dementia unit, Education C, Gender C	Satisfactory
Yap <i>et al.</i> (2008)	Singapore	Family	67	45	78.4 (7.5)	16.1 (5.4)	AD 58.6%, Mixed 32.8%, VaD 6.9%, PDD 1.7%	Live with spouse 81.7%	QoL-AD	ADL, NPS, Depression, Memory rating, GHQ, Burden	Satisfactory
Young (2001)	US	Health care professional	104	82	86.3	8.55 (7.78)	Dementia	Nursing home	Discomfort Scale	ADL, NPS, Depression, Pain, CSM	Good
Yu <i>et al.</i> (2013)	China	Family	87	48%	73.6 (7.7)	MoCA 7.26 (5.51)	AD	Community	QoL-AD	Anxiety, ADL, Depression, Burden	Good
Zucchella <i>et al.</i> (2015)	Italy	Family	135	93	78.2 (5.9)	15.3 (7.5)	AD	Live with carer 56.3%	QoL-AD	NPS, Depression	Satisfactory

Note: articles were judged to be of poor quality if scored  $\leq 20$  or below, satisfactory scored between  $>20$  and  $<26$ , good scored  $\geq 26$ . Shading indicates articles using the same study data. "Severity" refers to Mini-Mental State Examination score unless otherwise specified. \* indicates data not reported in articles

Quality of life measure abbreviations: 12-Item Short Form Health Survey (SF-12), 36-Item Short Form Health Survey (SF-36), Activity and Affect Indicators of QOL (AAIQoL), Alzheimer's Disease Related Quality of Life (ADRQL), Assessment of Quality of Life (AQoL), Community Dementia Quality of Life Profile (CDQLP), Cornell-Brown Scale for Quality of Life in Dementia (CBSQLD), Dementia Quality of Life Questionnaire (DEMQOL), Dementia Quality of Life Instrument (DQoL), Disability and Distress Index (DDI), EuroQol five dimensions questionnaire (EQ-5D), Health Utility Index (HUI), Investigating Choice Experiments for the Preferences of Older People CAPability for Older people (ICECAP-O), Linear Analogue Self Assessment (LASA), Nottingham Health Profile (NHP), Observable Displays of Affect Scale (ODAS), Observed Emotion Rating Scale (OERS), Pleasant Events Schedule-Alzheimer's disease (PES-AD), Quality of Life Assessment Schedule (QOLAS), Quality of Life in Alzheimer's Disease (QoL-AD), QUALity of Life in DEMentia (QUALIDEM), Quality of Life in Late Stage Dementia Scale (QUALID), Quality of Life Questionnaire for Dementia (QLQD), Quality of Well-Being scale (QWB), Source of Discomfort Scale (SDS), Visual Analogue Scale, (VAS), World Health Organization (WHO)

Severity abbreviations: Clinical Dementia Rating (CDR), Dementia Rating Scale (DRS), Functional Assessment Staging Test (FAST), Geriatric Rating Scale (GRS), Global Deterioration Scale (GDS), Mini-Mental State Examination (MMSE), Modified Mini-Mental State Examination (3MS), Modified Mini-Mental State Examination (mMMSE), Montreal Cognitive Assessment (MoCA), Severe Impairment Rating Scale (SIRS)

Dementia type abbreviations: Alzheimer's disease (AD), Behavioural-variant frontotemporal dementia (bvFTD), Cerebral Autosomal-Dominant Arteriopathy with Subcortical Infarcts and Leukoencephalopathy (CADASIL), Cerebrovascular disease (CVD), Dementia with Lewy bodies (DLB), Frontotemporal Dementia (FTD), mild cognitive impairment (MCI), Parkinson's Disease Dementia (PDD), Vascular dementia (VaD)

Factors included in the meta-analysis abbreviations: Alzheimer's (vs. other dementia subtypes) (Diagnosis), Better functional ability (ADL), Better self-rated health (Health), Better self-rated memory functioning (Memory rating), Burden or stress (Burden), Cared for by spouse (vs. other carer type) (Relationship), Carer Depression (Depression C), Carer quality of life (self-rated) (QoL C), Community vs residential (Community dwelling (vs. residential care)), Degree to which residential care is person-centred (PCC), Dementia unit (Special dementia unit (vs. other residential facility)), Distress at NPS symptoms (Distress), Higher level of education (Education), Higher level of carer education (Education C), Higher scores on cognitive screening measures (CSM), Female gender (Gender), Female gender carer (Gender C), Longer duration of care home stay (Care home stay), Longer disease duration (Duration), More awareness (Awareness), More advanced dementia (GDS), More time spent caring (community only) (Time caring (community)), More time spent caring (residential care only) (Time caring (care home)), Neuropsychiatric symptoms/BPSD (NPS), Older age (Age), Older age carer (Age C), Poorer mental health (General Health Questionnaire (GHQ)) (GHQ), Presence of co-morbid conditions (Co-morbidity), Taking medication (Medication), Underweight (Diet), White ethnicity (Ethnicity)



**Supplementary Table 5. Studies utilising proxy ratings of quality of life in people with dementia**

Study	Country of study	Relationship of informant to person with dementia	n	Females	Mean age	Severity	Dementia type	Living situation	QoL measure	Factors included in the meta-analysis	Quality rating
Ballard <i>et al.</i> (2001)	England	Health care professional	112	79.50%	85.5 (6.8)	8.4 (7.2)	Dementia	Residential/ Nursing home	DCM	NPS, Medication	Satisfactory
Bosboom <i>et al.</i> (2012b)	Australia	Family	80	67.50%	78.3 (7.9)	Not specified	AD	Community	QoL-AD	Age, ADL, NPS, Depression, Medication, Gender, Age C	Good
Chung (2004)	Hong Kong	Researcher	43	29	81.2 (7.01)	CDR1 6, CDR2 15 CDR3 22	AD 28, VaD 10, Mixed 5	Nursing home	DCM	GDS	Good
de Rooij <i>et al.</i> (2012)	Netherlands	Health care professional	102	75	84.25 (5.49)	6.29 (5.93)	Dementia	Dutch traditional sized Nursing home 51, Dutch small scale Nursing home 51	QUALIDEM	None	Good
	Belgium	Health care professional	77	67	86.81 (6.36)	7.09 (6.82)	Dementia	Belgian traditional sized Nursing home 30, Belgium small scale Nursing home 47	QUALIDEM	Depression	
Edelman <i>et al.</i> (2004b)	US	Researcher	166	75%	83.5 (6.1)	10.6 (7.1)	Dementia	Special care facilities 62, Assisted living facilities 49, Adult day centres 55	DCM	Age, ADL, Depression, Co-morbidity, CSM, Gender	Satisfactory
Edelman <i>et al.</i> (2007)		Health care professional	30	77%	85.0 (7.8)	80% MMSE of 0	Dementia	Nursing home	OQOLDA	Age, ADL, Depression, CSM	Satisfactory
Edelman <i>et al.</i> (2004a)		Researcher	54	61.80%	80.8 (6.5)	12.5 (7.3)	Dementia	Nursing home	DCM	None	Satisfactory
Edelman <i>et al.</i> (2005)		Researcher	117	85.50%	86.0 (6.8)	7.9 (6.8)	Dementia	special care facilities	DCM	None	Satisfactory
		Researcher	55	80.00%	85.3 (5.4)	11.1 (6.8)	Dementia	assisted living facility	DCM	None	
Kuhn <i>et al.</i> (2005)		Researcher	111	75%	83.5	10.6	Dementia	Special care facilities 62, Assisted living facilities 49, Adult day centres 55	DCM	None	Satisfactory
Ettema <i>et al.</i> (2007a)		Netherlands	Health care professional	202	182	84.69 (6.85)	GDS2 2, GDS3 5, GDS4 21, GDS5 64, GDS6 110, GDS7 36	AD 117, VaD 29, Mixed 22, other 21, unknown 49	Nursing home	QUALIDEM	ADL, NPS, Depression, GDS

Fleming <i>et al.</i> (2016)	Australia	Health care professional	275	211	84.33 (8.66)	GDS2 = 10, GDS3 = 45, GDS4 = 55, GDS5 = 67, GDS6 = 98	Controls 51, Dementia 75, AD 1, DLB 1, FTD 1, Huntingtons 11, Korsakoffs 5, PDD 29, VaD 13, Mixed 86, unspecified 2	Nursing home	DEMQOL	Age, ADL, GDS, Co-morbidity, Medication, Gender	Satisfactory
Funaki <i>et al.</i> (2005)	Japan	Researcher	25	18	81.2 (6.38)	HDS-R 10.6 (5.9)	AD 14, VaD 2, other 9	Group home	QLQD	ADL, NPS,	Satisfactory
Gómez-Gallego <i>et al.</i> (2015)	Spain	Family	81	68.60%	72.09 (6.39)	18.51 (4.29)	AD	Community	DEMQOL	NPS, Depression, Co-morbidity, CSM	Good
Gräske <i>et al.</i> (2015)	Germany	Health care professional	396	275	78.4 (11.1)	GDS0-5 63, GDS6 167, GDS7 152	Dementia	Nursing home	QUALIDEM	Age, NPS, GDS, Gender	Satisfactory
Hodgson <i>et al.</i> (2014)	US	Family	88	46	81.67 (8.02)	17.7 (4.57)	Dementia	Community	DEMQOL	Age, Co-morbidity, CSM	Good
Hurt <i>et al.</i> (2010)	England, Finland, France, Greece, Italy, Poland	Family	155	107	77.2 (6.5)	20.6 (4.9)	AD	Not specified	DEMQOL	Age, ADL, NPS,	Good
Jones <i>et al.</i> (2015)	England	Family	221	53.80%	79.7 (8.5)	14.6 (6.8)	AD	Community 86%, Residential home 14%	EQ-5D DEMQOL	ADL, NPS, CSM	Good
Trigg <i>et al.</i> (2012a, 2012b)		Family	249	53.80%	79.7 (8.5)	14.6 (6.8)	AD	Community 86%, Residential home 14%	EQ-5D DEMQOL	ADL	Satisfactory
Karlawish <i>et al.</i> (2001b)	US	Family	40	27	74.9 (8.0)	16.3 (7.8)	AD	Community	Single question - How would your relative rate his or her overall quality of your relative's life at present?	Age, NPS, GDS, CSM, Gender, Age C	Satisfactory
Lucas-Carrasco <i>et al.</i> (2010)	Spain	Family	95	67	79.2 (7.0)	19.49 (4.45)	MCI 19, AD 47, VaD 14, Mixed 10, Other 6, unknown 6	Community	DEMQOL	Age, ADL, Depression, CSM, Gender	Good
Mulhern <i>et al.</i> (2013)	England	Family	317	220	79.4 (8.5)	18.1 (6.6)	AD	Community 267, Nursing home 50	DEMQOL	ADL, NPS, Depression, CSM	Good
Ní Mhaoláin <i>et al.</i> (2012)	Ireland	Family	115	71	74.13 (9.14)	20.5 (6.5)	AD	Community	DEMQOL	Age, ADL, NPS, GDS, CSM, Gender	Good

Schiffczyk <i>et al.</i> (2011)	Germany	Family	194	57	73.0 (7.1)	17.3 (6.8)	AD or Mixed	Community	QoL-AD	Age, ADL, NPS, Depression, Medication, CSM, Age C	Satisfactory
Schiffczyk <i>et al.</i> (2010)		Family	137	30.70%	73.0 (6.7)	16.9 (6.4)	AD or Mixed	Community	EQ-5D	None	Good
Schulz <i>et al.</i> (2010)	US	Family	105	63	77.3 (8.2)	26=0-16, 37=16-23, 42=24+	AD	Community	DEMQOL	None	Satisfactory
Sloane <i>et al.</i> (2005)	US	Researcher	222	79%	85 (65-101)	Mild 12%, Moderate 25%, Severe 27%, Very severe 37%	AD 54%, VaD 4%, Mixed 5%, Other 37%	Nursing home	DCM RSOC-QOL, OERS	Age, ADL, NPS, Depression, Co-morbidity, Gender	Good
Zimmerman <i>et al.</i> (2005)		Health care professional	211	333	<85 203, ≥85 206	7.5	Dementia	Residential care or Assisted living	OERS DCM	Medication	Good
Sloane <i>et al.</i> (2007)	UK	Researcher	133	Not specified	Not specified	Not specified	Dementia	Nursing home (UK descriptive studies)	DCM	GDS, CSM	Poor
Smit <i>et al.</i> (2016)	Netherlands	Health care professional	1144	75.20%	84.22 (7.57)	CPS 3.99 (1.50)	Dementia	Nursing home	QUALIDEM	None	Good
Smith <i>et al.</i> (2005)	England	Family	99	59	78.65 (8.30)	16.01 (8.53)	Dementia	Community 79%, 21% Residential, Nursing, Sheltered or Dual registered	DEMQOL	ADL, Depression, Gender, Age C	Good
Banerjee <i>et al.</i> (2006)		Family	99	59	78.7 (8.3)	16.0 (8.5)	Dementia	Community 79%, 21% Residential, Nursing, Sheltered or Dual registered	DEMQOL	Age, NPS, Depression, CSM	Satisfactory
Smith <i>et al.</i> (2007)		Family	77	43	78.49 (8.32)	19.93 (4.84)	Dementia	Community	DEMQOL	None	Satisfactory
		Family	21	16	79.23 (8.42)	2.9 (3.6)	Dementia	Community	DEMQOL	None	
Thornton <i>et al.</i> (2004)	UK	Researcher	64	27	74.46 (9.58)	CAPE -CAS 10 (7.92)	Dementia	Hospital ward 22, Day hospital 42	DCM	None	Satisfactory
Wetzels <i>et al.</i> (2010)	Netherlands	Health care professional	207	72.50%	83.4 (6.8)	9.5 (6.0) (GDS 4-6)	AD 36.2%, VaD 11.6%, Mixed 7.2%, Other 44.9%	Nursing home	QUALIDEM	Age, ADL, NPS, Depression, GDS, Medication, Gender	Good
		Health care professional	81	86.40%	84.6 (8.0)	0.7 (1.6) (GDS 7)	AD 45.7%, VaD 7.4%, Mixed 3.7%, Other 43.2%	Nursing home	QUALIDEM	Age, ADL, NPS, Depression, Medication, Gender	
		Health care professional	207	150	83.7	9.4 (6.1)	Dementia	Nursing home	QUALIDEM	None	Good
Wolf-Ostermann <i>et al.</i> (2012)	Germany	Health care professional	56	43	82.3 (9.25)	GDS4 6, GDS5 5, GDS6 38, GDS7 7	Dementia	Shared-housing 34, Special care units 22	QUALIDEM	Gender	Good

Note: articles were judged to be of poor quality if scored  $\leq 20$  or below, satisfactory scored between  $>20$  and  $<26$ , good scored  $\geq 26$ . Shading indicates articles using the same study data. "Severity" refers to Mini-Mental State Examination score unless otherwise specified.

Quality of life measure abbreviations: Dementia Care Mapping (DCM), Dementia Quality of Life Questionnaire (DEMQOL), EuroQol five dimensions questionnaire (EQ-5D), Health Utility Index (HUI), Observed Emotion Rating Scale (OERS), Observing QOL for Dementia Advanced (OQOLDA), Resident and Staff Observation Checklist-Quality of Life Measure (RSOC-QOL), Quality of Life in Alzheimer's Disease (QoL-AD), QUALity of LIfe in DEMentia (QUALIDEM), Quality of Life Questionnaire for Dementia (QLQD)

Severity abbreviations: Clifton Assessment Procedure for the Elderly-Cognitive Assessment Scale (CAPE-CAS), Clinical Dementia Rating (CDR), Cognitive Performance Scale (CPS), Global Deterioration Scale (GDS), Hasegawa Dementia Scale-Revised (HDS-R), Mini-Mental State Examination (MMSE)

Dementia type abbreviations: Alzheimer's disease (AD), Dementia with Lewy bodies (DLB), Frontotemporal Dementia (FTD), mild cognitive impairment (MCI), Parkinson's Disease Dementia (PDD), Vascular dementia (VaD)

Factors included in the meta-analysis abbreviations: Better functional ability (ADL), Female gender (Gender), Higher scores on cognitive screening measures (CSM), More advanced dementia (GDS), Neuropsychiatric symptoms/BPSD (NPS), Older age (Age), Older age carer (Age C), Presence of co-morbid conditions (Co-morbidity), Taking medication (Medication)

**Supplementary Table 6. Studies utilising difference scores for ratings of quality of life in people with dementia**

Study	Country of study	Difference	n	Females	Mean age	Severity	Dementia type	Living situation	QoL measure	Factors included in the meta-analysis	Quality rating
Andrieu <i>et al.</i> (2016)	France	Self vs. Family	501	331	79.6 (5.9)	19.5 (3.9)	AD	Community	QoL-AD	Age, ADL, NPS, CSM, Gender, Age C, Living alone, Education, Burden, Gender C	Good
Buckley <i>et al.</i> (2012)	US	Self vs. Family	144	151	85.60 (5.77)	19.78 (7.25)	Dementia	Not specified	Single global QoL question	NPS, Co-morbidity, CSM, Gender, Education	Good
Conde-Sala <i>et al.</i> (2014b)	Spain	Self vs. Family	119	76	77.0 (6.7)	18.9 (3.6)	Dementia	Community	QoL-AD	ADL, NPS, Burden	Good
Conde-Sala <i>et al.</i> (2014a)	Spain	Self vs. Family	141	83	77.6 (7.2)	17.6 (5.9)	AD	Not specified	QoL-AD	ADL, NPS, CSM, Burden, Gender C	Good
Conde-Sala <i>et al.</i> (2016)		Self vs. Family	221	140	77.8 (0.4)	18.3 (0.3)	AD	Not specified	QoL-AD	None	Good
Devine <i>et al.</i> (2014)	England	Self vs. Health care professional proxy	565	430	86.2 (7.4)	19.0 (6.5)	Dementia	Nursing home	EQ-5D	Age, Depression, CSM, Gender	Good
Edelman <i>et al.</i> (2005)	US	Self vs. Health care professional	65	81.5	85.6 (5.8)	15.6 (3.8)	Dementia	Nursing home	QoL-AD	CSM	Satisfactory
Fuh and Wang (2006)	Taiwan	Self vs. Family	81	49	77.2 (6.8)	20.1 (4.5)	AD	Not specified	QoL-AD	Age, ADL, NPS, CSM, Education	Satisfactory
Gómez-Gallego <i>et al.</i> (2015)	Spain	Self vs. Family proxy	81	68.60%	72.09 (6.39)	18.51 (4.29)	AD	Community	DEMQOL	NPS, Depression, Co-morbidity, CSM, Burden	Good
Huang <i>et al.</i> (2009)	Taiwan	Self vs. Family	120	58	78.40 (9.13)	18.64 (6.23)	AD	Community	QoL-AD	Age, NPS, Co-morbidity, CSM, Gender, Age C, Being married, Education, Gender C	Satisfactory
Kunz (2010)	Germany	Self vs. Family	319	67.50%	80.2 (6.7)	18.6 (3.8)	Dementia	Community	EQ-5D	Age, ADL, CSM, Gender, Age C, Living alone, Burden, Gender C	Satisfactory
Novella <i>et al.</i> (2001c)	Belgium, France, Luxembourg, Switzerland	Self vs. Family Self vs. Health care professional	66	63	82 (7.9)	15.6 (3.95)	AD	Community 26.3%, Hospital 46.1%, Institution 27.6%	DHP	Age, ADL, Gender, Living alone	Good
Novella <i>et al.</i> (2006)		Self vs. Family Self vs. Health care professional	63	54	82 (7.9)	15.7 (4.2)	AD	Community 26.3%, Hospital 46.1%, Institution 27.6%	SF-36	Age, ADL, Gender	Good
Novelli and Caramelli (2010)	Brazil	Self vs. Family	30	73.30%	75.5 (6.7)	20.2 (2.6)	AD	Not specified	QoL-AD	ADL, NPS, Depression, CSM	Good
		Self vs. Family	30	66.70%	76.2 (6.2)	14.0 (2.8)	AD	Not specified	QoL-AD		
Rummel (2012)	US	Self vs. Family Self vs. Health care professional Family vs. Health care professional	26	35	83.89 (6.78)	7.94 (7.49)	Dementia	Memory care unit 52%, Skilled nursing facility 35%, Adult day program 13%	QoL-AD	ADL, NPS, Depression, CSM	Good
Sands <i>et al.</i> (2004)	US	Self vs. Family	91	63.00%	78.7 (7.6)	19.7 (4.5)	AD, DLB, FTD, PDD, VaD	Community	DQoL	Age, ADL, Depression, CSM, Gender, Age C, Being	Satisfactory

										married, Living alone, Burden, Gender C	
Schiffczyk <i>et al.</i> (2010)	Germany	Self vs. Family	137	30.70%	73.0 (6.7)	16.9 (6.4)	AD or Mixed	Community	EQ-5D	CSM	Good
Schulz <i>et al.</i> (2013)	US	Self vs. Family	79	27	76.0 (8.5)	23.1 (3.6)	AD	Community	QoL-AD DEMQL	Age, CSM, Gender, Age C, Being married, Education, Burden, Gender C	Good
Spector and Orrell (2006)	England	Self vs. Health care professional	76	67	85.2 (7.4)	13 (4.8)	Dementia	Nursing home	QoL-AD	Age, CSM	Good
Tay <i>et al.</i> (2014)	Singapore	Self vs. Family	165	91	76.8 (6.9)	18.4 (4.2)	Dementia	Community	QoL-AD	Age, ADL, NPS, Depression, CSM, Gender, Age C, Being married, Living alone, Education, Burden, Gender C	Good
Vogel <i>et al.</i> (2006)	Denmark	Self vs. Family	17	Not specified	77.0 (5.8)	24.9 (2.3)	AD	Community	QoL-AD EQ-5D EQ-5D VAS	None	Good
Zbrozek <i>et al.</i> (2006)	US	Self vs. Family	110	Not specified	Not specified	Not specified	AD	Community	HUI2	ADL, Depression, CSM,	Satisfactory
Zhao <i>et al.</i> (2012)	France, Switzerland	Self vs. Family	122	78	82 (6)	21 (5)	AD	Community or Institutional	QoL-AD	Age, ADL, NPS, Depression, Co-morbidity, CSM, Gender, Age C, Being married, Living alone, Education, Burden, Gender C	Good
Zucchella <i>et al.</i> (2015)	Italy	Self vs. Family	135	93	78.2 (5.9)	15.3 (7.5)	AD	Live with carer 56.3%	QoL-AD	ADL, NPS, Depression, CSM, Living alone, Burden	Satisfactory

Note: articles were judged to be of poor quality if scored  $\leq 20$  or below, satisfactory scored between  $>20$  and  $<26$ , good scored  $\geq 26$ . Shading indicates articles using the same study data. "Severity" refers to Mini-Mental State Examination score unless otherwise specified.

Quality of life measure abbreviations: 36-Item Short Form Health Survey (SF-36), Dementia Quality of Life Questionnaire (DEMQL), Dementia Quality of Life Instrument (DQoL), Duke Health Profile (DHP), EuroQol five dimensions questionnaire (EQ-5D), Health Utility Index (HUI), Quality of Life in Alzheimer's Disease (QoL-AD), Visual Analogue Scale, (VAS)

Dementia type abbreviations: Alzheimer's disease (AD), Dementia with Lewy bodies (DLB), Frontotemporal Dementia (FTD), Parkinson's Disease Dementia (PDD), Vascular dementia (VaD)

Factors included in the meta-analysis abbreviations: Better functional ability (ADL), Burden or stress (Burden), Higher level of education (Education), Higher scores on cognitive screening measures (CSM), Female gender (Gender), Female gender carer (Gender C), Neuropsychiatric symptoms/BPSD (NPS), Older age (Age), Older age carer (Age C), Presence of co-morbid conditions (Co-morbidity)

**Supplementary Table 7. Longitudinal studies of quality of life in people with dementia**

Study	Country of study	Time period	n	Females	Mean age	Severity	Dementia type	Living situation	QoL measure	Factors included in the meta-analysis	Quality rating
Albert <i>et al.</i> (2001)	US	24 months median	122	Not specified	74.175 (8.05)	Not specified	AD	Mostly community	AAIQoL	CSM	Good
Beerens <i>et al.</i> (2015)	England, Estonia, Finland, France, Germany, Netherlands, Spain, Sweden	3 months	343	256	84.3 (6.0)	14.1 (5.2)	Dementia	Not specified	QoL-AD	Baseline QoL	Satisfactory
Castro-Monteiro <i>et al.</i> (2014)	Spain	20 months	274	224	84.70 (6.51)	12.96 (8.51)	Dementia	Residential care	EQ-5D QoL-AD	Baseline QoL	Satisfactory
Clare <i>et al.</i> (2014b)	Wales	20 months	51	25	76.75 (7.88)	24.5 (2.80)	AD 31, VaD 11, Mixed 9	Community	QoL-AD	Age*, Depression, Baseline QoL, ADL*, NPS*, CSM*, Gender*, Baseline QoL*	Good
Funaki <i>et al.</i> (2005)	Japan	3 months	25	18	81.2 (6.38)	HDS-R 10.6 (5.9)	AD 14, VaD 2, Other 9	Group home	QLQD	Baseline QoL,	Satisfactory
Heggie <i>et al.</i> (2012)	Canada	12 months	32	15	72.5 (9.4)	3MS 75.8 (18.7)	Dementia	Community (rural and remote settings)	QoL-AD	Depression, Baseline QoL	Good
Hoe <i>et al.</i> (2009)	England, Wales	5 months	182	152	85.8 (7.6)	7.4 (8.0)	Dementia	Nursing home	QoL-AD	Age, ADL, NPS, Depression, CSM, Gender, GDS, Baseline QoL	Good
Livingston <i>et al.</i> (2008)	England	18 months	122	Not specified	80.4 (7.3)	16.7 (6.9)	AD	Not specified	QoL-AD life as whole item	Age, ADL, NPS, GDS, CSM, Baseline QoL	Good
Lyketsos <i>et al.</i> (2003)	US	24 months	47	45	80.4 (7.3)	8.4 (7.2)	Dementia	Long term care	ADRQL	Age, NPS, Depression, CSM, Gender, Baseline QoL	Good
Mjørud <i>et al.</i> (2014c)	Norway	10 months	143	116	87.2 (7.9)	CDR1 23, CDR2 57, CDR3 63	AD 94, Other 104	Nursing home	QUALID	Baseline QoL	Satisfactory
Nakanishi <i>et al.</i> (2016)	Japan	35.9 (5.4) months	32	27	84.3 (5.5)	15.9 (3.7)	Dementia	Nursing home	QoL-AD	Age, ADL, NPS, CSM, Gender, GDS, Baseline QoL	Poor
Sheehan <i>et al.</i> (2013)	England	6 months	66	51	86.0 (76.5)	CDR1 4, CDR2 31, CDR3 31.	Dementia	General hospital inpatients	QoL-AD	Age, Gender, GDS, Baseline QoL	Good
		12 months	59	37	86.5 (6.2)	CDR1 4, CDR2 24, CDR3 31	Dementia	General hospital inpatients	QoL-AD	Age, Baseline QoL	
de Sousa <i>et al.</i> (2015)	Brazil	12 months	55	72	76.8 (7.3)	21.4 (3.5)	AD	Not specified	QoL-AD	None	Satisfactory
Sura <i>et al.</i> (2015)	US	60 months	112	64	65-79 59; ≥80 53	Not specified	Dementia	Not specified	SF-12	Baseline QoL	Satisfactory

Tatsumi <i>et al.</i> (2009)	Japan	24 months	96	62.50%	71.8 (8.0)	17.86 (3.3)	AD	Community	QoL-AD	Age, ADL, NPS, CSM	Good
Trigg <i>et al.</i> (2015)	England	18 months	69	39	78.19 (8.48)	19.40 (4.67)	AD	Community	EQ-5D DEMQOL	Baseline QoL	Good
Uhlmann <i>et al.</i> (1987)	US	12 months	115	64.90%	73.8	16.1 (10.0)	AD 75.7%	Lived at home 74%, Lived with adult children 13%, Long term care 13%	Single global HRQoL rating	CSM	Satisfactory
Vogel <i>et al.</i> (2012)	Denmark	12 months	102	Not specified	76 (7.1) Baseline	22.7	AD	Community 91%	QoL-AD EQ-5D VAS	Baseline QoL	Good
		36 months	102	Not specified	76 (7.1) Baseline	18.0	AD	Community 86.3%	QoL-AD EQ-5D VAS	Baseline QoL	
Wolf-Ostermann <i>et al.</i> (2012)	Germany	12 months	56	43	82.3 (9.25)	GDS4 6, GDS5 5, GDS6 38, GDS7 7	Dementia	Shared-housing 34, Special care units 22	QUALIDEM	Gender	Good
Woods <i>et al.</i> (2006)	England	2 months	201	158	85.3 (7.0)	14.4 (3.8)	Dementia	Mostly residential 172	QoL-AD	NPS, Depression, CSM, Gender, GDS, Baseline QoL	Good

Note: articles were judged to be of poor quality if scored  $\leq 20$  or below, satisfactory scored between  $>20$  and  $<26$ , good scored  $\geq 26$ . Shading indicates articles using the same study data. "Severity" refers to Mini-Mental State Examination score unless otherwise specified. \* indicates data not reported in articles

Quality of life measure abbreviations: 12-Item Short Form Health Survey (SF-12), Activity and Affect Indicators of QOL (AAIQoL), Alzheimer's Disease Related Quality of Life (ADRQL), Dementia Quality of Life Questionnaire (DEMQOL), EuroQol five dimensions questionnaire (EQ-5D), Quality of Life in Alzheimer's Disease (QoL-AD), Quality of Life in Late Stage Dementia Scale (QUALID), Quality of Life Questionnaire for Dementia (QLQD), Visual Analogue Scale, (VAS)

Severity abbreviations: Clinical Dementia Rating (CDR), Hasegawa Dementia Scale-Revised (HDS-R), Modified Mini-Mental State Examination (3MS)

Dementia type abbreviations: Alzheimer's disease (AD), Vascular dementia (VaD)

Factors included in the meta-analysis abbreviations: Better functional ability (ADL), Female gender (Gender), Higher scores on cognitive screening measures (CSM), More advanced dementia (GDS), Neuropsychiatric symptoms/BPSD (NPS), Older age (Age), Quality of life rating at baseline (Baseline QoL)



**Supplementary Table 8. Studies assessing well-being in people with dementia**

Study	Country of study	n	Females	Mean age	Severity	Dementia type	Living situation	Well-being measure	Rating type	Data quality
Burgener and Dickerson-Putman (1999)	US	84	51	76.5	20.5	AD or VaD	Not specified	PWB-CIP	Informant Longitudinal	Satisfactory
Burgener and Twigg (2002)	US	70	55	77.3	21.52 (4.7)	Dementia	Community	PWB-CIP	Informant Longitudinal	Good
Burgener <i>et al.</i> (2005)	US	96	55	77.3 (7.8)	21.52 (4.7)	AD, VaD, Mixed, DLB	Assisted living 12, Community 84	PWB-CIP	Informant	Satisfactory
Gerritsen <i>et al.</i> (2007)	Netherlands	34	78%	80.5 (9.26)	5-13	Dementia	Nursing home	Positive Affect Scales Negative Affect Scales	Self	Satisfactory
Gilbart and Hirdes (2000)	Canada	385		75.6 (15.6)	CPS 3.2 (2.2)	Dementia	Nursing home	SHARP MIDAS Mood state	Informant	Poor
Muurinen <i>et al.</i> (2015)	Finland	237 9	78%	85	Mild 11%, Moderate 53% Severe 36%	Dementia	Nursing home	Psychological wellbeing was assessed by 6 questions	Self	Satisfactory

Note: articles were judged to be of poor quality if scored  $\leq 20$  or below, satisfactory scored between  $>20$  and  $<26$ , good scored  $\geq 26$ . Shading indicates articles using the same study data. “Severity” refers to Mini-Mental State Examination score unless otherwise specified.

Quality of life measure abbreviations: Measure of Intensity and Duration of Affective States (MIDAS), Psychological Well-being in Cognitively Impaired Persons (PWB-CIP), Short Happiness and Affect Research Protocol (SHARP)

Severity abbreviations: Cognitive Performance Scale (CPS)

Dementia type abbreviations: Alzheimer's disease (AD), Dementia with Lewy bodies (DLB), Vascular dementia (VaD)

**Supplementary Table 9. Studies assessing life satisfaction in people with dementia**

Study	Country of study	n	Females	Mean age	Severity	Dementia type	Living situation	Well-being measure	Rating type	Data quality
Eshkooor <i>et al.</i> (2014)	Malaysia	1210	770	Not specified	Not specified	Dementia	Not specified	Single question - Are you satisfied with your current life?	Self	Poor
Makai <i>et al.</i> (2012)	Netherlands	96	68.00%	82 (9.1)	Not specified	Dementia	Nursing home	Cantril's ladder Overall life satisfaction	Informant	Satisfactory
Zank and Leipold (2001)	Germany	63	76%	79.2 (8.6)	17.7 (4.3)	Dementia	Community	Life Satisfaction Questionnaire	Self	Satisfactory

Note: articles were judged to be of poor quality if scored  $\leq 20$  or below, satisfactory scored between  $>20$  and  $<26$ , good scored  $\geq 26$ . Shading indicates articles using the same study data. “Severity” refers to Mini-Mental State Examination score unless otherwise specified.

**Supplementary Table 10: Measures of quality of life used in the included studies, with frequency of use overall and by type of rating**

QoL measure	Number of studies					
	Total	Self-ratings	Informant ratings	Proxy ratings	Difference scores	Longitudinal measurement
<b>Dementia specific QoL/HRQoL measures</b>						
Activity and Affect Indicators of QoL (Albert <i>et al.</i> , 1996)	8	3	7			1
Pleasant Events Schedule-AD (Logsdon and Teri, 1997, Teri and Logsdon, 1991)	2		2			
Observed Emotion Rating Scale (Lawton <i>et al.</i> , 1996)	4		3	1		
Activity Engagement (Nolan <i>et al.</i> , 1995)	1		1			
Alzheimer's Disease Related Quality of Life (ADRQL) (Rabins <i>et al.</i> , 1999)	13	1	18			1
Bath Assessment of Subjective Quality of Life in Dementia (BASQID) (Trigg <i>et al.</i> , 2007)	3	4				
Community Dementia Quality of Life Profile (Salek <i>et al.</i> , 1996, Salek <i>et al.</i> , 1999)	1		1			
Cornell-Brown Scale for Quality of Life in Dementia (Ready <i>et al.</i> , 2002b)	1		1			
Dementia Care Mapping (Kitwood and Bredin, 1992)	7			6		
Dementia Quality of Life Questionnaire (DEMQOL) (Smith <i>et al.</i> , 2005)	16	11	1	10	2	1
Discomfort Scale-Dementia Alzheimer Type (Hurley <i>et al.</i> , 1992)	4	1	3			
Dementia Quality of Life instrument (Brod <i>et al.</i> , 1999)	14	13	1		1	
Observable Displays of Affect Scale (Vogelpohl and Beck, 1997)	1		1			
Observing QOL for Dementia Advanced (Edelman <i>et al.</i> , 2007)	1			1		
Quality of Life in Alzheimer's Disease (Logsdon <i>et al.</i> , 2000)	82	73	60	2	15	12
Quality of Life in Late Stage Dementia Scale (QUALID) (Weiner <i>et al.</i> , 2000)	12		11			1
QUALIDEM (Ettema <i>et al.</i> , 2007a)	9		4	8		
Quality of Life Questionnaire for Dementia (Terada <i>et al.</i> , 2002)	4		2	1		1
Resident and Staff Observation Checklist-Quality of Life Measure (Sloane <i>et al.</i> , 1991)	1			1		
Self-Reported Quality of Life Scale (Kane <i>et al.</i> , 2003)	3	3				
Source of Discomfort Scale (Cohen-Mansfield <i>et al.</i> , 2015)	1		1			
The Vienna List (Porzolt <i>et al.</i> , 2004)	1		1			
<b>Generic QoL measures</b>						
5 items from Geriatric Depression Scale-15 (Sheikh and Yesavage, 1986)	1	1				
COOP/WONCA (Nelson <i>et al.</i> , 1987)	1	1				
Investigating Choice Experiments for the Preferences of Older People CAPability measure-Older people (Grewal <i>et al.</i> , 2006)	2		2			
Linear Analogue Self Assessment (Grunberg <i>et al.</i> , 1996)	2	2	2			
Quality of Life Assessment Schedule (Selai <i>et al.</i> , 2001a)	1	1	1			
Quality of Life Index (Ferrans and Powers, 1985)	1	1				
Single item global QoL question (Buckley <i>et al.</i> , 2012, Campbell <i>et al.</i> , 2008, Corder <i>et al.</i> , 2010, Gerritsen <i>et al.</i> , 2005, James <i>et al.</i> , 2005)	5	4	5	1	1	
World Health Organization-8 (Power, 2003)	2	2	1			
World Health Organization Quality of Life-100 (Power <i>et al.</i> , 1999)	2	2				
World Health Organization Quality of Life-BREF (World Health Organization, 1996)	2	2				
<b>Generic HRQoL or health status measures</b>						
15-dimensional (15D) (Sintonen, 1995)	1	1				
Assessment of Quality of Life (Hawthorne <i>et al.</i> , 1999)	2	2	1			
Disability and Distress Index (Rosser and Kind, 1978)	1	1	1			
Duke Health Profile (Parkerson <i>et al.</i> , 1990)	1	1			1	
EQ-5D (The EuroQol Group, 1990)	25	16	19	2	4	2
EQ-5D VAS (The EuroQol Group, 1990)	14	11	11		1	1
Health Utility Index II (Torrance <i>et al.</i> , 1996)	5	1	5		1	
Health Utility Index III (Furlong <i>et al.</i> , 1998)	7	1	7			
Nottingham Health Profile (Hunt <i>et al.</i> , 1981)	1		1			
Quality of Well-being scale (Kaplan <i>et al.</i> , 1976)	4	2	4			
Single item global HRQoL question (Uhlmann <i>et al.</i> , 1987)	1	1				1
12-Item Short Form Health Survey (SF-12) (Ware <i>et al.</i> , 1995)	4	4	3			1
36-Item Short Form Health Survey (SF-36) (Ware <i>et al.</i> , 1993)	7	5	3		1	

Note: the Activity and Affect Indicators of QoL was split into two sections, in the analysis the first (Activity) was combined with Pleasant Events Schedule-AD and the second (Affect) was combined with Observed Emotion Rating Scale in the analysis. Health Utility Index II and Health Utility Index II, and SF-12 and SF-36 were combined in the analysis.

**Supplementary Table 11: Mean scores for self-ratings of quality of life**

QoL measure	Range of possible scores	Number of studies	Mean	Range of means reported in the studies	Range of scores reported in the studies	Direction of scoring
Dementia Quality of Life Questionnaire (DEMQOL)	28-112	7	87.5	81.2-91.2	33-112	Higher is better
Dementia Quality of Life Instrument-Aesthetics	1-5	6	3.3	2.81-3.7	1-5	Higher is better
Dementia Quality of Life Instrument-Feelings of Belonging	1-5	6	3.6	3.3-3.9	1-5	Higher is better
Dementia Quality of Life Instrument-Negative Affect	1-5	8	2.4	1.9-3.8	1-5	Lower is better
Dementia Quality of Life Instrument-Positive Affect	1-5	6	3.5	3.2-3.6	1.5-5	Higher is better
Dementia Quality of Life Instrument-Self-Esteem	1-5	6	3.3	3.2-3.5	1.5-5	Higher is better
EQ-5D	-.59-1	9	0.7	.4-.9	-.1-1	Higher is better
EQ-5D Visual Analogue Scale	0-100	4	67.9	34.0-79.1	20-100	Higher is better
Quality of Life in Alzheimer's Disease	13-56	85	35.2	26.7-42.8	2-52 <sup>a</sup>	Higher is better
Quality of Life in Alzheimer's Disease (different scoring)	1-4	6	2.9	2.51-3.1	1.3-4.0	Higher is better

<sup>a</sup> One paper provided data for all participants even where the QoL-AD was only partially completed; hence the lowest score reported (2) is below the minimum score for the full scale (13).

**Supplementary Table 12a: Mean scores for informant ratings of quality of life made by family carers**

QoL measure	Range of possible scores	Number of studies	Mean	Range of means reported in the studies	Range of scores reported in the studies	Direction of score
Alzheimer's Disease Related Quality of Life	0-100	11	71.3	55.5-83.1	18-100	Higher is better
EQ-5D	-.59-1	13	.6	.2-.8	-.4-1	Higher is better
EQ-5D Visual Analogue Scale	0-100	8	61.1	48.6-70.8	10-100	Higher is better
Health Utility Index 2	-.03-1	5	.61	.5-.7	.2-.1	Higher is better
Health Utility Index 3	-.36-1	8	.27	.2-.5	-.3-1	Higher is better
Quality of Life in Alzheimer's Disease	13-56	57	30.7	24.5-38.0	13-52	Higher is better

**Supplementary Table 12b: Mean scores for informant ratings of quality of life made by health care professionals**

QoL measure	Range of possible scores	Number of studies	Mean	Range of means reported in the studies	Range of scores reported in the studies	Direction of score
Alzheimer's Disease Related Quality of Life	0-100	8	70.4	59.2-79.9	15-100	Higher is better
Quality of Life in Alzheimer's Disease	13-56	12	31.2	27.0-37.7	Ranges not provided	Higher is better
Quality of Life in Late Stage Dementia Scale	11-55	14	22.4	18.1-28.8	11-45	Lower is better

**Supplementary Table 12c: Mean scores for informant ratings of quality of life made by mixed groups of informants including family carers and health care professionals**

QoL measure	Range of possible scores	Number of studies	Mean	Range of means reported in the studies	Range of scores reported in the studies	Direction of score
Quality of Life in Alzheimer's Disease	13-56	5	31.1	27.26-36.6	Ranges not provided	Higher is better

**Supplementary Table 13a: Factors associated with self-ratings of quality of life by people living with dementia – factors pertaining to the person with dementia factors**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Older age	58	8485	-.019	-.042-.004	.1135	63.302	.264	9.956
Female gender	47	7030	.005	-.019-.030	.6607	47.700	.403	3.565
White ethnicity	12	1885	.157	.092-.221	<.0001	22.143	.023	50.323
Higher income	7	1008	.156	-.024-.326	.0890	48.791	<.001	87.703
Higher level of education	44	5874	.053	.019-.086	.0021	33.140	.019	33.140
Underweight	8	1587	-.014	-.102-.074	.7531	19.581	.007	64.250
Alzheimer's (vs. other dementia subtypes)	9	1552	.136	-.042-.305	.1333	96.171	<.001	91.681
Longer disease duration	12	1918	-.012	-.066-.041	.6566	13.908	.238	20.910
More advanced dementia	24	3548	-.096	-.146--045	.0002	48.410	.001	52.489
Global Deterioration Scale	6	886	-.103	-.177--029	.0067	5.897	.316	15.207
Clinical Dementia Rating	15	2184	-.087	-.161--012	.0232	40.148	<.001	65.129
Higher scores on cognitive screening measures	93	13504	.086	.057-.115	<.0001	218.065	<.001	57.811
Mini-Mental State Examination	84	12046	.081	.050-.112	<.0001	199.242	<.001	58.342
Alzheimer's Disease Assessment Scale-Cognitive Subscale	5	3095	.066	.030-.100	.0003	3.239	.519	0
Taking medication	19	4606	-.120	-.168--071	<.0001	37.773	.004	52.347
Acetylcholinesterase inhibitors	7	1141	-.111	-.178--043	.0014	7.058	.316	14.990
Polypharmacy	8	1718	-.106	-.163--049	.0003	9.441	.223	25.854
Psychotropic drugs	9	2518	-.120	-.203--034	.0061	21.104	.007	62.093
Longer duration of care home stay	8	714	-.096	-.169--021	.0117	5.874	.555	0
Better functional ability	79	13216	.173	.139-.206	<.0001	262.432	<.001	70.278
Alzheimer's Disease Co-operative Study-Activities of Daily Living Inventory	5	981	.085	-.069-.235	.2773	22.156	<.001	81.946
Disability Assessment for Dementia	5	3122	.073	-.007-.153	.0751	11.492	.022	65.192
Basic activities of daily living	50	8558	.217	.172-.261	<.0001	179.342	<.001	72.678
Barthel Index	17	2414	.200	.097-.299	.0001	98.376	<.001	83.736
Katz Index of Independence in Activities of Daily Living	11	1338	.219	.122-.312	<.0001	25.762	.004	61.183
Physical Self-Maintenance Scale	6	703	.216	.132-.297	<.0001	6.403	.269	21.917
Basic activities of daily living measures excluding Barthel Index, Katz Index of Independence in Activities of Daily Living & Physical Self-Maintenance Scale	18	4352	.189	.130-.246	<.0001	41.009	.001	58.545
Instrumental activities of daily living	25	3330	.148	.087-.208	<.0001	65.771	<.001	63.510
Functional Activities Questionnaire	5	398	.176	.077-.271	.0005	2.319	.678	0
Lawton's Instrumental Activities of Daily Living	13	1660	.115	.059-.170	<.0001	14.161	.291	15.259
Instrumental activities of daily living measures excluding Lawton's Instrumental Activities of Daily Living & Functional Activities Questionnaire	8	1372	.208	.059-.349	.0066	50.192	<.001	86.054
Presence of unmet needs	5	838	-.204	-.305--100	.0002	9.273	.055	56.866
More awareness	10	1285	.145	.090-.198	<.0001	7.769	.558	0
Better self-rated memory functioning	9	1699	.027	-.021-.075	.2681	6.595	.581	0
Depression	80	11435	-.315	-.353--276	<.0001	363.600	<.001	78.273
Cornell Scale for Depression in Dementia	27	5537	-.245	-.300--189	<.0001	102.956	<.001	74.746
Geriatric Depression Scale (all versions)	28	2828	-.436	-.521--342	<.0001	212.993	<.001	87.324

Geriatric Depression Scale-15	16	1646	-.490	-.604--.357	<.0001	155.722	<.001	90.367
Geriatric Depression Scale-30	11	1079	-.320	-.397--.240	<.0001	15.873	.103	36.999
Neuropsychiatric Inventory-Depression	12	1855	-.262	-.363--.154	<.0001	55.863	<.001	80.309
Depression measures excluding Geriatric Depression Scale, Cornell Scale for Depression in Dementia & Neuropsychiatric Inventory-Depression	28	2802	-.332	-.401--.259	<.0001	109.001	<.001	75.229
Anxiety	21	3012	-.237	-.317--.154	<.0001	98.595	<.001	79.715
Neuropsychiatric Inventory-Anxiety	9	1503	-.054	-.105--.003	.0382	7.068	.529	0
Rating of Anxiety in Dementia	6	925	-.328	-.462--.180	<.0001	21.077	.001	76.278
Anxiety measures excluding Rating of Anxiety in Dementia & Neuropsychiatric Inventory-Anxiety	8	872	-.351	-.482--.204	<.0001	35.812	<.001	80.453
Neuropsychiatric symptoms/BPSD	56	9629	-.110	-.134--.086	<.0001	64.570	.177	14.821
Neuropsychiatric Inventory	41	8061	-.108	-.135--.080	<.0001	50.662	.120	21.045
Neuropsychiatric symptom measures excluding Neuropsychiatric Inventory	17	1654	-.127	-.175--.078	<.0001	13.292	.651	0
Pain	10	2720	-.157	-.236--.077	.0001	24.305	.004	62.971
Better self-rated health	11	1702	.269	.167-.366	<.0001	44.359	<.001	77.457
Presence of co-morbid conditions	31	4188	-.213	-.268--.157	<.0001	94.600	<.001	68.288
Better quality of relationship with carer	6	802	.384	.148-.579	.0019	62.659	<.001	92.020
Cared for by spouse (vs. other carer type)	8	1775	.124	.060-.186	.0001	11.873	.105	41.044
Being married	22	2847	.078	.046-.110	<.0001	18.132	.641	0
Living alone	9	2129	-.124	-.240--.004	.0436	58.329	<.001	86.285
Greater social engagement	11	1035	.314	.121-.483	.0017	94.157	<.001	89.379
Presence of religious beliefs/spirituality	8	641	.352	.120-.547	.0035	60.621	<.001	88.453

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data.

**Supplementary Table 13b: Factors associated with self-ratings of quality of life by people living with dementia – factors pertaining to the carer**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Older age	10	1808	-.061	-.121--.001	.0453	12.653	.179	28.870
Female gender	12	2242	.017	-.036-.070	.5221	15.644	.155	29.684
Higher level of education	11	1767	.088	.030-.144	.0028	13.597	.192	26.456
Depression	9	1008	-.120	-.199--.040	.0034	12.445	.132	35.715
Center for Epidemiologic Studies Depression Scale	5	564	-.118	-.244-.011	.0738	9.181	.057	56.432
Distress at NPS symptoms	9	1089	-.140	-.202--.078	.0001	8.536	.383	6.284
Burden or stress	20	2840	-.146	-.202--.089	<.0001	38.857	.005	51.103
Zarit Burden Interview	15	1808	-.140	-.217--.061	.0006	33.997	.002	58.820
Burden or stress measures excluding Zarit Burden Interview	5	1032	-.166	-.225--.105	<.0001	3.010	.556	0
Poorer mental health (GHQ)	5	702	-.156	-.275--.034	.0126	6.753	.150	40.767
Carer quality of life (self-rated)	6	667	.253	.081-.411	.0043	23.736	<.001	78.935

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data.

**Supplementary Table 14a: Factors associated with informant ratings of the quality of life of the person with dementia – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Older age	59	12017	-.027	-.055-.001	.0581	121.613	<.001	52.308
Female gender	49	10315	-.003	-.034-.028	.8527	108.209	<.001	55.642
White ethnicity	7	1486	.101	.042-.159	.0008	7.612	.268	21.180
Higher level of education	32	6092	.037	.012-.063	.0038	29.143	.562	0
Underweight	5	1755	-.065	-.129--002	.0447	7.119	.130	43.809
Alzheimer's (vs. other dementia subtypes)	9	2719	.050	-.027-.126	.2054	27.443	.001	70.849
Longer disease duration	12	1731	-.066	-.113--019	.0064	8.143	.700	0
More advanced dementia	40	8094	-.296	-.371--216	<.0001	549.596	<.001	92.904
Clinical Dementia Rating	25	5868	-.266	-.367--160	<.0001	417.838	<.001	94.256
Global Deterioration Scale	6	910	-.262	-.383--132	<.0001	20.558	.001	75.678
Advanced dementia measures excluding Clinical Dementia Rating & Global Deterioration Scale	9	1327	-.388	-.535--216	<.0001	86.493	<.001	90.751
Higher scores on cognitive screening measures	87	14672	.183	.147-.218	<.0001	377.741	<.001	77.233
Dementia Rating Scale	6	602	.266	.091-.425	.0032	22.092	.001	77.367
Mini-Mental State Examination	77	12947	.172	.135-.210	<.0001	321.090	<.001	76.331
Cognitive screening measures excluding Dementia Rating Scale & Mini-Mental State Examination	15	4719	.183	.095-.269	.0001	95.064	<.001	85.273
Taking medication	21	6003	-.054	-.081--027	.0001	20.911	.402	4.354
Acetylcholinesterase inhibitors	10	1892	-.082	-.147--015	.0156	17.145	.046	47.508
Polypharmacy	9	1834	-.060	-.105--014	.0112	6.754	.563	0
Psychotropic drugs	12	4043	-.066	-.112--018	.0064	19.261	.057	42.889
Antipsychotic	5	1244	-.171	-.290--047	.0069	15.322	.004	73.893
Antidepressants	6	1221	-.098	-.195--000	.0492	11.134	.049	55.092
Anxiolytics	7	1617	-.056	-.149-.038	.2459	17.494	.008	65.702
Longer duration of care home stay	12	2312	-.105	-.162--047	.0004	18.574	.069	40.778
Degree to which residential care is person-centred	6	1814	.155	.049-.257	.0042	13.729	.017	63.581
Community dwelling (vs. residential care)	5	1011	.123	.062-.184	.0001	3.398	.494	0
Special dementia unit (vs. other residential facility)	5	2366	.114	.069-.158	<.0001	4.753	.314	15.838
Better functional ability	87	18707	.337	.292-.380	<.0001	893.737	<.001	90.377
Alzheimer's Disease Co-operative Study-Activities of Daily Living Inventory	6	1264	.346	.223-.458	<.0001	25.967	<.001	80.745
Bristol Activities of Daily Living Scale	5	859	.450	.393-.504	<.0001	4.094	.393	2.296
Disability Assessment for Dementia	6	3206	.249	.110-.378	.0005	45.745	<.001	89.070
Basic activities of daily living	61	13149	.371	.317-.423	<.0001	695.854	<.001	91.378
Barthel Index	19	3429	.484	.372-.583	<.0001	268.501	<.001	93.296
Dependence Scale	7	3523	.328	.154-.483	.0003	123.388	<.001	95.137
Katz Index of Independence in Activities of Daily Living	16	2991	.300	.247-.354	<.0001	31.816	.007	52.854
Physical Self-Maintenance Scale	9	1494	.333	.265-.398	<.0001	13.285	.102	39.780
Basic activities of daily living measures excluding Barthel Index, Dependence Scale, Katz Index of Independence in Activities of Daily Living & Physical Self-Maintenance Scale	11	1859	.300	.208-.386	<.0001	40.364	<.001	75.225
Instrumental activities of daily living	24	3234	.351	.270-.428	<.0001	134.793	<.001	82.937

Lawton's Instrumental Activities of Daily Living	15	2306	.303	.210-.390	<.0001	72.120	<.001	80.588
Instrumental activities of daily living measures excluding Lawton's Instrumental Activities of Daily Living	10	1039	.458	.382-.528	<.0001	16.148	.064	44.267
More awareness	5	557	.275	.037-.484	.0241	31.084	<.001	87.132
Better self-rated memory functioning	8	1185	.213	.054-.363	.0092	47.334	<.001	85.211
Depression	68	12320	-.304	-.349--.259	<.0001	459.021	<.001	85.404
Cornell Scale for Depression in Dementia	28	6671	-.339	-.396--.280	<.0001	171.626	<.001	84.268
Geriatric Depression Scale (all versions)	19	1953	-.259	-.342--.172	<.0001	64.056	<.001	71.899
Geriatric Depression Scale-30	10	1082	-.289	-.414--.154	<.0001	40.764	<.001	77.922
Geriatric Depression Scale-15	8	837	-.211	-.324--.092	.0006	19.448	.007	64.006
Neuropsychiatric Inventory-Depression	12	2223	-.263	-.396--.118	.0004	117.702	<.001	90.654
Other depression measures excluding Geriatric Depression Scale, Cornell Scale for Depression in Dementia & Neuropsychiatric Inventory-Depression	19	2503	-.309	-.392--.221	<.0001	93.689	<.001	80.787
Anxiety	18	3143	-.148	-.189--.107	<.0001	20.328	.258	16.371
Neuropsychiatric Inventory-Anxiety	12	2128	-.151	-.209--.092	<.0001	16.069	.139	31.545
Anxiety measures excluding Neuropsychiatric Inventory-Anxiety	7	1201	-.163	-.235--.089	<.0001	8.765	.187	31.546
Neuropsychiatric symptoms/BPSD	76	15358	-.329	-.372--.285	<.0001	630.810	<.001	88.111
Cohen-Mansfield Agitation Inventory	9	1332	-.150	-.213--.085	<.0001	10.839	.211	26.191
Neuropsychiatric Inventory	51	11213	-.338	-.392--.282	<.0001	487.984	<.001	89.754
Neuropsychiatric symptom measures excluding Neuropsychiatric Inventory & Cohen-Mansfield Agitation Inventory	23	3685	-.353	-.417--.286	<.0001	107.094	<.001	79.457
Pain	13	4048	-.203	-.307--.095	.0003	124.860	<.001	90.389
Better self-rated health	8	1826	.198	.131-.263	<.0001	12.123	.097	42.260
Presence of co-morbid conditions	27	5349	-.090	-.126--.055	<.0001	39.872	.040	34.792
Cared for by spouse (vs. other carer type)	10	2139	.117	.053-.180	.0004	17.386	.043	48.234
Being married	18	3713	.100	.056-.143	<.0001	28.012	.045	39.311
Living alone	13	2396	-.137	-.193--.081	<.0001	20.782	.054	42.258

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data.



**Supplementary Table 14b: Factors associated with informant ratings of the quality of life of the person with dementia – factors pertaining to the carer**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Older age	15	2500	-.037	-.020-.094	.2006	24.345	.042	42.494
Female gender	15	3089	.046	-.005-.096	.0766	23.249	.056	39.782
Higher level of education	12	2313	.084	.035-.132	.0007	13.597	.256	19.098
More time spent caring (residential care only)	6	772	-.159	-.253--061	.0016	9.538	.089	47.578
More time spent caring (community only)	5	681	-.137	-.267--002	.0462	11.630	.020	65.606
Depression	14	2694	-.255	-.338--169	<.0001	64.440	<.001	79.826
Center for Epidemiologic Studies Depression Scale	6	905	-.299	-.458--122	.0012	32.272	<.001	84.507
Geriatric Depression Scale (all versions)	5	591	-.362	-.496--211	<.0001	14.617	.006	72.634
Depression measures excluding Geriatric Depression Scale & Center for Epidemiologic Studies Depression Scale	6	1449	-.202	-.313--085	.0008	22.218	<.001	77.496
Burden or stress	25	4460	-.324	-.398--247	<.0001	180.102	<.001	86.674
Zarit Burden Interview	18	3284	-.345	-.435--248	<.0001	148.814	<.001	88.576
Burden or stress measures excluding Zarit Burden Interview	8	1247	-.276	-.391--152	<.0001	32.129	<.001	78.213
Distress at NPS symptoms	10	1665	-.320	-.379--258	<.0001	15.219	.085	40.863
Poorer mental health (GHQ)	6	715	-.242	-.311--170	<.0001	3.990	.551	0
Carer quality of life (self-rated)	8	1509	.314	.212-.410	<.0001	28.246	<.001	75.218

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data.

**Supplementary Table 15a: Factors associated with proxy ratings of the quality of life of the person with dementia – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Older age	15	2283	-.015	-.113-.083	.7650	71.987	<.001	80.552
Female gender	12	2023	-.003	-.049-.043	.8911	6.387	.846	0
More advanced dementia	8	1421	-.302	-.413--.183	<.0001	35.674	<.001	80.378
Higher scores on cognitive screening measures	16	1978	.104	.018-.189	.0185	50.789	<.001	70.466
Mini-Mental State Examination	13	1557	.062	-.032-.154	.1965	35.941	<.001	66.612
Taking medication	7	1160	-.099	-.170--.026	.0076	8.884	.180	32.465
Better functional ability	15	2301	.149	.062-.233	.0008	56.388	<.001	75.172
Basic activities of daily living	12	1875	.141	.050-.230	.0025	38.616	<.001	71.514
Basic activities of daily living measures excluding Barthel Index & Katz Index of Independence in Activities of Daily Living	8	1249	.166	.058-.270	.0027	22.654	.002	69.100
Depression	13	1651	-.317	-.409--.219	<.0001	47.495	<.001	74.734
Cornell Scale for Depression in Dementia	5	811	-.200	-.361--.027	.0235	19.089	.001	79.046
Geriatric Depression Scale	5	466	-.446	-.608--.248	<.0001	20.722	<.001	80.697
Neuropsychiatric symptoms/BPSD	17	2559	-.316	-.373--.257	<.0001	37.956	.002	57.845
Neuropsychiatric Inventory	12	1645	-.315	-.387--.238	<.0001	28.633	.003	61.582
Neuropsychiatric symptom measures excluding Neuropsychiatric Inventory	6	1120	-.315	-.396--.228	<.0001	10.134	.072	50.659
Presence of co-morbid conditions	6	873	-.121	-.186--.054	.0004	3.383	.641	0

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data.

**Supplementary Table 15b: Factors associated with proxy ratings of the quality of life of the person with dementia – factors pertaining to the carer**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Older age	5	412	-.017	-.160-.126	.8173	7.963	.093	49.768

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data.

**Supplementary Table 16a: Factors associated with the difference between self- and informant-rated quality of life for the person with dementia – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Older age	12	2249	-.042	-.083--0.000	.0497	2.254	.997	0
Female gender	11	2237	.007	-.052-.066	.8093	16.622	.083	39.840
Higher level of education	7	1212	.027	-.056-.110	.5198	10.832	.094	44.606
Higher scores on cognitive screening measures	23	3203	.128	.079-.175	<.0001	35.229	.037	37.552
Mini-Mental State Examination	21	2974	.126	.074-.177	<.0001	33.508	.030	40.312
Better functional ability	17	2080	.221	.147-.292	<.0001	40.001	.001	60.011
Basic activities of daily living	8	1207	.204	.115-.291	<.0001	12.960	.073	45.988
Instrumental activities of daily living	7	1019	.099	.037-.160	.0018	1.227	.976	0
Lawton's Instrumental Activities of Daily Living	7	1019	.099	.037-.160	.0018	1.227	.976	0
Depression	11	1354	-.277	-.397--.148	<.0001	46.807	<.001	78.635
Geriatric Depression Scale (all versions)	9	1067	-.337	-.486--.168	.0002	47.848	<.001	83.281
Neuropsychiatric symptoms/BPSD	14	1700	-.224	-.289--.157	<.0001	22.251	.052	41.576
Neuropsychiatric Inventory	13	1580	-.218	-.287--.147	<.0001	21.047	.050	42.984
Presence of co-morbid conditions	5	467	-.131	-.311-.058	.1739	15.201	.004	73.686
Being married	6	668	.075	-.002-.151	.0559	2.727	.742	0
Living alone	7	1402	-.061	-.113--.008	.0234	5.335	.502	0

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data.

**Supplementary Table 16b: Factors associated with the difference between self- and informant-rated quality of life of the person with dementia – factors pertaining to the carer**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Older age	7	1397	-.038	-.090-.015	.1629	3.621	.728	0
Female gender	8	1538	.034	-.036-.104	.3398	11.970	.102	41.519
Burden or stress	11	1753	-.242	-.317--.163	<.0001	25.123	.005	60.196
Zarit Burden Interview	10	1434	-.259	-.341--.174	<.0001	21.812	.009	58.738

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data.

**Supplementary Table 17: Baseline factors associated with longitudinal quality of life ratings for the person with dementia – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Older age	7	544	-.079	-.166-.009	.0771	2.901	.821	0
Female gender	7	583	-.105	-.226-.020	.0984	11.330	.079	47.045
More advanced dementia	6	561	-.062	-.147-.024	.1600	.879	.972	0
Clinical Dementia Rating	5	439	-.078	-.175-.021	.1227	.459	.977	0
Higher scores on cognitive screening measures	9	885	.160	.051-.265	.0041	19.115	.014	58.149
Mini-Mental State Examination	9	885	.160	.053-.265	.0037	18.862	.016	57.587
Better functional ability	5	371	.115	.012-.216	.0287	2.867	.580	0
Depression	5	447	-.144	-.255--.029	.0144	5.052	.282	20.826
Neuropsychiatric symptoms/BPSD	7	619	-.120	-.199--.041	.0031	4.361	.628	0
Quality of life rating at baseline	15	1782	.280	.140-.408	.0001	117.942	<.001	88.130
Quality of Life-Alzheimer's Disease rating at baseline	10	1352	.233	.022-.425	.0309	125.859	<.001	92.849

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data.

**Supplementary Table 18a: Correspondence between factor effect sizes for self-rated and informant-rated quality of life – factors pertaining to the person with dementia**

<b>Factor</b>	<b>Z</b>	<b>p</b>
Neuropsychiatric symptoms/BPSD	-17.7886	<.0001
Better functional ability	-15.4824	<.0001
More advanced dementia	-10.2832	<.0001
Higher scores on cognitive screening measures	-8.2902	<.0001
Better self-rated memory functioning	-4.9962	<.0001
More awareness	-2.6795	.0074
Pain	-1.9170	.0552
Longer disease duration	-1.6304	.1030
Being married	-.8898	.3736
Older age	-.5644	.5725
Living alone	-.4438	.6572
Longer duration of care home stay	-.2120	.8321
Cared for by spouse (vs. other carer type)	.2211	.8251
Female gender	.5959	.5512
Higher level of education	.8765	.3807
Depression	.9367	.3489
Underweight	1.4736	.1406
White ethnicity	1.6405	.1009
Better self-rated health	2.2281	.0259
Alzheimer's (vs. other dementia subtypes)	2.7264	.0064
Taking medication	3.3954	.0007
Anxiety	3.6258	.0003
Presence of co-morbid conditions	6.1080	<.0001

Note: Negative Z score indicates that the informant rating effect size was higher than self-rating effect size, and vice versa.

**Supplementary Table 18b: Correspondence between factor effect sizes for self-rated and informant-rated quality of life – factors pertaining to the carer**

<b>Factor</b>	<b>Z</b>	<b>p</b>
Burden or stress	-7.8716	<.0001
Distress at NPS symptoms	-4.8879	<.0001
Depression	-3.7917	.0002
Poorer mental health (GHQ)	-1.6830	.0924
Carer quality of life (self-rated)	-1.4246	.1543
Female gender	-1.0457	.2957
Higher level of education	.1275	.8986
Older age	.7787	.4361

Note: Negative Z score indicates that the informant rating effect size was higher than self-rating effect size, and vice versa.

**Supplementary Table 19a: Factors associated with self-ratings of quality of life by the person with dementia using the Quality of Life-Alzheimer's Disease (QoL-AD) – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Older age	35	5041	-.014	-.048-.020	.4198	45.690	.087	25.586
Female gender	30	4655	-.004	-.033-.025	.7806	25.252	.665	0
White ethnicity	5	777	.194	.104-.281	<.0001	6.490	.165	38.365
Higher level of education	28	4145	.081	.040-.121	.0001	41.002	.041	34.150
Underweight	5	1145	-.043	-.115-.029	.2407	5.363	.252	25.412
Longer disease duration	7	1225	-.017	-.103-.069	.6956	10.641	.100	43.616
More advanced dementia	18	2848	-.100	-.158--042	.0008	38.149	.002	55.437
Global Deterioration Scale	5	853	-.085	-.152--018	.0135	1.561	.816	0
Clinical Dementia Rating	10	1517	-.108	-.213--001	.0474	35.067	<.001	74.335
Higher scores on cognitive screening measures	52	8809	.064	.033-.095	.0001	83.982	.002	39.272
Mini-Mental State Examination	47	8123	.062	.026-.097	.0006	90.333	<.001	49.077
Taking medication	12	3740	-.100	-.155--045	.0004	23.845	.013	53.869
Acetylcholinesterase inhibitors	6	1029	-.116	-.196--035	.0051	6.909	.228	27.627
Polypharmacy	5	1096	-.118	-.211--022	.0159	8.386	.078	52.304
Psychotropics	5	2267	-.066	-.149-.018	.1254	9.793	.044	59.153
Better functional ability	48	8741	.142	.106-.177	<.0001	106.485	<.001	55.862
Basic activities of daily living	27	5159	.160	.109-.210	<.0001	58.406	<.001	55.484
Physical Self-Maintenance Scale	5	612	.215	.113-.312	<.0001	6.338	.175	36.884
Katz Index of Independence in Activities of Daily Living	8	1030	.176	.075-.273	.0007	12.844	.076	45.500
Barthel Index	10	990	.112	-.009-.230	.0689	29.253	.001	69.234
Instrumental activities of daily living	17	2165	.124	.067-.181	<.0001	25.144	.067	36.366
Functional Activities Questionnaire	5	398	.176	.077-.271	.0005	2.319	.678	0
Lawton's Instrumental Activities of Daily Living	10	1421	.114	.037-.190	.0038	15.646	.075	42.476
Presence of unmet needs*	5	838	-.204	-.305--100	.0002	9.273	.055	56.866
More awareness	6	823	.134	.066-.201	.0001	4.525	.477	0
Better self-rated memory functioning	5	737	.068	-.005-.140	.06763	3.274	.513	0
Depression	50	8539	-.287	-.331--241	<.0001	218.287	<.001	77.552
Geriatric Depression Scale (all versions)	12	1380	-.386	-.492--268	<.0001	57.174	<.001	80.760
Geriatric Depression Scale-30	7	902	-.271	-.357--181	<.0001	9.701	.138	38.152
Depression measures excluding Geriatric Depression Scale, Cornell Scale for Depression in Dementia & Neuropsychiatric Inventory-Depression	17	1911	-.301	-.387--210	<.0001	68.920	<.001	76.785
Neuropsychiatric Inventory-Depression	9	1426	-.263	-.389--126	.0002	47.431	<.001	83.133
Cornell Scale for Depression in Dementia	22	5013	-.271	-.333--206	<.0001	101.847	<.001	79.381
Anxiety	16	2695	-.190	-.271--106	<.0001	65.530	<.001	77.110
Anxiety measures excluding Neuropsychiatric Inventory-Anxiety	7	816	-.299	-.417--170	<.0001	20.940	.002	71.347
Neuropsychiatric Inventory-Anxiety	8	1384	-.048	-.101-.005	.0754	6.501	.483	0
Neuropsychiatric symptoms/BPSD	40	7540	-.106	-.128--083	<.0001	38.582	.489	0
Neuropsychiatric Inventory	31	6603	-.112	-.142--082	<.0001	35.850	.213	16.317
Neuropsychiatric symptom measures excluding Neuropsychiatric Inventory	11	1023	-.103	-.164--041	.0012	2.913	.983	0
Pain	6	2495	-.113	-.187--038	.0032	11.852	.037	57.812
Presence of co-morbid conditions	15	2321	-.175	-.253--095	<.0001	46.292	<.001	69.757
Better quality of relationship with carer	5	583	.311	.114-.485	.0024	23.547	<.001	83.013
Cared for by spouse (vs. other carer type)	6	1199	.159	.103-.215	<.0001	4.169	.525	0
Being married	11	1991	.087	.042-.132	.0002	10.351	.410	3.388

Living alone	6	1553	-.072	-.127--.016	.0113	5.762	.330	13.222
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Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data. Those asterisked are unchanged from previous analyses.

**Supplementary Table 19b: Factors associated with self-ratings of quality of life by the person with dementia using the Quality of Life-Alzheimer’s Disease (QoL-AD) – factors pertaining to the carer**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran’s Q	p value (Cochran’s Q)	I <sup>2</sup>
Older age	7	1410	-.058	-.103-.012	.0137	7.859	.447	0
Female gender	9	1844	.067	.016-.117	.0104	9.082	.335	11.916
Higher level of education	7	1154	.112	.023-.198	.0135	11.511	.074	47.874
Depression	6	687	-.140	-.299-.025	.0963	22.061	.001	77.336
Distress at NPS symptoms	8	918	-.164	-.227--.099	<.0001	5.209	.635	0
Burden or stress	16	2581	-.127	-.183--.071	<.0001	27.663	.024	45.776
Burden or stress measures excluding Zarit Burden Interview	5	1022	-.191	-.250--.131	<.0001	2.177	.703	0
Zarit Burden Interview	11	1559	-.090	-.164--.016	.0172	18.530	.047	46.034
Carer quality of life (self-rated)	5	521	.297	.087-.481	.0060	21.397	<.001	81.305

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data.

**Supplementary Table 19c: Factors associated with self-ratings of quality of life made by the person with dementia using the Dementia Quality of Life Questionnaire (DEMQOL)**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran’s Q	p value (Cochran’s Q)	I <sup>2</sup>
Older age	6	913	-.063	-.164-.039	.2234	11.361	.045	55.991
Higher scores on cognitive screening measures	8	919	.019	-.046-.085	.5600	4.244	.751	0
Mini-Mental State Examination	7	747	.008	-.065-.080	.8358	3.710	.716	0
Better functional ability	6	863	.093	-.060-.242	.2341	24.110	<.001	79.262
Basic activities of daily living	5	715	.114	-.065-.285	.2117	21.256	<.001	81.181
Depression	8	804	-.417	-.566--.243	<.0001	47.237	<.001	85.181

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data.

**Supplementary Table 19d: Factors associated with self-ratings of quality of life made by the person with dementia quality of life using the EQ-5D**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Older age	6	1234	-.083	-.224-.061	.2587	28.510	<.001	82.462
Higher scores on cognitive screening measures	12	2463	.043	-.011-.096	.1229	18.879	.063	41.733
Mini-Mental State Examination	11	2095	.047	-.015-.109	.1338	19.118	.039	47.694
Better functional ability	13	2858	.194	.067-.314	.0028	135.774	<.001	91.162
Basic activities of daily living	8	1474	.331	.190-.458	<.0001	54.577	<.001	87.174
Depression	7	1581	-.225	-.316--.131	<.0001	18.998	.004	68.418
Geriatric Depression Scale (all versions)	5	667	-.264	-.352--.171	<.0001	5.251	.263	23.823
Neuropsychiatric symptoms/BPSD	5	1511	-.107	-.159--.055	.0001	4.327	.363	7.568

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data.

**Supplementary Table 19e: Factors associated with self-ratings of quality of life made by the person with dementia using the EQ-5D Visual Analogue Scale**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Older age	6	879	-.082	-.222-.061	.2600	28.479	<.001	82.443
Female gender	5	749	.010	-.062-.083	.7781	2.773	.597	0
Higher scores on cognitive screening measures	8	1342	.040	-.022-.101	.2031	8.411	.298	16.778
Mini-Mental State Examination	7	980	.012	-.051-.076	.6990	5.285	.508	0
Better functional ability	6	1498	.100	-.032-.229	.1356	29.328	<.001	82.952
Depression	6	1379	-.273	-.375--.164	<.0001	19.010	.002	73.698
Geriatric Depression Scale (all versions)	5	730	-.334	-.443--.216	<.0001	9.401	.052	57.450

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data.



**Supplementary Table 19f: Factors associated with self-ratings of quality of life made by the person with dementia using the Dementia Quality of Life instrument**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Higher scores on cognitive screening measures	10	821	.116	.005-.225	.0408	19.534	.021	53.927
Mini-Mental State Examination	10	879	.111	-.001-.220	.0518	20.508	.015	56.115
Better functional ability	9	1070	.134	.044-.222	.0037	14.919	.061	46.379
Basic activities of daily living	8	766	.168	.077-.257	.0003	10.021	.187	30.143
Depression	10	898	-.196	-.287--.102	.0001	16.782	.052	46.370
Cornell Scale for Depression in Dementia	6	486	-.119	-.208--.029	.0095	2.694	.747	0

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data.

**Supplementary Table 19g: Factors associated with self-ratings of quality of life made by the person with dementia using the 12-Item Short Form Health Survey (SF-12) and 36-Item Short Form Health Survey (SF-36)**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Higher scores on cognitive screening measures	6	344	.102	-.174-.362	.4715	31.812	<.001	84.282
Mini-Mental State Examination	5	276	.108	-.234-.426	.5409	31.763	<.001	87.407

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data.

**Supplementary Table 19h: Factors associated with self-ratings of quality of life by the person with dementia using dementia-specific quality of life measures – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Older age	45	6547	-.020	-.044-.005	.1148	35.842	.801	0
Female gender	34	5198	-.000	-.028-.028	.9913	33.321	.452	.963
White ethnicity	6	1052	.168	.083-.251	.0001	9.681	.085	48.351
Higher level of education	37	5075	.063	.024-.101	.0017	61.494	.005	41.458
Underweight	7	1462	.000	-.094-.095	.9919	17.601	.007	65.912
Alzheimer's (vs. other dementia subtypes)	6	855	.066	-.065-.195	.3222	16.836	.005	70.302
Longer disease duration	10	1724	-.009	-.055-.073	.7841	13.850	.128	35.019
More advanced dementia*	19	2904	-.116	-.173--.057	.0001	41.359	.001	56.478
Global Deterioration Scale*	6	886	-.103	-.177--.029	.0067	5.897	.316	15.207
Clinical Dementia Rating	10	1540	-.121	-.223--.016	.0236	34.106	<.001	73.612
Higher scores on cognitive screening measures	71	10869	.077	.049-.106	<.0001	126.989	<.001	44.877
Mini-Mental State Examination	64	9792	.077	.043-.110	<.0001	141.095	<.001	55.349
Alzheimer's Disease Assessment Scale-Cognitive Subscale	5	3095	.068	.033-.103	.0002	3.369	.498	0
Taking medication	17	4266	-.122	-.174--.068	<.0001	36.857	<.001	56.589
Acetylcholinesterase inhibitors	6	1029	-.116	-.196--.035	.0051	6.909	.228	27.627
Polypharmacy	8	1705	-.108	-.166--.049	.0003	9.725	.205	28.021
Psychotropics*	9	2518	-.120	-.203--.034	.0061	21.104	.007	62.093
Longer duration of care home stay*	8	714	-.096	-.169--.021	.0117	5.874	.555	0
Better quality of relationship with carer*	5	583	.311	.114-.485	.0024	23.547	<.001	83.013
Better functional ability	63	10913	.161	.128-.194	<.0001	159.449	<.001	61.116
Alzheimer's Disease Co-operative Study-Activities of Daily Living Inventory	5	981	.087	-.064-.234	.2584	21.346	<.001	81.261
Disability Assessment for Dementia	5	3123	.089	.014-.162	.0198	9.834	.043	59.324
Basic activities of daily living	39	6821	.193	.149-.237	<.0001	99.324	<.001	61.741
Physical Self-Maintenance Scale	5	612	.215	.113-.312	<.0001	6.338	.175	36.884
Basic activities of daily living measures excluding Barthel Index, Dependence Scale, Katz Index of Independence in Activities of Daily Living & Physical Self-Maintenance Scale	13	3562	.202	.128-.274	<.0001	33.612	.001	64.299
Katz Index of Independence in Activities of Daily Living	8	1030	.182	.083-.277	.0004	12.474	.086	43.882
Barthel Index	14	1894	.122	.036-.206	.0057	41.627	<.001	68.770
Instrumental activities of daily living	18	2476	.119	.065-.172	<.0001	26.861	.060	36.711
Functional Activities Questionnaire	5	398	.176	.077-.271	.0005	2.318	.678	0
Lawton's Instrumental Activities of Daily Living	10	1447	.124	.050-.196	.0010	14.611	.102	38.404
Presence of unmet needs*	5	838	-.204	-.305--.100	.0002	9.273	.055	56.866
More awareness	8	1064	.153	.093-.212	<.0001	6.798	.450	0
Better self-rated memory functioning	7	1191	.039	-.018-.096	.1820	5.203	.518	0
Depression	66	10226	-.302	-.341--.261	<.0001	278.686	<.001	76.676
Geriatric Depression Scale (all versions)	17	1692	-.424	-.510--.329	<.0001	71.101	<.001	77.497
Geriatric Depression Scale-15	8	651	-.506	-.630--.358	<.0001	35.667	<.001	80.374
Geriatric Depression Scale-30	8	938	-.319	-.417--.214	<.0001	15.531	<.001	54.929
Depression measures excluding Geriatric Depression Scale, Cornell Scale for Depression in Dementia & Neuropsychiatric Inventory-Depression	23	2515	-.320	-.391--.244	<.0001	84.279	<.001	73.896
Neuropsychiatric Inventory-Depression	11	1788	-.274	-.379--.162	<.0001	54.205	<.001	81.551
Cornell Scale for Depression in Dementia	25	5421	-.253	-.310--.194	<.0001	104.748	<.001	77.088
Anxiety	20	2946	-.212	-.286--.136	<.0001	76.236	<.001	75.077

Rating of Anxiety in Dementia	6	915	-.330	-.461--.184	<.0001	20.357	.001	75.439
Anxiety measures excluding Rating of Anxiety in Dementia & Neuropsychiatric Inventory-Anxiety	7	816	-.299	-.417--.170	<.0001	20940	.002	71.347
Neuropsychiatric Inventory-Anxiety	9	1503	-.054	-.105--.003	.0382	7.068	.529	0
Neuropsychiatric symptoms/BPSD	48	8660	-.117	-.143--.091	<.0001	58.786	.116	20.049
Neuropsychiatric symptom measures excluding Neuropsychiatric Inventory	13	1127	-.113	-.171--.054	.0002	8.956	.707	0
Neuropsychiatric Inventory	37	7621	-.119	-.149--.089	<.0001	50.020	.060	28.028
Pain	9	2595	-.134	-.210--.056	.0008	18.287	.019	56.253
Better self-rated health	6	1115	.269	.101-.422	.0020	36.456	<.001	86.285
Presence of co-morbid conditions	23	3155	-.216	-.283--.147	<.0001	75.635	<.001	70.913
Cared for by spouse (vs. other carer type)	7	1345	.144	.083-.204	<.0001	7.461	.280	19.578
Being married	16	2848	.085	.048-.122	<.0001	12.931	.608	0
Living alone	7	1699	-.064	-.114--.014	.0125	6.380	.382	5.958
Presence of religious beliefs/spirituality	7	619	.349	.102-.556	.0064	58.178	<.001	89.687

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data. Those asterisked are unchanged from previous analyses.

**Supplementary Table 19i: Factors associated with self-ratings of quality of life made by the person with dementia using dementia-specific quality of life measures – factors pertaining to the carer**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Older age	8	1556	-.051	-.024-.125	.1845	12.269	.092	42.944
Female gender	10	1990	.054	.009-.098	.0176	8.303	.504	0
Higher level of education	8	1300	.096	.017-.174	.0178	12.475	.086	43.886
Depression	7	758	-.178	-.323--.025	.0229	25.505	<.001	76.476
Distress at NPS symptoms*	8	918	-.164	-.227--.099	<.0001	5.209	.635	0
Burden or stress	19	2751	-.154	-.213--.093	<.0001	40.152	.002	55.171
Burden/stress measures excluding Zarit Burden Interview	5	1022	-.191	-.250--.131	<.0001	2.177	.703	0
Zarit Burden Interview	14	1729	-.143	-.225--.059	.0009	33.991	.001	61.755
Carer quality of life (self-rated)*	6	667	.253	.081-.411	.0043	23.736	<.001	78.935

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data. Those asterisked are unchanged from previous analyses.

**Supplementary Table 19j: Factors associated with self-ratings of quality of life made by the person with dementia using health related quality of life measures**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Older age	13	2005	-.032	-.117-.053	.4620	38.657	<.001	68.957
Female gender	11	1504	.010	-.041-.061	.6939	7.602	.668	0
Higher level of education	6	885	.030	-.036-.097	.3715	4.383	.496	0
Higher scores on cognitive screening measures	22	3316	.043	-.016-.101	.1503	52.682	<.001	60.138
Mini-Mental State Examination	21	2957	.043	-.021-.105	.1864	52.908	<.001	62.199
Better functional ability	18	3469	.140	.051-.227	.0021	111.365	<.001	84.735
Basic activities of daily living	10	1633	.257	.147-.361	<.0001	44.408	<.001	79.733
Instrumental activities of daily living	7	884	.143	-.010-.290	.0667	27.452	<.001	78.143
Depression	12	1924	-.277	-.354--.196	<.0001	31.847	.001	65.460
Geriatric Depression Scale (all versions)	8	882	-.324	-.416--.225	<.0001	14.021	.051	50.074
Geriatric Depression Scale-30	5	575	-.236	-.312--.156	<.0001	2.630	.622	0
Neuropsychiatric symptoms/BPSD	8	1954	-.082	-.127--.036	.0005	7.352	.393	4.788
Neuropsychiatric Inventory	6	1529	-.062	-.112--.012	.0150	3.754	.585	0
Presence of co-morbid conditions	6	1009	-.166	-.265--.064	.0015	12.257	.031	59.208
Being married	5	1259	.059	.004-.114	.0364	3.749	.441	0

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data.

**Supplementary Table 19k: Factors associated with self-ratings of quality of life made by the person with dementia using generic quality of life measures**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Older age	7	1033	-.026	-.087-.036	.4107	4.238	.645	0
Higher scores on cognitive screening measures	9	1116	.173	.027-.311	.0201	39.800	<.001	79.900
Mini-Mental State Examination	6	361	.161	.006-.308	.0421	9.776	.082	48.857
Better functional ability	7	968	.218	.018-.401	.0333	50.832	<.001	88.196
Basic activities of daily living	5	472	.301	.154-.435	.0001	9.221	.056	56.621
Depression	10	1091	-.409	-.544--.253	<.0001	60.277	<.001	85.069
Geriatric Depression Scale (all versions)	8	1087	-.475	-.665--.227	.0004	138.284	<.001	94.938
Geriatric Depression Scale-15	6	665	-.508	-.710--.231	.0007	80.499	<.001	93.789
Presence of co-morbid conditions	5	819	-.156	-.305-.000	.0507	17.053	.002	76.544

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data.

**Supplementary Table 19I: Factors associated with self-ratings of quality of life made by the people with dementia diagnosed with Alzheimer’s disease – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran’s Q	p value (Cochran’s Q)	I <sup>2</sup>
Older age	22	3277	.006	-.028-.041	.7153	19.720	.539	0
Female gender	16	2281	.003	-.039-.044	.8932	12.019	.678	0
Higher level of education	23	2825	.027	-.011-.064	.1616	10.054	.986	0
Longer disease duration	5	1018	-.030	-.134-.075	.5743	8.912	.063	55.115
Higher scores on cognitive screening measures	37	6846	.114	.073-.155	<.0001	76.809	<.001	53.130
Mini-Mental State Examination	33	5956	.107	.058-.155	<.0001	81.391	<.001	60.684
Taking medication	9	1386	-.167	-.247--.084	<.0001	15.618	.048	48.778
Psychotropics	6	433	-.206	-.312--.094	.0004	6.723	.242	25.633
Better functional ability	33	6763	.165	.121-.209	<.0001	81.629	<.001	60.798
Basic activities of daily living	20	5051	.190	.145-.234	<.0001	33.568	.021	43.399
Physical Self-Maintenance Scale	5	636	.248	.173-.320	<.0001	1.067	.899	0
Basic activities of daily living measures excluding Barthel Index, Dependence Scale, Katz Index of Independence in Activities of Daily Living & Physical Self-Maintenance Scale	9	3328	.198	.119-.274	<.0001	21.083	.007	62.055
Instrumental activities of daily living	11	1383	.098	.045-.151	.0003	4.619	.915	0
Lawton’s Instrumental Activities of Daily Living	8	1184	.093	.036-.150	.0015	3.270	.859	0
More awareness	6	850	.149	.082-.214	.0002	3.309	.652	0
Depression	31	3841	-.350	-.410--.288	<.0001	123.201	<.001	75.650
Geriatric Depression Scale (all versions)	14	1658	-.398	-.496--.291	<.0001	73.145	<.001	82.227
Geriatric Depression Scale-15	7	665	-.482	-.646--.275	<.0001	54.511	<.001	88.993
Geriatric Depression Scale-30	6	889	-.285	-.367--.198	<.0001	7.967	.158	37.243
Neuropsychiatric Inventory-Depression	5	1051	-.351	-.529--.144	.0012	43.027	<.001	90.704
Depression measures excluding Geriatric Depression Scale, Cornell Scale for Depression in Dementia & Neuropsychiatric Inventory-Depression	11	1116	-.325	-.413--.231	<.0001	23.635	.009	57.690
Cornell Scale for Depression in Dementia	7	871	-.316	-.445--.174	<.0001	28.599	<.001	79.020
Anxiety	11	1510	-.164	-.265--.059	.0023	35.155	<.001	71.554
Neuropsychiatric Inventory-Anxiety	5	1008	-.026	-.088-.036	.4102	3.012	.556	0
Neuropsychiatric symptoms/BPSD	23	5718	-.096	-.130--.062	<.0001	28.140	.171	21.820
Neuropsychiatric Inventory	19	5101	-.092	-.132--.053	<.0001	25.724	.106	30.026
Presence of co-morbid conditions	12	1632	-.152	-.229--.074	.0002	21.616	.028	49.112
Being married	8	1334	.059	.005-.113	.0331	3.159	.870	0

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data.

**Supplementary Table 19m: Factors associated with self-ratings of quality of life made by the people with dementia diagnosed with Alzheimer’s disease – factors pertaining to the carer**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran’s Q	p value (Cochran’s Q)	I <sup>2</sup>
Older age	6	968	-.053	-.169-.065	.3810	12.295	.031	59.335
Female gender	7	1151	.039	-.019-.097	.1857	3.733	.713	0
Depression	5	554	-.160	-.290--.023	.0220	9.247	.055	56.741
Burden or stress	11	1559	-.109	-.171--.047	.0007	13.870	.179	27.902
Zarit Burden Interview	9	1209	-.075	-.133--.016	.0127	8.305	.404	3.674

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data.

**Supplementary Table 19n: Factors associated with self-ratings of quality of life by people with dementia, excluding studies that focused specifically on people diagnosed with Alzheimer’s disease – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran’s Q	p value (Cochran’s Q)	I <sup>2</sup>
Older age	36	5205	-.043	-.077--.009	.0124	49.150	.057	28.789
Female gender	31	4749	.007	-.025-.039	.6684	35.667	.219	15.888
White ethnicity	8	1428	.146	.070-.220	.0002	14.655	.041	52.234
Higher level of education	20	3034	.072	.013-.131	.0161	46.331	<.001	58.991
Underweight	5	863	.003	-.131-.125	.9587	14.084	.007	71.600
Alzheimer’s (vs. other dementia subtypes)	8	1233	.058	-.035-.150	.2250	17.733	.013	60.525
Longer disease duration	7	900	.033	-.034-.098	.3348	2.872	.825	0
More advanced dementia	19	2731	-.095	-.156--.034	.0024	42.107	.001	57.252
Global Deterioration Scale	5	665	-.106	-.204--.006	.0377	5.700	.223	29.828
Clinical Dementia Rating	12	1783	-.088	-.175-.001	.0516	34.818	<.001	68.407
Higher scores on cognitive screening measures	56	6657	.066	.025-.107	.0017	139.605	<.001	60.603
Mini-Mental State Examination	51	6090	.054	.015-.092	.0059	99.527	<.001	49.762
Taking medication	10	3220	-.086	-.140--.031	.0022	16.385	.059	45.072
Polypharmacy	5	972	-.149	-.210--.087	<.0001	.982	.913	0
Longer duration of care home stay	5	582	-.062	-.144-.020	.1380	.614	.961	0
Better functional ability	46	6454	.174	.124-.223	<.0001	170.431	<.001	73.596
Basic activities of daily living	29	3452	.202	.130-.271	<.0001	118.961	<.001	76.463
Katz Index of Independence in Activities of Daily Living	7	536	.296	.161-.420	<.0001	13.647	.034	56.034
Barthel Index	15	2263	.197	.079-.309	.0012	105.346	<.001	86.710
Basic activities of daily living measures excluding Barthel Index, Dependence Scale, Katz Index of Independence in Activities of Daily Living & Physical Self-Maintenance Scale	9	1024	.180	.083-.274	.0003	18.425	.018	56.580
Instrumental activities of daily living	14	1948	.188	.089-.283	.0002	57.590	<.001	77.427
Instrumental activities of daily living measures excluding IADL & FAQ	8	1372	.208	.059-.349	.0066	50.192	<.001	86.054
Lawton’s Instrumental Activities of Daily Living	5	477	.178	.024-.324	.0241	9.822	.044	59.274
Presence of unmet needs*	5	838	-.204	-.305--.100	.0002	9.273	.055	56.866
Better self-rated memory functioning	5	1100	.036	-.037-.109	.3328	5.335	.255	25.022
Depression	49	7594	-.293	-.342--.242	<.0001	233.321	<.001	79.428
Geriatric Depression Scale (all versions)	14	1170	-.468	-.588--.327	<.0001	94.727	<.001	86.276

Geriatric Depression Scale-15	9	980	-.496	-.640--.318	<.0001	84.433	<.001	90.525
Geriatric Depression Scale-30	5	190	-.407	-.531--.266	<.0001	4.295	.368	6.863
Depression measures excluding Geriatric Depression Scale, Cornell Scale for Depression in Dementia & Neuropsychiatric Inventory-Depression	17	1686	-.324	-.423--.218	<.0001	83.732	<.001	80.891
Cornell Scale for Depression in Dementia	20	4666	-.220	-.276--.162	<.0001	61.713	<.001	69.212
Neuropsychiatric Inventory-Depression	7	804	-.203	-.305--.097	.0002	12.299	.056	51.215
Anxiety	10	1502	-.256	-.368--.137	<.0001	44.750	<.001	79.888
Neuropsychiatric symptoms/BPSD	33	3911	-.126	-.158--.093	<.0001	33.928	.375	5.683
Neuropsychiatric symptom measures excluding Neuropsychiatric Inventory	13	1037	-.123	-.183--.061	.0001	11.947	.450	0
Neuropsychiatric Inventory	22	2960	-.127	-.164--.089	<.0001	22.137	.392	5.135
Pain	8	2639	-.158	-.242--.071	.0004	22.538	.002	68.942
Better self-rated health	9	1447	.231	.123-.333	<.0001	31.509	<.001	74.610
Presence of co-morbid conditions	19	2557	-.210	-.270--.148	<.0001	43.338	.001	58.466
Better quality of relationship with carer	5	682	.453	.235-.627	.0001	39.223	<.001	89.802
Cared for by spouse (vs. other carer type)	5	1129	.178	.052-.298	.0056	17.025	.002	76.506
Being married	14	2514	.090	.048-.0131	<.0001	14.215	.359	8.545
Living alone	5	1258	-.200	-.371--.015	.0339	42.488	<.001	90.585
Greater social engagement*	8	903	.345	.102-.549	.0061	92.625	<.001	92.443

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data. Those asterisked are unchanged from previous analyses.

**Supplementary Table 19o: Factors associated with self-ratings of quality of life by people with dementia, excluding studies that focused specifically on people diagnosed with Alzheimer’s disease – factors pertaining to the carer**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran’s Q	p value (Cochran’s Q)	I <sup>2</sup>
Female gender	5	1091	.085	.004-.166	.0394	6.555	.161	38.982
Higher level of education	7	1257	.110	.029-.190	.0077	10.968	.089	45.295
Distress at NPS symptoms	5	711	-.150	-.248--.049	.0036	6.313	.177	36.636
Burden or stress	9	1281	-.144	-.215--.071	.0001	11.674	.166	31.472
Zarit Burden Interview	6	599	-.151	-.271--.027	.0175	10.098	.072	50.487
Poorer mental health (GHQ)*	5	702	-.156	-.275--.034	.0126	6.753	.150	40.767

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data. Those asterisked are unchanged from previous analyses.

**Supplementary Table 19p: Factors associated with self-ratings of quality of life by people with dementia living in the community – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Older age	29	4624	-.023	-.058-.012	.1969	36.584	.128	23.464
Female gender	27	4437	.004	-.028.037	.7994	29.075	.308	10.576
White ethnicity	7	1026	.237	.177-.294	<.0001	3.186	.785	0
Higher level of education	24	3945	.062	.025-.099	.0010	28.830	.186	20.221
Alzheimer's (vs. other dementia subtypes)	5	625	.137	.029-.241	.0130	6.938	.139	42.345
Longer disease duration	6	1185	.015	-.078-.107	.7575	10.245	.069	51.196
More advanced dementia	8	1481	-.144	-.248--.036	.0089	28.005	<.001	75.005
Clinical Dementia Rating	5	983	-.183	-.348--.006	.0425	26.814	<.001	85.083
Higher scores on cognitive screening measures	48	8542	.067	.040-.094	<.0001	59.157	.002	20.550
Mini-Mental State Examination	41	7476	.063	.029-.096	.0003	62.786	.012	36.292
Taking medication	8	2664	-.083	-.139--.025	.0047	11.573	.116	39.512
Polypharmacy	5	1288	-.104	-.181--.026	.0087	7.178	.127	44.273
Better functional ability	38	8470	.182	.131-.232	<.0001	174.584	<.001	78.807
Basic activities of daily living	20	5126	.236	.161-.309	<.0001	104.875	<.001	81.883
Katz Index of Independence in Activities of Daily Living	5	833	.293	.100-.465	.0034	20.200	<.001	80.198
Barthel Index	7	1055	.243	.064-.407	.0083	47.165	<.001	87.279
Basic activities of daily living measures excluding Barthel Index, Dependence Scale, Katz Index of Independence in Activities of Daily Living & Physical Self-Maintenance Scale	6	2903	.198	.091-.301	.0003	18.004	.003	72.228
Instrumental activities of daily living	16	2657	.176	.094-.256	<.0001	61.289	<.001	75.526
Instrumental ADL measures excluding IADL & FAQ	7	1260	.232	.066-.386	.0065	48.642	<.001	87.662
Lawton's Instrumental Activities of Daily Living	6	1168	.132	.034-.228	.0088	11.810	.037	57.661
Better self-rated memory functioning	5	741	.050	-.026-.126	.1990	4.126	.389	3.062
Depression	40	6743	-.315	-.369--.260	<.0001	201.589	<.001	80.654
Geriatric Depression Scale (all versions)	17	1761	-.393	-.481--.298	<.0001	72.052	<.001	77.794
Geriatric Depression Scale-15	9	780	-.474	-.590--.340	<.0001	36.822	<.001	78.274
Geriatric Depression Scale-30	8	981	-.275	-.341--.206	<.0001	8.135	.321	13.955
Depression measures excluding Geriatric Depression Scale, Cornell Scale for Depression in Dementia & Neuropsychiatric Inventory-Depression	15	1724	-.357	-.447--.259	<.0001	62.906	<.001	77.745
Neuropsychiatric Inventory-Depression	6	1092	-.289	-.463--.093	.0043	44.993	<.001	88.887
Cornell Scale for Depression in Dementia	8	2840	-.213	-.288--.136	<.0001	25.401	.001	72.442
Anxiety	11	2051	-.196	-.289--.099	.0001	43.156	<.001	76.828
Anxiety measures excluding Rating of Anxiety in Dementia & Neuropsychiatric Inventory-Anxiety	5	598	-.360	-.464--.247	<.0001	9.065	.060	55.873
Neuropsychiatric Inventory-Anxiety	6	1077	-.057	-.131-.017	.1302	6.268	.281	20.233
Neuropsychiatric symptoms/BPSD	29	6006	-.110	-.138--.081	<.0001	29.851	.370	6.199
Neuropsychiatric symptom measures excluding Neuropsychiatric Inventory	8	539	-.130	-.214--.045	.0029	4.586	.710	0
Neuropsychiatric Inventory	22	5513	-.111	-.144--.077	<.0001	25.108	.243	16.362
Pain	5	1481	-.138	-.247--.026	.0157	6.944	.139	42.400
Presence of co-morbid conditions	14	2196	-.217	-.301--.131	<.0001	48.928	<.001	73.430
Cared for by spouse (vs. other carer type)	6	1523	.149	.056-.239	.0018	15.511	.008	67.764
Being married	14	2567	.079	.039-.118	.0001	13.225	.431	1.698
Living alone	6	1553	-.072	-.127--.016	.0113	5.762	.330	13.222
Greater social engagement	5	409	.287	.070-.478	.0102	15.481	.004	74.161



Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data.

**Supplementary Table 19q: Factors associated with self-ratings of quality of life by people with dementia living in the community – factors pertaining to the carer**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Older age	7	1496	-.057	-.132-.018	.1368	10.398	.109	42.297
Female gender	9	1849	.051	.005-.097	.0296	6.975	.539	0
Higher level of education	7	1242	.076	-.001-.153	.0523	9.789	.134	38.704
Depression	6	771	-.106	-.178--.033	.0045	5.182	.394	3.508
Distress at NPS symptoms	6	667	-.175	-.265--.082	.0002	6.637	.249	24.660
Burden or stress	13	2358	-.137	-.192--.080	<.0001	20.709	.055	42.056
Zarit Burden Interview	8	1326	-.113	-.199--.026	.0108	15.403	.031	54.555
Burden/stress measures excluding Zarit Burden Interview	5	1032	-.166	-.225--.105	<.0001	3.010	.556	0

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data.

**Supplementary Table 19r: Factors associated with self-ratings of quality of life by people with dementia living in residential care – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	Number of participants	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Older age	6	1052	-.008	-.068-.053	.8060	2.385	.794	0
Female gender	6	1052	.015	-.070-.100	.7245	9.295	.098	46.209
More advanced dementia	7	893	-.052	-.159-.055	.3412	13.555	.035	55.735
Higher scores on cognitive screening measures	14	1197	.102	-.015-.216	.0873	46.304	<.001	71.925
Mini-Mental State Examination	14	1197	.115	-.011-.238	.0739	54.900	<.001	76.321
Taking medication	9	1746	-.154	-.238--.069	.0004	18.922	.015	57.721
Psychotropics	5	994	-.231	-.408--.036	.0207	15.908	.003	74.855
Longer duration of care home stay	7	665	-.069	-.146-.008	.0783	.793	.992	0
Better functional ability	13	1211	.206	.096-.312	.0003	40.820	<.001	70.603
Basic activities of daily living	13	1211	.207	.097-.313	.0003	40.974	<.001	70.713
Basic activities of daily living measures excluding Barthel Index, Dependence Scale, Katz Index of Independence in Activities of Daily Living & Physical Self-Maintenance Scale	5	301	.178	.064-.287	.0024	3.007	.557	0
Barthel Index	6	860	.120	-.069-.300	.2126	35.449	<.001	85.895
Depression	14	1756	-.244	-.336--.147	<.0001	40.746	<.001	68.095
Cornell Scale for Depression in Dementia	9	1470	-.201	-.320-.074	.0020	32.210	<.001	75.163
Depression measures excluding Geriatric Depression Scale, Cornell Scale for Depression in Dementia & Neuropsychiatric Inventory-Depression	6	330	-.325	-.439--.200	<.0001	7.146	.210	30.031
Anxiety	5	367	-.225	-.430-.001	.0511	17.665	.001	77.356
Neuropsychiatric symptoms/BPSD	9	873	-.086	-.154--.018	.0135	8.212	.413	2.583
Neuropsychiatric symptom measures excluding Neuropsychiatric Inventory	6	464	-.097	-.209-.017	.0937	7.187	.207	30.434
Presence of co-morbid conditions	8	747	-.177	-.247--.106	<.0001	5.159	.641	0

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data.

**Supplementary Table 20a: Factors associated with informant ratings of quality of life for the person with dementia made by family carers only – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Older age	41	7101	-.033	-.066-.001	.0544	72.245	.001	44.633
Female gender	36	6465	-.020	-.060-.020	.3197	80.622	<.001	56.588
Higher level of education	28	4841	.047	.019-.075	.0012	19.449	.853	0
Longer disease duration	10	1504	-.071	-.122--020	.0061	7.556	.579	0
More advanced dementia	20	3696	-.296	-.431--148	.0001	413.353	<.001	95.403
Global Deterioration Scale	5	767	-.288	-.388--181	<.0001	9.593	.048	58.301
Clinical Dementia Rating	16	2933	-.252	-.408--081	.0042	325.168	<.001	95.387
Higher scores on cognitive screening measures	64	11057	.155	.115-.195	<.0001	247.699	<.001	74.566
Mini-Mental State Examination	56	9836	.148	.104-.191	<.0001	223.071	<.001	75.344
Cognitive screening measures excluding Dementia Rating Scale & Mini-Mental State Examination	16	4304	.174	.086-.259	.0001	81.672	<.001	81.634
Taking medication	14	3586	-.060	-.092--027	.0004	11.910	.535	0
Acetylcholinesterase inhibitors	7	1317	-.055	-.122-.013	.1131	8.134	.228	26.235
Polypharmacy	8	1652	-.064	-.115--013	.0140	7.536	.375	7.116
Psychotropics	6	1731	-.093	-.163--022	.0100	6.640	.249	24.696
Better functional ability	60	11082	.328	.275-.378	<.0001	476.001	<.001	87.605
Bristol Activities of Daily Living Scale	5	859	.443	.387-.496	<.0001	2.642	.619	0
Alzheimer's Disease Co-operative Study-Activities of Daily Living Inventory	5	1172	.341	.199-.468	<.0001	25.946	<.001	84.583
Disability Assessment for Dementia*	5	3172	.231	.085-.367	.0021	42.953	<.001	90.687
Basic activities of daily living	35	6833	.369	.295-.438	<.0001	334.697	<.001	89.842
Barthel Index	10	1021	.522	.377-.642	<.0001	63.199	<.001	85.759
Dependence scale	5	3182	.342	.112-.537	.0041	117.287	<.001	96.850
Physical Self-Maintenance Scale	6	622	.310	.214-.401	<.0001	8.025	.155	37.696
Katz Index of Independence in Activities of Daily Living	9	1581	.298	.212-.380	<.0001	23.071	.003	65.324
Basic activities of daily living measures excluding Barthel Index, Dependence Scale, Katz Index of Independence in Activities of Daily Living & Physical Self-Maintenance Scale	6	611	.271	.157-.378	<.0001	9.812	.081	49.044
Instrumental activities of daily living	24	3234	.350	.269-.426	<.0001	134.795	<.001	82.937
Lawton's Instrumental Activities of Daily Living*	15	2306	.303	.210-.390	<.0001	72.120	<.001	80.588
Instrumental activities of daily living measures excluding Lawton's Instrumental Activities of Daily Living	10	1039	.453	.373-.526	<.0001	17.506	.041	48.590
Better self-rated memory functioning	6	515	.177	-.000-.343	.0503	19.765	.001	74.703
Depression	49	8469	-.301	-.352--248	<.0001	292.145	<.001	83.570
Cornell Scale for Depression in Dementia	16	3601	-.364	-.435--289	<.0001	79.254	<.001	81.074
Geriatric Depression Scale (all versions)	18	1919	-.253	-.338--164	<.0001	62.570	<.001	72.830
Geriatric Depression Scale-30	10	1082	-.294	-.419--158	<.0001	41.161	<.001	78.135
Geriatric Depression Scale-15	8	837	-.200	-.308--087	.0006	17.439	.015	59.861
Neuropsychiatric Inventory-Depression	8	1877	-.291	-.462--098	.0036	115.445	<.001	93.937
Depression measures excluding Geriatric Depression Scale, Cornell Scale for Depression in Dementia & Neuropsychiatric Inventory-Depression	15	1612	-.287	-.350--221	<.0001	29.273	.010	52.174
Anxiety	13	2675	-.148	-.194--102	<.0001	15.224	.229	21.178
Neuropsychiatric Inventory-Anxiety	8	1877	-.168	-.232--101	<.0001	12.173	.095	42.495
Neuropsychiatric symptoms/BPSD	53	10716	-.354	-.406--301	<.0001	448.528	<.001	88.407
Neuropsychiatric Inventory	39	8635	-.363	-.425--296	<.0001	396.376	<.001	90.413

Neuropsychiatric symptom measures excluding Neuropsychiatric Inventory	15	2209	-.364	-.430--.294	<.0001	43.166	<.001	67.567
Better self-rated health	6	1031	.232	.140-.320	<.0001	9.258	.099	45.992
Presence of co-morbid conditions	17	2873	-.107	-.154--.061	<.0001	22.593	.125	29.182
Cared for by spouse (vs. other carer type)*	10	2139	.117	.053-.180	.0004	17.386	.043	48.234
Being married	14	2998	.117	.073-.161	<.0001	17.980	.158	27.699
Living alone	12	2271	-.120	-.176--.063	<.0001	18.067	.080	39.114

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data. Those asterisked are unchanged from previous analyses.

**Supplementary Table 20b: Factors associated with informant ratings of quality of life for the person with dementia made by family carers only – factors pertaining to the carer**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Older age	12	2158	-.059	-.111--.006	.0303	14.758	.194	25.464
Female gender	14	2466	.040	-.014-.093	.1498	20.256	.089	35.821
Higher level of education	11	1676	.077	.018-.134	.0102	13.080	.219	23.550
More time spent caring (community only)*	5	681	-.137	-.267--.002	.0462	11.630	.020	65.606
Depression*	14	2694	-.255	-.338--.169	<.0001	64.440	<.001	79.826
Center for Epidemiologic Studies Depression Scale*	6	905	-.299	-.458--.122	.0012	32.272	<.001	84.507
Geriatric Depression Scale*	5	591	-.362	-.496--.211	<.0001	14.617	.006	72.634
Depression measures excluding Geriatric Depression Scale & Center for Epidemiologic Studies Depression Scale*	6	1449	-.202	-.313--.085	.0008	22.218	<.001	77.496
Distress at NPS symptoms	10	1645	-.319	-.388--.246	<.0001	21.052	.012	57.248
Burden or stress	23	4207	-.328	-.406--.246	<.0001	176.692	<.001	87.549
Zarit Burden Interview	18	3275	-.343	-.433--.246	<.0001	148.656	<.001	88.564
Burden or stress measures excluding Zarit Burden Interview	6	1003	-.280	-.428--.118	.0009	29.333	<.001	82.954
Poorer mental health (GHQ)*	6	715	-.242	-.311--.170	<.0001	3.990	.551	0
Carer quality of life (self-rated)	7	1409	.315	.201-.421	<.0001	27.700	<.001	78.339

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data. Those asterisked are unchanged from previous analyses.

**Supplementary Table 20c: Factors associated with informant ratings of quality of life for the person with dementia made by health care professionals only – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Older age	18	3966	-.050	-.103-.005	.0726	43.490	<.001	60.910
Female gender	18	4155	.021	-.019-.062	.3022	25.920	.076	34.413
Higher level of education	5	928	-.008	-.116-.101	.8868	9.172	.057	56.388
More advanced dementia	13	3043	-.333	-.427--.231	<.0001	99.998	<.001	88.000
Clinical Dementia Rating	5	2053	-.327	-.487--.146	.0006	71.904	<.001	94.437
Advanced dementia measures excluding Clinical Dementia Rating	8	990	-.338	-.448--.217	<.0001	28.062	<.001	75.055
Higher scores on cognitive screening measures	25	3237	.244	.180-.306	<.0001	81.605	<.001	70.590
Mini-Mental State Examination	25	3228	.247	.182-.309	<.0001	84.364	<.001	71.552
Taking medication	11	3108	-.049	-.085--.012	.0085	10.092	.432	.908
Acetylcholinesterase inhibitors	5	766	-.105	-.211-.003	.0556	8.699	.069	54.018
Psychotropics	8	2503	-.051	-.109-.007	.0852	12.423	.087	43.655
Antidepressants	5	1076	-.126	-.244--.004	.0432	11.384	.023	64.864
Longer duration of care home stay	10	1804	-.088	-.150--.025	.0062	14.138	.117	36.344
Degree to which residential care is person-centred	6	1814	.154	.049-.256	.0042	13.718	.018	63.551
Special dementia unit (vs. other residential facility)	5	2372	.120	.071-.168	<.0001	5.528	.237	27.641
Better functional ability	29	6176	.368	.277-.452	<.0001	406	<.001	93.109
Basic activities of daily living	25	4654	.363	.268-.451	<.0001	297.994	<.001	91.946
Barthel Index	12	2329	.425	.264-.563	<.0001	207.202	<.001	94.691
Katz Index of Independence in Activities of Daily Living	5	474	.371	.290-.447	<.0001	2.532	.639	0
Basic activities of daily living measures excluding Barthel Index, Dependence Scale, Katz Index of Independence in Activities of Daily Living & Physical Self-Maintenance Scale	7	1345	.280	.166-.386	<.0001	27.152	<.001	77.903
Depression	19	3176	-.310	-.400--.214	<.0001	133.102	<.001	86.476
Cornell Scale for Depression in Dementia	11	2506	-.262	-.350--.168	<.0001	52.375	<.001	80.907
Neuropsychiatric Inventory-Depression	7	489	-.304	-.457--.133	.0006	20.521	.002	70.762
Anxiety	9	761	-.215	-.314--.110	<.0001	14.794	.063	45.923
Neuropsychiatric Inventory-Anxiety	7	489	-.199	-.336--.053	.0078	13.914	.031	56.877
Neuropsychiatric symptoms/BPSD	24	3714	-.331	-.402--.255	<.0001	131.451	<.001	82.503
Cohen-Mansfield Agitation Inventory	6	776	-.201	-.284--.115	<.0001	6.847	.232	26.980
Neuropsychiatric Inventory	12	1794	-.311	-.404--.211	<.0001	43.189	<.001	74.531
Neuropsychiatric symptom measures excluding Neuropsychiatric Inventory & Cohen-Mansfield Agitation Inventory	9	1472	-.371	-.497--.230	<.0001	69.911	<.001	88.557
Pain	9	2443	-.255	-.403--.095	.0021	115.216	<.001	93.057
Presence of co-morbid conditions	8	1781	-.099	-.152--.046	.0003	8.528	.288	17.914
Being married	5	917	.055	-.037-.146	.2428	6.578	.160	39.188

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data.

**Supplementary Table 20d: Factors associated with informant ratings of quality of life for the person with dementia made by mixed groups of informants including both family carers and health care professionals – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Older age	5	1719	-.039	.014--.092	.1493	4.829	.305	17.170
Higher scores on cognitive screening measures	5	1246	.225	.016-.414	.0350	52.030	<.001	92.312
Better functional ability	9	2515	.339	.272-.403	<.0001	26.525	.001	69.840
Basic activities of daily living*	8	2324	.330	.258-.399	<.0001	24.499	.001	71.427
Neuropsychiatric symptoms/BPSD	5	1345	-.157	-.301--.006	.0415	29.669	<.001	86.518

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data. Those asterisked are unchanged from previous analyses.

**Supplementary Table 20e: Factors associated with informant ratings of quality of life for the person with dementia made using the Quality of Life-Alzheimer's Disease (QoL-AD) - factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Older age	31	6501	-.011	-.047-.025	.5574	57.365	.002	47.703
Female gender	25	5286	-.034	-.082-.014	.1658	65.922	<.001	63.593
Higher level of education	19	3371	.061	.027-.095	.0004	17.493	.489	0
Longer disease duration	6	1137	-.063	-.132-.006	.0754	6.184	.289	19.145
More advanced dementia	18	3466	-.249	-.308-.188	<.0001	55.453	<.001	69.344
Clinical Dementia Rating	12	2555	-.210	-.285-.134	<.0001	39.043	<.001	71.826
Advanced dementia measures excluding Clinical Dementia Rating	6	911	-.330	-.387-.270	<.0001	4.064	.540	0
Higher scores on cognitive screening measures	43	8818	.165	.120-.210	<.0001	164.917	<.001	74.533
Mini-Mental State Examination	38	8113	.164	.116-.210	<.0001	142.608	<.001	74.055
Cognitive screening measures excluding Dementia Rating Scale & Mini-Mental State Examination	8	3165	.127	.017-.235	.0242	30.856	<.001	77.314
Taking medication	11	4033	-.047	-.079--.016	.0033	10.179	.425	1.754
Acetylcholinesterase inhibitors	5	1116	-.054	-.135-.028	.1947	6.465	.167	38.125
Polypharmacy	6	1509	-.072	-.129--.014	.0148	6.109	.296	18.148
Psychotropics	5	2437	-.032	-.072-.008	.1128	1.317	.859	0
Better functional ability	44	9961	.303	.255-.349	<.0001	248.081	<.001	82.667
Basic activities of daily living	27	7002	.317	.255-.376	<.0001	169.842	<.001	84.692
Barthel Index	10	1885	.395	.326-.461	<.0001	22.776	.007	60.485
Katz Index of Independence in Activities of Daily Living	9	2023	.286	.196-.370	<.0001	31.683	<.001	74.750
Instrumental activities of daily living	15	1997	.320	.212-.421	<.0001	85.817	<.001	83.686
Lawton's Instrumental Activities of Daily Living	10	1567	.295	.158-.421	<.0001	66.351	<.001	86.436
Instrumental activities of daily living measures excluding Lawton's Instrumental Activities of Daily Living	6	540	.412	.319-.498	<.0001	7.164	.209	30.203
Better self-rated memory functioning	5	442	.213	.020-.390	.0308	16.079	.003	75.122
Depression	43	9336	-.301	-.353--.248	<.0001	296.306	<.001	85.825
Cornell Scale for Depression in Dementia	20	5720	-.339	-.399--.275	<.0001	118.105	<.001	83.913
Geriatric Depression Scale (all versions)	12	1475	-.280	-.383--.170	<.0001	48.505	<.001	77.322
Geriatric Depression Scale-30	8	983	-.314	-.453--.161	.0001	37.641	<.001	81.403
Neuropsychiatric Inventory-Depression	8	1881	-.257	-.431--.064	.0096	107.576	<.001	93.493

Depression measures excluding Geriatric Depression Scale, Cornell Scale for Depression in Dementia & Neuropsychiatric Inventory-Depression	10	956	-.301	-.372--.226	<.0001	13.416	.145	32.914
Anxiety	14	2884	-.183	-.254--.111	<.0001	41.720	<.001	68.840
Anxiety measures excluding Neuropsychiatric Inventory-Anxiety	7	1188	-.196	-.305--.082	.0008	20.326	.002	70.481
Neuropsychiatric symptoms/BPSD	41	9369	-.332	-.392--.268	<.0001	405.962	<.001	90.147
Neuropsychiatric Inventory	32	8095	-.330	-.400--.257	<.0001	353.242	<.001	91.224
Neuropsychiatric symptom measures excluding Neuropsychiatric Inventory & Cohen-Mansfield Agitation Inventory	9	1126	-.401	-.513--.275	<.0001	44.122	<.001	81.869
Pain	6	2764	-.049	-.086--.012	.0100	2.694	.747	0
Presence of co-morbid conditions	13	2489	-.118	-.167--.068	<.0001	16.284	.179	26.310
Cared for by spouse (vs. other carer type)	7	1835	.115	.021-.206	.0162	21.684	.001	72.330
Being married	10	2020	.132	.082-.182	<.0001	11.222	.261	19.797
Living alone	7	1657	-.158	-.240--.073	.0003	15.874	.014	62.202

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data.

**Supplementary Table 20f: Factors associated with informant ratings of quality of life for the person with dementia made using the Quality of Life-Alzheimer's Disease (QoL-AD) - factors pertaining to the carer**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Older age	9	1845	-.014	-.115-.088	.7905	32.842	<.001	75.641
Female gender	12	2282	.045	-.012-.101	.1206	17.642	.090	37.650
Higher level of education	8	1357	.072	.001-.142	.0461	10.469	.164	33.136
Depression	10	2003	-.254	-.338--.166	<.0001	34.194	<.001	73.680
Distress at NPS symptoms	8	1097	-.302	-.373--.227	<.0001	11.291	.126	38.003
Burden or stress	19	3544	-.327	-.427--.220	<.0001	208.780	<.001	91.379
Zarit Burden Interview	14	2592	-.341	-.450--.223	<.0001	132.637	<.001	90.199
Burden or stress measures excluding Zarit Burden Interview	5	952	-.286	-.529-.001	.0506	72.363	<.001	94.472
Poorer mental health (GHQ)	6	742	-.286	-.392--.172	<.0001	8.442	.133	40.774
Carer quality of life (self-rated)	7	1408	.323	.212-.427	<.0001	26.792	<.001	77.605

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data.

**Supplementary Table 20g: Factors associated with informant ratings of quality of life for the person with dementia made using the Alzheimer's Disease Related Quality of Life (ADRQL) – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Older age	12	2495	-.049	-.097-.001	.0443	14.699	.197	25.164
Female gender	8	2085	.057	.014-.100	.0096	6.141	.523	0
More advanced dementia	9	1596	-.383	-.487-.267	<.0001	46.370	<.001	82.747
Higher scores on cognitive screening measures	14	2508	.295	.223-.363	<.0001	43.364	<.001	70.021
Mini-Mental State Examination	14	2510	.295	.223-.365	<.0001	45.213	<.001	71.247
Taking medication	6	1190	-.027	-.086-.032	.3690	5.295	.381	5.569
Better functional ability	14	4069	.342	.233-.442	<.0001	161.125	<.001	91.932
Basic activities of daily living	9	1339	.361	.267-.448	<.0001	26.861	.001	70.217
Katz Index of Independence in Activities of Daily Living	7	989	.344	.274-.410	<.0001	8.170	.226	26.558
Depression	10	1320	-.328	-.441--.204	<.0001	50.806	<.001	82.285
Cornell Scale for Depression in Dementia	9	1186	-.353	-.470--.225	<.0001	44.614	<.001	82.068
Neuropsychiatric symptoms/BPSD	14	2618	-.379	-.473--.276	<.0001	110.040	<.001	88.186
Neuropsychiatric Inventory	8	1589	-.421	-.536--.291	<.0001	59.180	<.001	88.172
Presence of co-morbid conditions	7	929	-.006	-.071-.059	.8511	6.011	.422	.185

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data.

**Supplementary Table 20h: Factors associated with informant ratings of quality of life for the person with dementia made using the EQ-5D – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Older age	7	2051	.018	-.065-.101	.6721	19.691	.003	69.529
Female gender	6	1902	-.057	-.101-.011	.0140	2.363	.797	0
Higher scores on cognitive screening measures	14	2839	.196	.100-.289	.0001	79.568	<.001	83.662
Mini-Mental State Examination	13	2429	.215	.119-.308	<.0001	63.367	<.001	81.063
Better functional ability	18	3551	.531	.409-.634	<.0001	342.597	<.001	95.038
Basic activities of daily living	11	1981	.613	.481-.718	<.0001	152.400	<.001	93.438
Barthel Index	6	1448	.723	.646-.785	<.0001	25.778	<.001	80.603
Instrumental activities of daily living	5	636	.459	.330-.572	<.0001	11.179	.025	64.220
Depression	8	2074	-.167	-.260--.070	.0007	29.949	<.001	76.627
Neuropsychiatric symptoms/BPSD	8	1624	-.293	-.420--.154	.0001	54.199	<.001	87.085
Neuropsychiatric Inventory*	8	1624	-.293	-.420--.154	.0001	54.199	<.001	87.085
Presence of co-morbid conditions	6	1677	-.116	-.209--.021	.0164	15.527	.008	67.798

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data. Those asterisked are unchanged from previous analyses.



**Supplementary Table 20i: Factors associated with informant ratings of quality of life for the person with dementia made using the EQ-5D Visual Analogue Scale – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Older age	6	1689	-.020	-.118-.078	.6867	16.603	.005	69.884
Female gender	5	1211	-.056	-.137-.027	.1878	6.622	.157	39.600
Higher scores on cognitive screening measures	7	1763	.111	-.029-.246	.1204	46.034	<.001	86.966
Mini-Mental State Examination	6	1356	.135	-.037-.300	.1233	43.564	<.001	88.523
Better functional ability	6	1857	.285	.201-.365	<.0001	16.183	.006	69.104
Depression	6	1740	-.178	-.279-.074	.0009	20.593	.001	75.720

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data.

**Supplementary Table 20j: Factors associated with informant ratings of quality of life for the person with dementia made using the Quality of Life in Late Stage Dementia Scale (QUALID) – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Older age	6	1765	-.022	-.094-.050	.5496	9.849	.080	49.234
Female gender	7	2057	-.011	-.054-.033	.6271	5.064	.536	0
More advanced dementia	5	1537	-.245	-.348--.135	<.0001	15.096	.005	73.504
Higher scores on cognitive screening measures	6	1213	.091	-.084-.261	.3093	40.592	<.001	87.682
Mini-Mental State Examination*	6	1213	.091	-.084-.261	.3093	40.592	<.001	87.682
Taking medication	5	1319	-.087	-.169--.004	.0392	7.165	.127	44.176
Better functional ability	9	2355	.203	.011-.381	.0388	165.249	<.001	95.159
Basic activities of daily living*	9	2355	.203	.011-.381	.0388	165.249	<.001	95.159
Depression	6	1058	-.526	-.664--.352	<.0001	48.065	<.001	89.597
Neuropsychiatric symptoms/BPSD	8	1651	-.395	-.535--.234	<.0001	77.089	<.001	90.920
Neuropsychiatric Inventory	5	1063	-.352	-.514--.165	.0003	27.454	<.001	85.430

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data. Those asterisked are unchanged from previous analyses.

**Supplementary Table 20k: Factors associated with informant ratings of quality of life for the person with dementia made using the Health Utility Index (HUI) 2 and/or 3 – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Higher scores on cognitive screening measures	6	3336	.208	.025-.378	.0264	89.599	<.001	94.420
Mini-Mental State Examination	5	2920	.240	-.032-.479	.0834	112.324	<.001	96.439
Better functional ability	6	3338	.375	.158-.558	.0010	145.386	<.001	96.561
Basic activities of daily living	5	2917	.385	.111-.604	.0070	126.927	<.001	96.849
Presence of co-morbid conditions	5	1337	-.135	-.209--.060	.0005	7.097	.131	43.637

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data.

**Supplementary Table 20l: Factors associated with informant ratings of quality of life for the person with dementia made using dementia-specific quality of life measures – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Older age	49	10112	-.029	-.057--.001	.0428	85.287	.001	43.719
Female gender	37	8320	.000	-.036-.036	.9987	88.710	<.001	59.418
White ethnicity	5	906	.066	.000-.131	.0490	2.029	.730	0
Higher level of education	24	3930	.042	.007-.077	.0187	26.544	.276	13.350
Underweight*	5	1755	-.065	-.129--.002	.0447	7.119	.130	43.809
Alzheimer's (vs. other dementia subtypes)	8	2624	.067	-.010-.143	.0885	23.568	.001	70.298
Longer disease duration	8	1356	-.070	-.123--.016	.0107	6.674	.464	0
More advanced dementia	33	6532	-.281	-.336--.225	<.0001	176.330	<.001	81.852
Clinical Dementia Rating	19	4715	-.261	-.337--.180	<.0001	142.262	<.001	87.347
Global Deterioration Scale	6	898	-.283	-.379--.182	<.0001	12.740	.026	60.755
Advanced dementia measures excluding Clinical Dementia Rating & Global Deterioration Scale	8	919	-.337	-.429--.238	<.0001	17.240	.016	59.396
Higher scores on cognitive screening measures	68	12491	.190	.152-.228	<.0001	285.747	<.001	76.553
Mini-Mental State Examination	59	10906	.183	.143-.222	<.0001	227.086	<.001	74.459
Cognitive screening measures excluding Dementia Rating Scale & Mini-Mental State Examination	17	5004	.211	.120-.299	<.0001	132.416	<.001	87.917
Taking medication	19	5737	-.057	-.086--.028	.0001	20.097	.327	10.434
Acetylcholinesterase inhibitors	9	1684	-.093	-.165--.020	.0122	16.171	.040	50.527
Polypharmacy	8	1776	-.058	-.104--.011	.0154	6.564	.476	0
Psychotropics	12	4043	-.066	-.112--.018	.0064	19.261	.057	42.889
Antipsychotics*	5	1244	-.171	-.290--.047	.0069	15.322	.004	73.893
Antidepressants*	6	1221	-.098	-.195--.000	.0492	11.134	.049	55.092
Anxiolytics *	7	1617	-.056	-.149-.038	.2459	17.494	.008	65.702
Longer duration of care home stay	11	2217	-.103	-.164--.041	.0011	18.521	.047	46.008
Degree to which residential care is person-centred*	6	1814	.155	.049-.257	.0042	13.729	.017	63.581
Special dementia unit (vs. other residential facility)*	5	2366	.114	.069-.158	<.0001	4.753	.314	15.838
Better functional ability	70	16702	.283	.246-.320	<.0001	414.271	<.001	83.344
Alzheimer's Disease Co-operative Study-Activities of Daily Living Inventory	6	1176	.354	.225-.470	<.0001	22.915	<.001	78.181

Disability Assessment for Dementia	5	3172	.214	.067-.353	.0047	43.709	<.001	90.849
Basic activities of daily living	48	11109	.294	.255-.333	<.0001	206.491	<.001	77.239
Barthel Index	13	2424	.331	.251-.406	<.0001	50.285	<.001	76.136
Dependence Scale	5	2967	.217	.068-.356	.0045	36.368	<.001	89.001
Katz Index of Independence in Activities of Daily Living	14	2840	.295	.239-.348	<.0001	29.224	.006	55.515
Physical Self-Maintenance Scale	10	1716	.321	.237-.399	<.0001	25.638	.002	64.896
Basic activities of daily living measures excluding Barthel Index, Dependence Scale, Katz Index of Independence in Activities of Daily Living & Physical Self-Maintenance Scale	10	1777	.292	.195-.384	<.0001	38.905	<.001	76.867
Instrumental activities of daily living	18	2610	.337	.244-.423	<.0001	103.639	<.001	83.597
Lawton's Instrumental Activities of Daily Living	12	2089	.303	.190-.409	<.0001	77.671	<.001	85.838
Instrumental activities of daily living measures excluding Lawton's Instrumental Activities of Daily Living	7	63	.433	.347-.511	<.0001	8.967	.175	33.091
More awareness*	5	557	.275	.037-.484	.0241	31.084	<.001	87.132
Better self-rated memory functioning	7	710	.170	.030-.304	.0177	20.382	.002	70.562
Depression	59	11196	-.321	-.369--.271	<.0001	442.334	<.001	86.888
Cornell Scale for Depression in Dementia	27	6439	-.358	-.415--.299	<.0001	165.413	<.001	84.282
Geriatric Depression Scale (all versions)	13	1509	-.284	-.383--.179	<.0001	49.013	<.001	75.517
Geriatric Depression Scale-30	8	983	-.314	-.453--.161	<.0001	37.641	<.001	81.403
Neuropsychiatric Inventory-Depression	11	2087	-.259	-.404--.102	.0015	113.249	<.001	91.170
Depression measures excluding Geriatric Depression Scale, Cornell Scale for Depression in Dementia & Neuropsychiatric Inventory-Depression	17	1998	-.314	-.408--.213	<.0001	88.394	<.001	81.899
Anxiety	17	3090	-.178	-.243--.112	<.0001	44.849	<.001	64.324
Neuropsychiatric Inventory-Anxiety	11	2087	-.150	-.211--.088	<.0001	15.735	.107	36.447
Anxiety measures excluding Neuropsychiatric Inventory-Anxiety	7	1188	-.219	-.316--.118	<.0001	16.338	.012	63.275
Neuropsychiatric symptoms/BPSD	66	13851	-.335	-.383--.285	<.0001	625.716	<.001	89.612
Cohen-Mansfield Agitation Inventory	9	1332	-.150	-.213--.085	<.0001	10.839	.211	26.191
Neuropsychiatric Inventory	43	10216	-.348	-.409--.283	<.0001	495.411	<.001	91.522
Neuropsychiatric symptom measures excluding Neuropsychiatric Inventory & Cohen-Mansfield Agitation Inventory	20	3079	-.353	-.425-.276	<.0001	103.081	<.001	81.568
Pain*	13	4048	-.203	-.307--.095	.0003	124.860	<.001	90.389
Presence of co-morbid conditions	21	3888	-.072	-.111--.034	.0002	26.380	.154	24.185
Cared for by spouse (vs. other carer type)	9	2068	.121	.046-.194	.0016	20.652	.008	62.263
Being married	13	2407	.122	.076-.168	<.0001	14.966	.243	19.821
Living alone	10	2066	-.141	-.206--.074	<.0001	18.676	.028	51.811

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data. Those asterisked are unchanged from previous analyses.

**Supplementary Table 20m: Factors associated with informant ratings of quality of life for the person with dementia made using dementia-specific quality of life measures – factors pertaining to the carer**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Older age	13	2318	-.013	-.088-.061	.7257	33.985	.001	64.691
Female gender	14	3066	.054	.006-.102	.0283	21.214	.090	35.689
Higher level of education	11	2231	.087	.035-.138	.0010	13.164	.215	24.034
More time spent caring (community only)*	5	681	-.137	-.267--.002	.0462	11.630	.020	65.606
Depression	12	2215	-.266	-.342--.187	<.0001	37.599	<.001	70.744
Center for Epidemiologic Studies Depression Scale	5	865	-.274	-.439--.091	.0037	26.446	<.001	84.875
Depression measures excluding Geriatric Depression Scale & Center for Epidemiologic Studies Depression Scale	5	1041	-.236	-.293--.178	<.0001	1.918	.751	0
Distress at NPS symptoms	7	1027	-.331	-.419--.236	<.0001	14.753	.022	59.330
Burden or stress	22	3827	-.336	-.425--.239	<.0001	211.743	<.001	90.082
Zarit Burden Interview	17	2875	-.351	-.445--.250	<.0001	135.079	<.001	88.155
Poorer mental health (GHQ)*	6	742	-.286	-.392--.172	<.0001	8.442	.133	40.774
Carer quality of life (self-rated)	8	1508	.317	.217-.410	<.0001	26.916	<.001	73.993

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data. Those asterisked are unchanged from previous analyses.

**Supplementary Table 20n: Factors associated with informant ratings of quality of life for the person with dementia made using dementia-specific quality of life measures by family carers – factors pertaining to the person with dementia factors**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Older age	33	5786	-.030	-.064-.004	.0789	48.532	.031	34.064
Female gender	26	5059	-.025	-.072-.023	.3037	63.531	<.001	60.649
Higher level of education	22	3679	.052	.019-.084	.0018	18.091	.643	0
Longer disease duration	6	1133	-.068	-.135-.001	.0520	5.966	.310	16.194
More advanced dementia	18	2754	-.263	-.327--.196	<.0001	55.213	<.001	69.210
Clinical Dementia Rating	10	1632	-.225	-.322--.124	<.0001	36.719	<.001	75.490
Global Deterioration Scale	5	767	-.288	-.388--.181	<.0001	9.593	.048	58.301
Higher scores on cognitive screening measures	46	8976	.161	.117-.204	<.0001	163.119	<.001	72.413
Mini-Mental State Examination	39	7896	.160	.112-.206	<.0001	140.566	<.001	72.966
Cognitive screening measures excluding Dementia Rating Scale & Mini-Mental State Examination	12	987	.171	.069-.269	.0010	73.164	<.001	84.965
Taking medication	12	3320	-.062	-.096--.028	.0003	10.969	.446	0
Acetylcholinesterase inhibitors	6	1109	-.070	-.150-.011	.0904	7.653	.176	34.667
Polypharmacy	7	1594	-.066	-.122--.009	.0232	7.360	.289	18.476
Psychotropics	6	1731	-.093	-.163--.022	.0099	6.640	.249	24.696
Better functional ability	44	9500	.275	.222-.327	<.0001	283.292	<.001	84.821
Alzheimer's Disease Co-operative Study-Activities of Daily Living Inventory	5	1179	.344	.213-.462	<.0001	22.319	<.001	82.078
Disability Assessment for Dementia	5	3172	.214	.067-.353	.0047	43.709	<.001	90.849
Basic activities of daily living	25	5531	.292	.229-.353	<.0001	113.668	<.001	78.886
Barthel Index	6	587	.388	.296-.472	<.0001	7.489	.187	33.233

Katz Index of Independence in Activities of Daily Living	7	1434	.289	.191-.382	<.0001	20.106	.003	70.158
Physical Self-Maintenance Scale	7	844	.296	.172-.411	<.0001	20.564	.002	70.823
Basic activities of daily living measures excluding Barthel Index, Katz Index of Independence in Activities of Daily Living & Physical Self-Maintenance Scale	5	543	.271	.135-.397	.0001	9.632	.047	58.472
Instrumental activities of daily living	18	2610	.335	.242-.422	<.0001	103.328	<.001	83.548
Lawton's Instrumental Activities of Daily Living*	12	2089	.282	.171-.387	<.0001	73.362	<.001	85.006
Instrumental activities of daily living measures excluding Lawton's Instrumental Activities of Daily Living	7	632	.426	.335-.510	<.0001	9.893	.129	39.351
More awareness*	5	557	.275	.037-.484	.0241	31.084	<.001	87.132
Better self-rated memory functioning*	6	515	.177	-.000-.343	.0503	19.765	.001	74.703
Depression	40	7346	-.319	-.377--.258	<.0001	282.918	<.001	86.215
Cornell Scale for Depression in Dementia	15	3371	-.394	-.468--.314	<.0001	80.048	<.001	82.511
Geriatric Depression Scale (all versions)	12	1475	-.278	-.381--.168	<.0001	47.937	<.001	77.053
Geriatric Depression Scale-30	8	983	-.320	-.458--.166	<.0001	37.958	<.001	81.558
Neuropsychiatric Inventory-Depression	6	1669	-.267	-.473--.033	.0258	105.110	<.001	95.243
Depression measures excluding Geriatric Depression Scale, Cornell Scale for Depression in Dementia & Neuropsychiatric Inventory-Depression	12	1240	-.289	-.366--.208	<.0001	23.239	.016	52.665
Anxiety	12	2621	-.183	-.260--.104	<.0001	39.398	<.001	72.080
Neuropsychiatric Inventory-Anxiety	7	1836	-.168	-.237--.097	<.0001	11.997	.062	49.986
Anxiety measures excluding Neuropsychiatric Inventory-Anxiety	6	964	-.190	-.318--.055	.0061	18.114	.003	72.397
Neuropsychiatric symptoms/BPSD	42	9113	-.368	-.430--.304	<.0001	443.809	<.001	90.762
Neuropsychiatric Inventory	31	7638	-.383	-.456--.304	<.0001	403.246	<.001	92.560
Neuropsychiatric symptom measures excluding Neuropsychiatric Inventory	13	1692	-.350	-.435--.258	<.0001	48.078	<.001	78.041
Presence of co-morbid conditions	13	2208	-.097	-.149--.044	.0003	16.661	.163	27.974
Cared for by spouse (vs. other carer type)*	9	2068	.121	.046-.194	.0016	20.652	.008	62.263
Being married	11	2162	.126	.071-.181	<.0001	15.335	.120	34.789
Living alone	9	1944	-.125	-.190--.060	.0002	15.001	.059	46.670

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data. Those asterisked are unchanged from previous analyses.

**Supplementary Table 20o: Factors associated with informant ratings of quality of life for the person with dementia made using dementia-specific quality of life measures by family carers only – factors pertaining to the carer factors**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Older age	10	1976	-.037	-.121-.047	.3861	27.028	.001	66.701
Female gender	13	2443	.037	-.019-.093	.1896	20.272	.062	40.806
Higher level of education	10	1608	.080	.018-.142	.0120	12.749	.147	29.404
More time spent caring (community only)*	5	681	-.137	-.267--.002	.0462	11.630	.020	65.606
Depression*	12	2215	-.266	-.342--.187	<.0001	37.599	<.001	70.744
Center for Epidemiologic Studies Depression Scale*	5	865	-.274	-.439--.091	.0037	26.446	<.001	84.875
Depression measures excluding Geriatric Depression Scale & Center for Epidemiologic Studies Depression Scale*	5	1041	-.236	-.293--.178	<.0001	1.918	.751	0
Distress at NPS symptoms	7	1007	-.330	-.434--.216	<.0001	20.691	.002	71.002
Burden or stress	20	3574	-.341	-.437--.238	<.0001	206.746	<.001	90.810
Zarit Burden Interview	17	2866	-.349	-.443--.247	<.0001	135.117	<.001	88.158
Poorer mental health (GHQ)*	6	742	-.286	-.392--.172	<.0001	8.442	.133	40.774
Carer quality of life (self-rated)	7	1408	.318	.207-.421	<.0001	26.485	<.001	77.346

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data. Those asterisked are unchanged from previous analyses.

**Supplementary Table 20p: Factors associated with informant ratings of quality of life for the person with dementia made using dementia-specific quality of life measures by health care professionals only – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Older age	14	3205	-.062	-.111--.012	.0152	22.767	.045	42.900
Female gender	14	3394	.027	-.018-.072	.2415	20.523	.083	36.657
More advanced dementia	13	3043	-.333	-.427--.231	<.0001	99.998	<.001	88.000
Clinical Dementia Rating	5	2053	-.327	-.487--.146	.0006	71.904	<.001	94.437
Advanced dementia measures excluding Clinical Dementia Rating	8	990	-.338	-.448--.217	<.0001	28.062	<.001	75.055
Higher scores on cognitive screening measures	23	3047	.239	.172-.305	<.0001	78.324	<.001	71.912
Mini-Mental State Examination	23	3038	.242	.173-.309	<.0001	81.160	<.001	72.893
Taking medication	11	3108	-.049	-.085--.012	.0085	10.092	.432	.908
Acetylcholinesterase inhibitors	5	766	-.105	-.211-.003	.0556	8.699	.069	54.018
Psychotropics	8	2503	-.051	-.109-.007	.0852	12.423	.087	43.655
Antidepressants	5	1076	-.126	-.244--.004	.0432	11.384	.023	64.864
Longer duration of care home stay	9	1709	-.085	-.153--.016	.0152	13.936	.083	42.596
Degree to which residential care is person-centred*	6	1814	.154	.049-.256	.0042	13.718	.018	63.551
Special dementia unit (vs. other residential facility)*	5	2372	.120	.071-.168	<.0001	5.528	.237	27.641
Better functional ability	23	5328	.292	.234-.349	<.0001	97.626	<.001	77.465
Basic activities of daily living	21	3894	.303	.252-.353	<.0001	54.478	<.001	63.288
Barthel Index	10	1759	.336	.258-.410	<.0001	27.120	.001	66.814
Basic activities of daily living measures excluding Barthel Index, Dependence Scale, Katz Index of Independence in Activities of Daily Living & Physical Self-Maintenance Scale	6	1249	.249	.137-.354	<.0001	19.768	<.001	74.707
Depression	18	3135	-.315	-.407--.216	<.0001	132.695	<.001	87.189
Cornell Scale for Depression in Dementia	11	2506	-.262	-.350--.168	<.0001	52.375	<.001	80.907
Neuropsychiatric Inventory-Depression	5	424	-.318	-.508--.099	.0049	20.146	<.001	80.145
Anxiety	8	720	-.213	-.322--.098	.0003	14.760	.039	52.575
Neuropsychiatric Inventory-Anxiety	6	448	-.194	-.350--.026	.0236	13.790	.017	63.743
Neuropsychiatric symptoms/BPSD	23	3673	-.326	-.399--.249	<.0001	130.165	<.001	83.098
Neuropsychiatric Inventory	11	1753	-.300	-.398--.196	<.0001	41.346	<.001	75.814
Neuropsychiatric symptom measures excluding Neuropsychiatric Inventory & Cohen-Mansfield Agitation Inventory	14	2288	-.327	-.426--.221	<.0001	93.038	<.001	86.027
Pain*	9	2443	-.255	-.403--.095	.0021	115.216	<.001	93.057
Presence of co-morbid conditions	6	987	-.065	-.129-.000	.0508	5.193	.393	3.723

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data. Those asterisked are unchanged from previous analyses.

**Supplementary Table 20q: Factors associated with informant ratings of quality of life for the person with dementia made using dementia-specific quality of life measures by mixed groups of carers including both family carers and health care professionals – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Older age	5	1717	.040	-.013-.092	.1369	4.748	.314	15.746
Better functional ability	9	2513	.311	.224-.394	<.0001	43.255	<.001	81.505
Basic activities of daily living*	8	2322	.298	.206-.385	<.0001	38.411	<.001	81.776
Neuropsychiatric symptoms/BPSD	6	1536	-.209	-.362--.046	.0126	51.817	<.001	90.351

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data. Those asterisked are unchanged from previous analyses.

**Supplementary Table 20r: Factors associated with informant ratings of quality of life for the person with dementia made using health-related quality of life measures – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Older age	13	3160	-.050	-.118-.019	.1538	38.056	<.001	68.468
Female gender	11	2533	-.031	-.080-.018	.2195	13.666	.189	26.826
Higher level of education	5	1764	.024	-.023-.071	.3165	1.726	.786	0
More advanced dementia	8	2257	-.424	-.624--.171	.0015	284.268	<.001	97.538
Clinical Dementia Rating	7	1849	-.375	-.608--.083	.0131	237.791	<.001	97.477
Higher scores on cognitive screening measures	22	5828	.154	.078-.228	<.0001	135.888	<.001	84.546
Mini-Mental State Examination	21	5438	.151	.060-.239	.0011	172.057	<.001	88.376
Better functional ability	23	6347	.452	.331-.558	<.0001	601.300	<.001	96.341
Basic activities of daily living	15	4710	.517	.345-.655	<.0001	572.421	<.001	97.554
Barthel Index	7	1475	.664	.546-.756	<.0001	53.911	<.001	88.871
Instrumental activities of daily living	6	711	.353	.164-.516	.0004	28.980	<.001	82.747
Depression	13	2715	-.240	-.320--.157	<.0001	50.222	<.001	76.106
Geriatric Depression Scale (all versions)	7	795	-.228	-.361--.086	.0018	18.927	.004	68.299
Geriatric Depression Scale-30	5	589	-.306	-.481--.107	.0030	15.260	.004	73.788
Neuropsychiatric symptoms/BPSD	12	4688	-.320	-.422--.209	<.0001	137.811	<.001	92.018
Neuropsychiatric Inventory	10	4234	-.290	-.400--.172	<.0001	106.540	<.001	91.552
Presence of co-morbid conditions	8	2393	-.114	-.189--.038	.0035	21.962	.003	68.127

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data.



**Supplementary Table 20s: Factors associated with informant ratings of quality of life for the person with dementia made using health-related quality of life measures – factors pertaining to the carer**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Burden or stress	5	1515	-.267	-.402--.121	.0004	32.132	<.001	87.551

**Supplementary Table 20t: Factors associated with informant ratings of quality of life for the person with dementia made using health-related quality of life measures by family carers only – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Older age	11	2157	-.060	-.142-.023	.1596	31.177	.001	67.925
Female gender	9	1530	-.005	-.065-.055	.8692	9.930	.270	19.434
More advanced dementia	7	2030	-.469	-.664--.215	.0006	237.789	<.001	97.477
Clinical Dementia Rating	6	1622	-.422	-.657--.112	.0090	202.966	<.001	97.537
Higher scores on cognitive screening measures	21	5300	.162	.081-.240	<.0001	128.786	<.001	84.470
Mini-Mental State Examination	20	4909	.158	.060-.253	.0016	168.151	<.001	88.701
Better functional ability	23	6347	.452	.331-.558	<.0001	601.300	<.001	96.341
Basic activities of daily living	13	3692	.475	.300-.619	<.0001	298.154	<.001	95.975
Barthel Index	7	1475	.664	.546-.756	<.0001	53.911	<.001	88.871
Instrumental activities of daily living*	6	711	.353	.164-.516	.0004	28.980	<.001	82.747
Depression	12	2190	-.267	-.343--.187	<.0001	34.677	<.001	68.278
Geriatric Depression Scale (all versions)	7	795	-.228	-.361--.086	.0018	18.927	.004	68.299
Geriatric Depression Scale-30	5	589	-.306	-.481--.107	.0030	15.260	.004	73.788
Neuropsychiatric symptoms/BPSD	12	4688	-.315	-.418--.204	<.0001	136.816	<.001	91.960
Neuropsychiatric Inventory	10	4234	-.285	-.394--.167	<.0001	105.366	<.001	91.458
Presence of co-morbid conditions	5	1074	-.139	-.228--.047	.0032	7.514	.111	46.769

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data. Those asterisked are unchanged from previous analyses.

**Supplementary Table 20u: Factors associated with informant ratings of quality of life for the person with dementia made using health-related quality of life measures by family carers only – factors pertaining to the carer**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Burden or stress*	5	1515	-.267	-.402-.121	.0004	32.132	<.001	87.551

Note: those asterisked are unchanged from previous analyses.

**Supplementary Table 20v: Factors associated with informant ratings of quality of life for the person with dementia made using generic quality of life measures – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Higher scores on cognitive screening measures	8	1045	.214	.019-.393	.0316	61.342	<.001	88.589
Mini-Mental State Examination	6	476	.204	.027-.368	.0240	17.476	.004	71.389
Better functional ability	6	818	.462	.252-.630	.0001	46.481	<.001	89.243
Depression	5	625	-.168	-.328-.002	.0529	11.694	.020	65.795
Geriatric Depression Scale (all versions)	5	625	-.288	-.477-.074	.0090	19.971	.001	79.971

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data.

**Supplementary Table 20w: Factors associated with informant ratings of quality of life for the person with dementia made using generic quality of life measures by family carers only – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Higher scores on cognitive screening measures	7	950	.186	-.031-.386	.0922	56.747	<.001	89.427
Mini-Mental State Examination	5	381	.157	-.053-.353	.1423	14.947	.005	73.238
Better functional ability	5	709	.360	.187-.512	.0001	17.072	.002	76.570
Depression*	5	625	-.168	-.328-.002	.0529	11.694	.020	65.795
Geriatric Depression Scale (all versions)*	5	625	-.288	-.477-.074	.0090	19.971	.001	79.971

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data. Those asterisked are unchanged from previous analyses.

**Supplementary Table 20x: Factors associated with informant ratings of quality of life for people with dementia diagnosed with Alzheimer’s disease – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran’s Q	p value (Cochran’s Q)	I <sup>2</sup>
Older age	20	3202	-.013	-.067-.041	.6383	38.724	.005	50.935
Female gender	15	2646	-.005	-.076-.066	.8896	40.263	<.001	65.229
Higher level of education	15	2364	.013	-.028-.053	.5462	6.844	.941	0
More advanced dementia	9	1325	-.217	-.328-.099	.0003	37.128	<.001	78.453
Clinical Dementia Rating	7	1073	-.195	-.326-.057	.0058	32.036	<.001	81.271
Higher scores on cognitive screening measures	31	6659	.157	.102-.211	<.0001	117.522	<.001	74.473
Mini-Mental State Examination	26	5640	.130	.073-.185	<.0001	80.492	<.001	68.941
Cognitive screening measures excluding Dementia Rating Scale & Mini-Mental State Examination	8	3416	.231	.105-.350	.0004	59.180	<.001	88.172
Taking medication	8	1401	-.087	-.149-.025	.0063	8.752	.271	20.019
Acetylcholinesterase inhibitors	5	1083	-.055	-.138-.028	.1909	6.409	.171	37.587
Better functional ability	28	6218	.289	.221-.354	<.0001	172.427	<.001	84.341
Basic activities of daily living	18	4845	.294	.214-.369	<.0001	107.216	<.001	84.144
Dependence Scale	6	3374	.263	.108-.407	.0011	71.667	<.001	93.023
Katz Index of Independence in Activities of Daily Living	5	877	.272	.138-.397	.0001	12.267	.015	67.391
Physical Self-Maintenance Scale	5	441	.343	.238-.441	<.0001	5.561	.234	28.069
Instrumental activities of daily living	11	1420	.334	.200-.456	<.0001	64.787	<.001	84.565
Lawton’s Instrumental Activities of Daily Living	8	1157	.317	.151-.466	.0003	51.773	<.001	86.479
Depression	26	3464	-.274	-.328--.218	<.0001	66.994	<.001	62.683
Cornell Scale for Depression in Dementia	7	826	-.414	-.532--.279	<.0001	26.831	<.001	77.638
Geriatric Depression Scale (all versions)	12	1539	-.237	-.338--.129	<.0001	46.065	<.001	76.121
Geriatric Depression Scale-30	7	949	-.245	-.396--.081	.0037	34.026	<.001	82.366
Neuropsychiatric Inventory-Depression	6	953	-.332	-.471--.177	.0001	22.630	<.001	77.905
Depression measures excluding Geriatric Depression Scale, Cornell Scale for Depression in Dementia & Neuropsychiatric Inventory-Depression	8	931	-.249	-.309--.187	<.0001	3.701	.813	0
Anxiety	9	1126	-.170	-.261--.076	.0004	14.112	.079	43.312
Neuropsychiatric Inventory-Anxiety	6	858	-.218	-.354--.074	.0033	12.607	.027	60.340
Neuropsychiatric symptoms/BPSD	32	6928	-.339	-.408--.267	<.0001	285.405	<.001	89.138
Neuropsychiatric Inventory	22	5643	-.344	-.432--.251	<.0001	252.974	<.001	91.699
Neuropsychiatric symptom measures excluding Neuropsychiatric Inventory & Cohen-Mansfield Agitation Inventory	8	999	-.343	-.404--.279	<.0001	8.369	.301	16.359
Presence of co-morbid conditions	8	1456	-.073	-.124--.021	.0056	2.547	.924	0
Being married	8	1595	.101	.052-.149	<.0001	5.600	.587	0
Living alone	5	1017	-.100	-.191--.007	.0349	7.193	.126	44.389

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data.

**Supplementary Table 20y: Factors associated with informant ratings of quality of life for people with dementia diagnosed with Alzheimer’s disease – factors pertaining to the carer**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran’s Q	p value (Cochran’s Q)	I <sup>2</sup>
Older age	5	807	-.119	-.187-.050	.0008	1.386	.847	0
Female gender	7	1018	-.012	-.074-.050	.7102	3.032	.805	0
Depression	7	1343	-.205	-.316-.088	.0007	23.207	.001	74.146
Burden or stress	13	2464	-.258	-.357-.153	<.0001	80.475	<.001	85.089
Zarit Burden Interview	10	2149	-.288	-.399-.170	<.0001	68.951	<.001	86.947

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data.

**Supplementary Table 20z: Factors associated with informant ratings of quality of life for people with dementia diagnosed with Alzheimer’s disease made by family carers only – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran’s Q	p value (Cochran’s Q)	I <sup>2</sup>
Older age	19	3094	-.013	-.070-.044	.6540	38.623	.003	53.395
Female gender	15	2646	-.006	-.077-.066	.8724	40.543	<.001	65.468
Higher level of education	15	2356	.010	-.031-.051	.6370	5.733	.973	0
More advanced dementia	6	953	-.207	-.366-.038	.0169	35.737	<.001	86.009
Clinical Dementia Rating	5	732	-.175	-.360-.023	.0833	29.546	<.001	86.463
Higher scores on cognitive screening measures	32	6719	.163	.109-.217	<.0001	123.055	<.001	74.808
Mini-Mental State Examination	27	5700	.138	.081-.194	<.0001	87.152	<.001	70.167
Cognitive screening measures excluding Dementia Rating Scale & Mini-Mental State Examination	8	3416	.231	.105-.350	.0004	59.180	<.001	88.172
Taking medication	8	1401	-.087	-.148-.024	.0067	8.775	.269	20.228
Acetylcholinesterase inhibitors	5	1083	-.055	-.138-.028	.1909	6.409	.171	37.587
Better functional ability	25	5907	.288	.216-.358	<.0001	171.226	<.001	85.983
Instrumental activities of daily living	11	1420	.331	.197-.453	<.0001	64.186	<.001	84.420
Lawton’s Instrumental Activities of Daily Living*	8	1157	.317	.151-.466	.0003	51.773	<.001	86.479
Basic activities of daily living	15	4462	.297	.207-.382	<.0001	101.437	<.001	86.198
Katz Index of Independence in Activities of Daily Living*	5	877	.272	.138-.397	.0001	12.267	.015	67.391
Depression	22	3142	-.272	-.332-.210	<.0001	63.114	<.001	66.727
Cornell Scale for Depression in Dementia	6	630	-.427	-.572-.256	<.0001	27.013	<.001	81.490
Depression measures excluding Geriatric Depression Scale, Cornell Scale for Depression in Dementia & Neuropsychiatric Inventory-Depression	7	850	-.256	-.319-.191	<.0001	3.217	.781	0
Geriatric Depression Scale (all versions)	11	1505	-.223	-.328-.113	.0001	43.658	<.001	77.094
Geriatric Depression Scale-30	7	949	-.245	-.396-.081	.0037	34.026	<.001	82.366
Anxiety	7	1131	-.171	-.265-.073	.0007	13.331	.038	54.992
Neuropsychiatric symptoms/BPSD	26	6228	-.348	-.425-.266	<.0001	262.972	<.001	90.493
Neuropsychiatric symptom measures excluding Neuropsychiatric Inventory & Cohen-Mansfield Agitation Inventory	7	849	-.359	-.418-.297	<.0001	6.142	.407	2.316
Neuropsychiatric Inventory	19	5379	-.340	-.434-.239	<.0001	239.349	<.001	92.480
Presence of co-morbid conditions*	8	1456	-.073	-.124-.021	.0056	2.547	.924	0

Being married	8	1595	.107	.057-.158	<.0001	7.302	.398	4.132
Living alone*	5	1017	-.100	-.191--.007	.0349	7.193	.126	44.389

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data. Those asterisked are unchanged from previous analyses.

**Supplementary Table 20aa: Factors associated with informant ratings of quality of life for people with dementia diagnosed with Alzheimer’s disease made by family carers only – factors pertaining to the carer**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran’s Q	p value (Cochran’s Q)	I <sup>2</sup>
Older age*	5	807	-.119	-.187--.050	.0008	1.386	.847	0
Female gender	7	1018	-.019	-.081-.043	.5396	4.215	.648	0
Depression*	7	1343	-.205	-.316--.088	.0007	23.207	.001	74.146
Burden or stress	13	2455	-.250	-.350--.145	<.0001	81.036	<.001	85.192
Zarit Burden Interview	10	2140	-.279	-.391--.159	<.0001	70.006	<.001	87.144

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data. Those asterisked are unchanged from previous analyses.

**Supplementary Table 20ab: Factors associated with informant ratings of quality of life for the person with dementia, excluding studies that focused specifically on people diagnosed with Alzheimer’s disease – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran’s Q	p value (Cochran’s Q)	I <sup>2</sup>
Older age	39	8815	-.032	-.065-.001	.0561	82.818	<.001	54.116
Female gender	34	7669	-.005	-.039-.029	.7701	65.909	.001	49.931
White ethnicity*	5	906	.066	.000-.131	.0490	2.029	.730	0
Higher level of education	16	3253	.061	.023-.100	.0017	17.403	.295	13.807
Alzheimer’s (vs. other dementia subtypes)*	9	2719	.050	-.027-.126	.2054	27.443	.001	70.849
Longer disease duration	8	983	-.053	-.116-.010	.1016	1.605	.978	0
More advanced dementia	31	6769	-.318	-.405--.225	<.0001	485.325	<.001	93.819
Clinical Dementia Rating	18	4796	-.293	-.413--.163	<.0001	361.339	<.001	95.295
Global Deterioration Scale	5	677	-.265	-.382--.141	<.0001	11.376	.023	64.839
Advanced dementia measures excluding Global Deterioration Scale & Clinical Dementia Rating	8	1296	-.403	-.555--.224	<.0001	84.093	<.001	91.676
Higher scores on cognitive screening measures	55	7858	.195	.147-.242	<.0001	240.569	<.001	77.553
Mini-Mental State Examination	50	7152	.192	.142-.240	<.0001	211.931	<.001	76.879
Cognitive screening measures excluding Dementia Rating Scale & Mini-Mental State Examination	9	1033	.124	.011-.234	.0319	21.125	.007	62.131
Taking medication	13	4602	-.046	-.075--.016	.0023	11.196	.512	0
Acetylcholinesterase inhibitors	5	809	-.109	-.215--.000	.0498	9.371	.052	57.314
Psychotropics	9	3769	-.050	-.096--.004	.0314	12.960	.113	38.270
Antidepressants	5	1119	-.074	-.171-.025	.1416	7.923	.094	49.513
Anxiolytics	6	1515	-.064	-.168-.042	.2363	17.125	.004	70.802
Longer duration of care home stay*	12	2312	-.105	-.162--.047	.0004	18.574	.069	40.778
Degree to which residential care is person-centred*	6	1814	.155	.049-.257	.0042	13.729	.017	63.581

Special dementia unit (vs. other residential facility)*	5	2372	.120	.071-.168	<.0001	5.528	.237	27.641
Better functional ability	59	12394	.360	.303-.413	<.0001	669.188	<.001	91.333
Basic activities of daily living	41	8103	.394	.327-.457	<.0001	455.482	<.001	91.218
Barthel Index	18	3327	.498	.384-.596	<.0001	259.016	<.001	93.437
Katz Index of Independence in Activities of Daily Living	11	2114	.310	.256-.363	<.0001	16.416	.088	39.082
Basic activities of daily living measures excluding Barthel Index, Dependence Scale, Katz Index of Independence in Activities of Daily Living & Physical Self-Maintenance Scale	10	1808	.287	.193-.376	<.0001	37.609	<.001	76.070
Instrumental activities of daily living	13	1814	.348	.243-.445	<.0001	60.784	<.001	80.258
Lawton's Instrumental Activities of Daily Living	7	1149	.261	.166-.351	<.0001	15.567	.016	61.456
Instrumental activities of daily living measures excluding Lawton's Instrumental Activities of Daily Living	7	776	.517	.462-.567	<.0001	5.640	.465	0
Depression	42	8856	-.318	-.379--.256	<.0001	388.227	<.001	89.439
Cornell Scale for Depression in Dementia	21	5844	-.318	-.382--.250	<.0001	140.453	<.001	85.760
Geriatric Depression Scale (all versions)	7	414	-.307	-.455--.144	.0003	16.548	.011	63.742
Neuropsychiatric Inventory-Depression	6	1270	-.192	-.408-.043	.1084	73.543	<.001	93.201
Depression measures excluding Geriatric Depression Scale, Cornell Scale for Depression in Dementia & Neuropsychiatric Inventory-Depression	11	1572	-.346	-.468--.211	<.0001	79.163	<.001	87.368
Anxiety	9	2018	-.143	-.186--.100	<.0001	6.214	.623	0
Neuropsychiatric Inventory-Anxiety	6	1270	-.122	-.176--.067	<.0001	2.888	.717	0
Neuropsychiatric symptoms/BPSD	44	8430	-.322	-.377--.265	<.0001	332.965	<.001	87.086
Cohen-Mansfield Agitation Inventory	6	1015	-.141	-.201--.080	<.0001	3.448	.631	0
Neuropsychiatric Inventory	29	5570	-.333	-.403--.260	<.0001	226.724	<.001	87.650
Neuropsychiatric symptom measures excluding Neuropsychiatric Inventory & Cohen-Mansfield Agitation Inventory	14	2517	-.322	-.398--.242	<.0001	59.110	<.001	78.007
Pain*	13	4048	-.203	-.307-.095	.0003	124.860	<.001	90.389
Presence of co-morbid conditions	196	3893	-.101	-.148--.053	<.0001	36.917	.005	51.242
Cared for by spouse (vs. other carer type)	7	1453	.129	.066-.191	<.0001	8.234	.221	27.130
Being married	6	1303	.115	.033-.197	.0064	10.267	.068	51.298
Living alone	8	1379	-.161	-.220--.101	<.0001	8.540	.287	18.033

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data. Those asterisked are unchanged from previous analyses.

**Supplementary Table 20ac: Factors associated with informant ratings of quality of life for the person with dementia, excluding studies that focused specifically on people diagnosed with Alzheimer’s disease – factors pertaining to the carer**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran’s Q	p value (Cochran’s Q)	I <sup>2</sup>
Older age	10	1693	-.004	-.062-.070	.9088	15.187	.086	40.737
Female gender	8	2071	.098	.049-.147	.0001	8.376	.301	16.424
Higher level of education	9	2094	.098	.043-.152	.0005	11.342	.183	29.463
More time spent caring (residential care only)	5	605	-.166	-.284--.043	.0082	9.436	.051	57.609
Depression	7	1350	-.290	-.376--.199	<.0001	17.128	.009	64.970
Distress at NPS symptoms	5	878	-.331	-.436--.216	<.0001	12.111	.017	66.973
Burden or stress	12	1996	-.373	-.477--.260	<.0001	82.666	<.001	86.693
Zarit Burden Interview	8	1135	-.385	-.538--.206	<.0001	73.232	<.001	90.441
Poorer mental health (GHQ)*	6	715	-.242	-.311--.170	<.0001	3.990	.551	0
Carer quality of life (self-rated)	6	1228	.330	.209-.441	<.0001	22.844	<.001	78.112

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data. Those asterisked are unchanged from previous analyses.

**Supplementary Table 20ad: Factors associated with informant ratings of quality of life for the person with dementia made by family carers only, excluding studies that focused specifically on people diagnosed with Alzheimer’s disease – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran’s Q	p value (Cochran’s Q)	I <sup>2</sup>
Older age	22	4007	-.045	-.086--.004	.0326	33.375	.042	37.078
Female gender	21	3819	-.034	-.079-.011	.1336	34.792	.021	42.516
Higher level of education	13	2485	.082	.043-.121	<.0001	7.481	.824	0
Longer disease duration	6	756	-.059	-.131-.013	.1074	1.194	.945	0
More advanced dementia	19	3510	-.322	-.453--.178	<.0001	361.331	<.001	95.018
Clinical Dementia Rating	11	2202	-.286	-.481--.064	.0120	265.365	<.001	96.232
Higher scores on cognitive screening measures	34	4456	.154	.093-.214	<.0001	127.116	<.001	74.040
Mini-Mental State Examination	30	4109	.161	.093-.227	<.0001	127.011	<.001	77.167
Cognitive screening measures excluding Dementia Rating Scale & Mini-Mental State Examination	6	869	.120	-.025-.260	.1036	18.060	.003	72.315
Taking medication	6	2185	-.050	-.092--.008	.0207	2.569	.766	0
Better functional ability	35	5176	.358	.284-.427	<.0001	267.710	<.001	87.300
Basic activities of daily living	19	2319	.423	.313-.521	<.0001	153.424	<.001	88.268
Barthel Index	9	919	.550	.408-.666	<.0001	50.258	<.001	84.082
Basic activities of daily living measures excluding Barthel Index, Dependence Scale, Katz Index of Independence in Activities of Daily Living & Physical Self-Maintenance Scale	5	560	.238	.130-.341	<.0001	6.437	.169	37.861
Instrumental activities of daily living*	13	1814	.348	.243-.445	<.0001	60.784	<.001	80.258
Lawton’s Instrumental Activities of Daily Living	7	1149	.261	.166-.351	<.0001	15.567	.016	61.456
Instrumental activities of daily living measures excluding Lawton’s Instrumental Activities of Daily Living*	7	776	.517	.462-.567	<.0001	5.640	.465	0
Depression	27	5327	-.320	-.396--.240	<.0001	226.800	<.001	88.536
Cornell Scale for Depression in Dementia	10	2972	-.336	-.419--.247	<.0001	50.641	<.001	82.228
Geriatric Depression Scale (all versions)	7	414	-.315	-.462--.151	.0003	16.856	.010	64.404

Depression measures excluding Geriatric Depression Scale, Cornell Scale for Depression in Dementia & Neuropsychiatric Inventory-Depression	8	1062	-.300	-.404--.188	<.0001	22.755	.002	69.237
Anxiety	6	1544	-.137	-.185--.087	<.0001	1.810	.875	0
Neuropsychiatric symptoms/BPSD	26	4321	-.357	-.421--.289	<.0001	140.919	<.001	82.259
Neuropsychiatric Inventory	20	3256	-.384	-.457--.306	<.0001	109.702	<.001	82.680
Neuropsychiatric symptom measures excluding Neuropsychiatric Inventory & Cohen-Mansfield Agitation Inventory	8	1360	-.358	-.467--.239	<.0001	36.806	<.001	80.981
Presence of co-morbid conditions	9	1417	-.152	-.232--.070	.0003	17.530	.025	54.363
Cared for by spouse (vs. other carer type)*	7	1453	.129	.066--.191	<.0001	8.234	.221	27.130
Being married*	6	1303	.115	.033--.197	.0064	10.267	.068	51.298
Living alone	7	1254	-.139	-.204--.073	<.0001	7.783	.254	22.906

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data. Those asterisked are unchanged from previous analyses.

**Supplementary Table 20ae: Factors associated with informant ratings of quality of life for the person with dementia made by family carers only, excluding studies that focused specifically on people diagnosed with Alzheimer’s disease – factors pertaining to the carer**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran’s Q	p value (Cochran’s Q)	I <sup>2</sup>
Older age	7	1351	-.026	-.093-.040	.4394	8.258	.220	27.341
Female gender	7	1448	.088	.025-.151	.0066	8.198	.224	26.813
Higher level of education	8	1457	.095	.026-.164	.0074	11.161	.132	37.281
More time spent caring (residential care only)*	5	605	-.166	-.284--.043	.0082	9.436	.051	57.609
Depression*	7	1350	-.290	-.376--.199	<.0001	17.128	.009	64.970
Distress at NPS symptoms	5	858	-.322	-.446--.186	<.0001	16.515	.002	75.780
Burden or stress	10	1752	-.401	-.511--.277	<.0001	71.985	<.001	87.497
Zarit Burden Interview	8	1135	-.392	-.542--.218	<.0001	70.434	<.001	90.062
Poorer mental health (GHQ)*	6	715	-.242	-.311--.170	<.0001	3.990	.551	0
Carer quality of life (self-rated)	5	1128	.335	.194-.462	<.0001	22.438	<.001	82.173

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data. Those asterisked are unchanged from previous analyses.



**Supplementary Table 20af: Factors associated with informant ratings of quality of life for the person with dementia made by health care professionals only, excluding studies that focused specifically on people diagnosed with Alzheimer’s disease – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran’s Q	p value (Cochran’s Q)	I <sup>2</sup>
Older age	17	3858	-.052	-.108-.005	.0713	43.123	<.001	62.897
Female gender	17	4053	.025	-.017-.066	.2393	25.050	.069	36.127
More advanced dementia	12	3012	-.338	-.435--.234	<.0001	99.396	<.001	88.933
Clinical Dementia Rating	5	2053	-.327	-.487--.146	.0006	71.904	<.001	94.437
Advanced dementia measures excluding Clinical Dementia Rating	7	959	-.347	-.463--.219	<.0001	27.406	<.001	78.107
Higher scores on cognitive screening measures	21	2965	.242	.176-.305	<.0001	67.722	<.001	70.468
Mini-Mental State Examination	21	2956	.245	.177-.310	<.0001	70.495	<.001	71.629
Taking medication	10	3006	-.050	.010-.090	.0136	10.069	.345	10.619
Psychotropics	7	2401	-.050	-.113-.014	.1281	12.273	.056	51.112
Anxiolytics	5	1370	-.104	-.240-.036	.1449	21.632	<.001	81.509
Longer duration of care home stay*	10	1804	-.088	-.150--.025	.0062	14.138	.117	36.344
Degree to which residential care is person-centred*	6	1814	.154	.049-.256	.0042	13.718	.018	63.551
Special dementia unit (vs. other residential facility)*	5	2372	.120	.071-.168	<.0001	5.528	.237	27.641
Better functional ability	26	6008	.367	.271-.456	<.0001	403.300	<.001	93.801
Basic activities of daily living	23	4510	.372	.272-.463	<.0001	294.753	<.001	92.536
Barthel Index	11	2227	.443	.276-.583	<.0001	197.598	<.001	94.939
Katz Index of Independence in Activities of Daily Living	5	474	.371	.290-.447	<.0001	2.532	.639	0
Basic activities of daily living measures excluding Barthel Index, Dependence Scale, Katz Index of Independence in Activities of Daily Living & Physical Self-Maintenance Scale	7	1345	.280	.166-.386	<.0001	27.152	<.001	77.903
Depression	15	2897	-.283	-.387--.172	<.0001	123.916	<.001	88.702
Cornell Scale for Depression in Dementia	10	2398	-.244	-.337--.147	<.0001	47.726	<.001	81.142
Anxiety	5	563	-.165	-.264--.061	.0019	5.630	.229	28.950
Neuropsychiatric symptoms/BPSD	19	3466	-.330	-.411--.245	<.0001	127.793	<.001	85.915
Neuropsychiatric Inventory	9	1619	-.320	-.431--.199	<.0001	41.768	<.001	80.847
Neuropsychiatric symptom measures excluding Neuropsychiatric Inventory & Cohen-Mansfield Agitation Inventory	8	1303	-.318	-.419--.209	<.0001	30.289	<.001	76.889
Pain*	9	2443	-.255	-.403--.095	.0021	115.216	<.001	93.057
Presence of co-morbid conditions	8	1781	-.099	-.152--.046	.0003	8.528	.288	17.914

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data. Those asterisked are unchanged from previous analyses.

**Supplementary Table 20ag: Factors associated with informant ratings of quality of life for the person with dementia made by mixed groups of informants including family carers and health care professionals, excluding studies that focused specifically on people diagnosed with Alzheimer’s disease – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran’s Q	p value (Cochran’s Q)	I <sup>2</sup>
Older age	5	1719	-.039	-.092-.014	.1493	4.829	.305	17.170
Better functional ability	6	1983	.341	.257-.420	<.0001	20.398	.001	75.488
Basic activities of daily living*	6	1983	.341	.257-.420	<.0001	20.398	.001	75.488

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data. Those asterisked are unchanged from previous analyses.

**Supplementary Table 20ah: Factors associated with informant ratings of quality of life for people with dementia living in the community – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran’s Q	p value (Cochran’s Q)	I <sup>2</sup>
Older age	27	4932	-.020	-.067-.027	.4077	63.551	<.001	59.088
Female gender	20	3894	.015	-.041-.070	.6052	49.788	<.001	61.838
Higher level of education	19	3597	.043	.011-.076	.0097	13.919	.734	0
Longer disease duration	5	1067	-.088	-.148--028	.0041	2.156	.707	0
More advanced dementia	10	1681	-.232	-.333--.125	<.0001	43.127	<.001	79.131
Clinical Dementia Rating	6	1122	-.220	-.372--.055	.0091	35.013	<.001	85.719
Higher scores on cognitive screening measures	40	8097	.148	.098-.196	<.0001	158.260	<.001	75.357
Mini-Mental State Examination	34	6956	.127	.074-.179	<.0001	122.962	<.001	73.976
Cognitive screening measures excluding Dementia Rating Scale & Mini-Mental State Examination	14	3868	.165	.074-.253	.0004	61.744	<.001	78.945
Taking medication	9	2377	-.040	-.080-.001	.0545	7.754	.458	0
Acetylcholinesterase inhibitors	5	1077	-.012	-.072-.048	.6899	2.037	.729	0
Polypharmacy	5	1115	-.068	-.145-.010	.0855	5.905	.206	32.264
Psychotropics	5	1226	-.104	-.202--.004	.0425	8.195	.085	51.192
Better functional ability	34	7799	.339	.272-.402	<.0001	288.900	<.001	88.577
<i>Bristol Activities of Daily Living Scale</i>	5	769	.419	.322-.507	<.0001	6.973	.137	42.637
Disability Assessment for Dementia	5	3042	.208	.071-.337	.0030	29.842	<.001	86.596
Basic activities of daily living	17	5108	.329	.223-.428	<.0001	217.392	<.001	92.640
Katz Index of Independence in Activities of Daily Living	6	1059	.335	.226-.436	<.0001	15.098	.010	66.883
Instrumental activities of daily living	15	2215	.402	.291-.503	<.0001	108.271	<.001	87.070
Lawton’s Instrumental Activities of Daily Living	7	1356	.343	.182-.487	.0001	54.793	<.001	89.050
Instrumental activities of daily living measures excluding Lawton’s Instrumental Activities of Daily Living	9	970	.491	.431-.547	<.0001	9.859	.275	18.860
Depression	31	5694	-.321	-.369--.272	<.0001	103.915	<.001	71.130
Cornell Scale for Depression in Dementia	9	2823	-.362	-.438--.282	<.0001	36.031	<.001	77.797
Geriatric Depression Scale (all versions)	12	1262	-.270	-.389--.142	.0001	52.200	<.001	78.927
Geriatric Depression Scale-30	8	912	-.281	-.433--.113	.0012	39.036	<.001	82.068
Neuropsychiatric Inventory-Depression	6	1083	-.351	-.481--.205	<.0001	26.160	<.001	80.887
Depression measures excluding Geriatric Depression Scale, Cornell Scale for Depression in Dementia & Neuropsychiatric Inventory-Depression	8	888	-.297	-.382--.207	<.0001	12.997	.072	46.143

Anxiety	10	1821	-.159	-.221--.096	<.0001	14.064	.120	36.007
Neuropsychiatric Inventory-Anxiety	6	1083	-.201	-.304--.095	.0003	12.322	.031	59.424
Neuropsychiatric symptoms/BPSD	33	7104	-.371	-.438--.301	<.0001	300.843	<.001	89.363
Neuropsychiatric Inventory	25	6113	-.374	-.455--.288	<.0001	283.585	<.001	91.537
Neuropsychiatric symptom measures excluding Neuropsychiatric Inventory & Cohen-Mansfield Agitation Inventory	8	1018	-.402	-.478--.320	<.0001	14.457	.044	51.579
Presence of co-morbid conditions	9	1746	-.105	-.176--.032	.0046	15.523	.050	48.463
Cared for by spouse (vs. other carer type)	6	1761	.116	.041-.191	.0027	11.823	.037	57.709
Being married	12	2575	.111	.066-.155	<.0001	13.808	.244	20.338
Living alone	10	2030	-.126	-.190--.061	.0002	16.828	.051	46.519

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data.

**Supplementary Table 20ai: Factors associated with informant ratings of quality of life for people with dementia living in the community - factors pertaining to the carer**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Older age	9	1750	-.048	-.101-.005	.0785	9.216	.324	13.193
Female gender	9	1584	.029	-.023-.081	.2783	8.470	.289	5.550
Higher level of education	6	1316	.090	.000-.179	.0495	12.327	.031	59.439
More time spent caring (community only)*	5	681	-.137	-.267--.002	.0462	11.630	.020	65.606
Depression	9	2050	-.237	-.340--.130	<.0001	45.312	<.001	82.345
Center for Epidemiologic Studies Depression Scale	5	854	-.273	-.446--.081	.0059	28.229	<.001	85.830
Distress at NPS symptoms	5	925	-.364	-.442--.281	<.0001	6.681	.143	41.697
Burden or stress	17	3469	-.358	-.440--.270	<.0001	124.683	<.001	87.167
Zarit Burden Interview	12	2575	-.397	-.494--.291	<.0001	96.649	<.001	88.619
Burden or stress measures excluding Zarit Burden Interview	5	894	-.255	-.427--.066	.0086	27.271	<.001	85.332
Carer quality of life (self-rated)	5	1108	.306	.176-.425	<.0001	17.771	.001	77.492

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data. Those asterisked are unchanged from previous analyses.

**Supplementary Table 20aj: Factors associated with informant ratings of quality of life for people with dementia living in the community made by family carers only – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Older age	25	4724	-.020	-.070-.029	.4200	63.230	<.001	62.043
Female gender	20	3894	.014	-.042-.070	.6186	50.065	<.001	62.049
Higher level of education	18	3489	.043	.010-.077	.0112	12.856	.746	0
More advanced dementia*	10	1681	-.232	-.333--.125	<.0001	43.127	<.001	79.131
Clinical Dementia Rating*	6	1122	-.220	-.372--.055	.0091	35.013	<.001	85.719
Higher scores on cognitive screening measures	38	7912	.147	.096-.197	<.0001	154.127	<.001	75.994
Mini-Mental State Examination	30	6671	.129	.073-.184	<.0001	117.460	<.001	75.311
Cognitive screening measures excluding Dementia Rating Scale & Mini-Mental State Examination*	14	3868	.165	.074-.253	.0004	61.744	<.001	78.945
Taking medication	8	1586	-.053	-.102--.003	.0372	6.905	.439	0
Acetylcholinesterase inhibitors	5	1077	-.012	-.072-.048	.6899	2.037	.729	0
Polypharmacy*	5	1115	-.068	-.145-.010	.0855	5.905	.206	32.264
Better functional ability	32	7631	.337	.268-.402	<.0001	284.355	<.001	89.098
Disability Assessment for Dementia*	5	3042	.208	.071-.337	.0030	29.842	<.001	86.596
Basic activities of daily living	16	5008	.334	.222-.436	<.0001	217.457	<.001	93.102
Katz Index of Independence in Activities of Daily Living	5	959	.345	.214-.464	<.0001	15.089	.005	73.491
Instrumental activities of daily living	15	2215	.400	.288-.501	<.0001	108.533	<.001	87.101
Lawton's Instrumental Activities of Daily Living*	7	1356	.343	.182-.487	.0001	54.793	<.001	89.050
Instrumental activities of daily living measures excluding Lawton's Instrumental Activities of Daily Living	9	970	.482	.415-.544	<.0001	11.367	.182	29.619
Depression	30	5588	-.328	-.377--.277	<.0001	103.831	<.001	72.070
Cornell Scale for Depression in Dementia	8	2717	-.380	-.459--.296	<.0001	34.170	<.001	79.514
Geriatric Depression Scale (all versions)*	8	912	-.281	-.433--.113	.0012	39.036	<.001	82.068
Geriatric Depression Scale-30*	8	888	-.297	-.382--.207	<.0001	12.997	.072	46.143
Neuropsychiatric Inventory-Depression	6	1083	-.368	-.500--.220	<.0001	28.020	<.001	82.156
Depression measures excluding Geriatric Depression Scale, Cornell Scale for Depression in Dementia & Neuropsychiatric Inventory-Depression*	8	888	-.297	-.382--.207	<.0001	12.997	.072	46.143
Anxiety	10	1821	-.155	-.213--.096	<.0001	12.508	.186	28.044
Neuropsychiatric Inventory-Anxiety	6	1083	-.194	-.290--.094	.0002	10.851	.054	53.923
Neuropsychiatric symptoms/BPSD	32	7004	-.378	-.446--.305	<.0001	306.693	<.001	89.892
Neuropsychiatric Inventory	24	6013	-.380	-.462--.291	<.0001	282.294	<.001	91.852
Neuropsychiatric symptom measures excluding Neuropsychiatric Inventory & Cohen-Mansfield Agitation Inventory	8	1018	-.414	-.500--.319	<.0001	19.533	.007	64.162
Presence of co-morbid conditions*	9	1746	-.105	-.176--.032	.0046	15.523	.050	48.463
Cared for by spouse (vs. other carer type)*	6	1761	.116	.041-.191	.0027	11.823	.037	57.709
Being married	11	2464	.118	.068-.168	<.0001	15.003	.132	33.344
Living alone*	10	2030	-.126	-.190--.061	.0002	16.828	.051	46.519

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data. Those asterisked are unchanged from previous analyses.

**Supplementary Table 20ak: Factors associated with informant ratings of quality of life for people with dementia living in the community made by family carers only – factors pertaining to the carer**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Older age	8	1650	-.052	-.112-.007	.0863	8.978	.254	22.034
Female gender	9	1584	.022	-.038-.083	.4646	10.292	.245	22.273
Higher level of education*	6	1316	.090	.000-.179	.0495	12.327	.031	59.439
More time spent caring (community only)*	5	681	-.137	-.267--.002	.0462	11.630	.020	65.606
Depression*	9	2050	-.237	-.340--.130	<.0001	45.312	<.001	82.345
Center for Epidemiologic Studies Depression Scale*	5	854	-.273	-.446--.081	.0059	28.229	<.001	85.830
Distress at NPS symptoms	5	925	-.372	-.454--.283	<.0001	7.747	.101	48.368
Burden or stress	16	3349	-.355	-.442--.261	<.0001	126.936	<.001	88.183
Zarit Burden Interview	12	2566	-.390	-.489--.282	<.0001	99.191	<.001	88.910

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data. Those asterisked are unchanged from previous analyses.

**Supplementary Table 20al: Factors associated with informant ratings of quality of life for people with dementia living in the community made by health care professionals only – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Higher scores on cognitive screening measures	5	489	.132	-.031-.288	.1129	13.060	.011	69.373
Mini-Mental State Examination*	5	489	.132	-.031-.288	.1129	13.060	.011	69.373
Better functional ability	5	438	.380	.243-.502	<.0001	9.983	.041	59.933

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data. Those asterisked are unchanged from previous analyses.

**Supplementary Table 20am: Factors associated with informant ratings of quality of life for people with dementia living in residential care settings – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Older age	18	4208	-.026	-.074-.023	.2967	37.041	.003	54.105
Female gender	17	4120	-.006	-.049-.038	.7906	27.808	.033	42.462
Higher level of education	5	1672	.012	-.081-.104	.8077	13.001	.011	69.234
More advanced dementia	14	2948	-.288	-.358--.214	<.0001	50.995	<.001	74.507
Clinical Dementia Rating	6	1971	-.250	-.340--.155	<.0001	20.781	.001	78.939
Advanced dementia measures excluding Global Deterioration Scale	8	979	-.321	-.426--.208	<.0001	23.752	.001	70.529
Higher scores on cognitive screening measures	19	3313	.239	.169-.306	<.0001	75.494	<.001	76.157
Mini-Mental State Examination	18	3118	.246	.171-.319	<.0001	78.566	<.001	78.362
Taking medication	9	3007	-.062	-.098--.025	.0009	7.993	.434	0
Psychotropics	6	2423	-.065	-.132-.003	.0609	9.789	.081	48.920
Longer duration of care home stay*	12	2312	-.105	-.162--.047	.0004	18.574	.069	40.778
Better functional ability	25	5927	.399	.300-.490	<.0001	411.991	<.001	94.175
Basic activities of daily living	24	4562	.419	.325-.506	<.0001	294.635	<.001	92.194
Barthel Index	14	2790	.504	.371-.616	<.0001	226.725	<.001	94.266
Basic activities of daily living measures excluding Barthel Index, Dependence Scale, Katz Index of Independence in Activities of Daily Living & Physical Self-Maintenance Scale	12	2067	.322	.251-.390	<.0001	28.818	.002	61.829
Depression	18	3738	-.309	-.406--.206	<.0001	176.913	<.001	90.391
Cornell Scale for Depression in Dementia	11	2957	-.287	-.394--.172	<.0001	99.990	<.001	89.999
Anxiety	5	546	-.158	-.257--.056	.0025	5.284	.259	24.293
Neuropsychiatric symptoms/BPSD	20	3777	-.303	-.381--.221	<.0001	130.068	<.001	85.392
Cohen-Mansfield Agitation Inventory	8	1243	-.149	-.219--.077	.0001	10.594	.157	33.928
Neuropsychiatric Inventory	7	1483	-.338	-.447--.218	<.0001	28.326	<.001	78.818
Neuropsychiatric symptom measures excluding Neuropsychiatric Inventory & Cohen-Mansfield Agitation Inventory	10	1684	-.317	-.442--.181	<.0001	79.560	<.001	88.688
Pain	9	2199	-.268	-.422--.099	.0021	114.141	<.001	92.991
Presence of co-morbid conditions	8	1763	-.044	-.110-.021	.1846	11.657	.112	39.950

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data. Those asterisked are unchanged from previous analyses.

**Supplementary Table 20an: Factors associated with informant ratings of quality of life for people with dementia living in residential care settings made by family carers only – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Older age	6	1153	-.032	-.090-.027	.2868	2.273	.810	0
Female gender	6	1182	-.063	-.120--.006	.0309	2.801	.731	0
Better functional ability	7	523	.464	.237-.643	.0002	46.736	<.001	87.162
Basic activities of daily living	7	523	.487	.248-.670	.0002	53.503	<.001	88.786
Barthel Index	5	382	.614	.395-.767	<.0001	26.443	<.001	84.873

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data.

**Supplementary Table 20zo: Factors associated with informant ratings of quality of life for people with dementia living in residential care settings made by health care professionals only – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Older age	14	3040	-.033	-.094-.028	.2889	32.792	.002	60.356
Female gender	14	3049	.010	-.037-.057	.6787	20.158	.091	35.510
More advanced dementia	12	2420	-.309	-.389--.225	<.0001	48.344	<.001	77.246
Higher scores on cognitive screening measures	16	2543	.253	.181-.323	<.0001	53.642	<.001	72.037
Mini-Mental State Examination	16	2534	.257	.183-.328	<.0001	56.286	<.001	73.350
Taking medication	8	1821	-.075	-.123--.028	.0019	6.916	.438	0
Psychotropics	5	1216	-.080	-.177-.019	.1140	9.203	.056	56.538
Longer duration of care home stay*	10	1804	-.088	-.150--.025	.0062	14.138	.117	36.344
Special dementia unit (vs. other residential facility)*	5	2372	.120	.071-.168	<.0001	5.528	.237	27.641
Better functional ability	20	5178	.365	.249-.471	<.0001	373.509	<.001	94.913
Basic activities of daily living	19	3812	.386	.275-.488	<.0001	258.544	<.001	93.038
Barthel Index	9	2075	.455	.266-.610	<.0001	192.570	<.001	95.846
Basic activities of daily living measures excluding Barthel Index, Dependence Scale, Katz Index of Independence in Activities of Daily Living & Physical Self-Maintenance Scale	11	1934	.328	.256-.397	<.0001	25.263	<.001	60.417
Depression	14	2785	-.305	-.413--.189	<.0001	122.925	<.001	89.424
Cornell Scale for Depression in Dementia	9	2298	-.251	-.349--.146	<.0001	47.214	<.001	83.056
Anxiety*	5	546	-.158	-.257--.056	.0025	5.284	.259	24.293
Neuropsychiatric symptoms/BPSD	16	3056	-.331	-.419--.238	<.0001	109.008	<.001	86.240
Neuropsychiatric Inventory	5	1230	-.353	-.509--.175	<.0001	31.678	<.001	87.373
Neuropsychiatric symptom measures excluding Neuropsychiatric Inventory & Cohen-Mansfield Agitation Inventory	8	1368	-.348	-.484--.195	<.0001	64.515	<.001	89.150
Cohen-Mansfield Agitation Inventory	6	776	-.201	-.284--.115	<.0001	6.847	.232	26.980
Pain	8	2049	-.271	-.443--.081	.0057	114.980	<.001	93.912
Presence of co-morbid conditions	6	1068	-.074	-.150-.002	.0577	6.961	.224	28.176

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data. Those asterisked are unchanged from previous analyses.

**Supplementary Table 21a: Factors associated with proxy ratings of quality of life for the person with dementia made by family carers only – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Older age	8	865	.059	-.061-.177	.3383	20.802	.004	66.349
Female gender	5	428	.061	-.035-.156	.2148	1.637	.802	0
Higher scores on cognitive screening measures	10	1145	.002	-.066-.071	.9452	11.337	.253	20.614
Mini-Mental State Examination*	10	1145	.002	-.066-.071	.9452	11.337	.253	20.614
Better functional ability	8	1124	.139	.009-.265	.0361	32.947	<.001	78.754
Basic activities of daily living	5	699	.114	-.038-.261	.1423	15.249	.004	73.768
Depression	7	761	-.362	-.494--.215	<.0001	26.611	<.001	77.453
Geriatric Depression Scale (all versions)*	5	466	-.446	-.608--.248	<.0001	20.722	<.001	80.697
Neuropsychiatric symptoms/BPSD	10	1267	-.356	-.437--.270	<.0001	23.112	.006	61.060
Neuropsychiatric Inventory	8	1033	-.349	-.444--.247	<.0001	20.217	.005	65.376

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data. Those asterisked are unchanged from previous analyses.

**Supplementary Table 21b: Factors associated with proxy ratings of quality of life for the person with dementia made by family carers only – factors pertaining to the carer**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Older age*	5	412	-.017	-.160-.126	.8173	7.963	.093	49.768

Note: those asterisked are unchanged from previous analyses.

**Supplementary Table 21c: Factors associated with proxy ratings of quality of life for the person with dementia made by health care professionals only – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Older age	5	989	-.095	-.290-.107	.3569	34.171	<.001	88.294
Female gender	5	1166	.027	-.031-.084	.3682	1.430	.839	0
Taking medication	5	886	-.120	-.207--.030	.0088	6.916	.140	42.161
Better functional ability	6	862	.082	.008-.156	.0300	5.544	.353	9.808
Basic activities of daily living	6	862	.082	.008-.156	.0300	5.544	.353	9.808
Depression	5	583	-.347	-.417--.272	<.0001	3.665	.453	0
Neuropsychiatric symptoms/BPSD	5	1005	-.295	-.382--.203	<.0001	8.874	.064	54.926

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data.



**Supplementary Table 21d: Factors associated with proxy ratings of quality of life for the person with dementia made using the Dementia Quality of Life Questionnaire (DEMQOL) – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Older age	6	826	.094	-.042-.227	.1753	18.263	.003	72.622
Higher scores on cognitive screening measures	8	875	.003	-.086-.091	.9553	11.111	.134	36.997
Mini-Mental State Examination*	8	875	.003	-.086-.091	.9553	11.111	.134	36.997
Better functional ability	8	1134	.097	-.030-.220	.1334	28.953	<.001	75.823
Basic activities of daily living	5	727	.041	-.033-.114	.2753	2.655	.617	0
Depression	5	487	-.386	-.577-.155	.0015	26.266	<.001	84.771
Neuropsychiatric symptoms/BPSD	7	898	-.404	-.491-.311	<.0001	13.860	.031	56.711
Neuropsychiatric Inventory*	7	898	-.404	-.491-.311	<.0001	13.860	.031	56.711

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data. Those asterisked are unchanged from previous analyses.

**Supplementary Table 21e: Factors associated with proxy ratings of quality of life for the person with dementia made using dementia-specific quality of life measures – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Older age	14	2243	-.016	-.118-.087	.7643	71.886	<.001	81.916
Female gender	11	1832	.037	-.009-.083	.1184	3.351	.972	0
More advanced dementia	7	1381	-.307	-.425-.179	<.0001	35.663	<.001	83.176
Higher scores on cognitive screening measures	15	1903	.112	.022-.199	.0144	49.267	<.001	71.584
Mini-Mental State Examination	12	1482	.068	-.030-.165	.1718	35.146	<.001	68.702
Taking medication*	7	1160	-.099	-.170-.026	.0076	8.884	.180	32.465
Better functional ability	15	2284	.139	.051-.224	.0019	56.667	<.001	75.294
Basic activities of daily living	12	1878	.124	.039-.208	.0042	33.337	<.001	67.004
Basic activities of daily living measures excluding Barthel Index & Katz Index of Independence in Activities of Daily Living	8	1251	.141	.039-.240	.0066	19.852	.006	64.739
Depression*	13	1651	-.317	-.409-.219	<.0001	47.495	<.001	74.734
Geriatric Depression Scale (all versions)*	5	466	-.446	-.608-.248	<.0001	20.722	<.001	80.697
Cornell Scale for Depression in Dementia*	5	811	-.200	-.361-.027	.0235	19.089	.001	79.046
Neuropsychiatric symptoms/BPSD	16	2484	-.321	-.377-.263	<.0001	34.096	.003	26.007
Neuropsychiatric Inventory	12	1609	-.333	-.404-.257	<.0001	27.782	.003	60.406
Neuropsychiatric measures excluding Neuropsychiatric Inventory	5	1080	-.297	-.372-.219	<.0001	6.800	.147	41.175
Presence of co-morbid conditions*	6	873	-.121	-.186-.054	.0004	3.383	.641	0

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data. Those asterisked are unchanged from previous analyses.

**Supplementary Table 21f: Factors associated with proxy ratings of quality of life for the person with dementia made by family carers only using dementia-specific quality of life measures – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Older age	7	825	.064	-.066-.192	.3364	20.696	.002	71.008
Higher scores on cognitive screening measures	9	1069	.005	-.069-.080	.8879	11.186	.191	28.483
Mini-Mental State Examination*	9	1069	.005	-.069-.080	.8879	11.186	.191	28.483
Better functional ability	8	1108	.121	-.009-.247	.0685	32.214	<.001	78.270
Basic activities of daily living	5	701	.074	-.032-.178	.1721	7.379	.117	45.792
Depression*	7	761	-.362	-.494--.215	<.0001	26.611	<.001	77.453
Geriatric Depression Scale (all versions)*	5	466	-.446	-.608--.248	<.0001	20.722	<.001	80.697
Neuropsychiatric symptoms/BPSD	9	1191	-.366	-.441--.285	<.0001	17.687	.024	54.770
Neuropsychiatric Inventory	8	997	-.376	-.463--.282	<.0001	17.110	.017	59.088

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data. Those asterisked are unchanged from previous analyses.

**Supplementary Table 21g: Factors associated with proxy ratings of quality of life for the person with dementia made by health care professionals only using dementia-specific quality of life measures – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Older age	5	989	-.095	-.290-.107	.3569	34.171	<.001	88.294
Female gender	5	1015	.037	-.025-.099	.2417	1.664	.797	0
Taking medication*	5	886	-.120	-.207--.030	.0088	6.916	.140	42.161
Better functional ability	6	862	.082	.008-.156	.0300	5.544	.353	16.522
Basic activities of daily living*	6	862	.082	.008-.156	.0300	5.544	.353	16.522
Depression*	5	583	-.347	-.417--.272	<.0001	3.665	.453	0
Neuropsychiatric symptoms/BPSD	5	1005	-.295	-.382--.203	<.0001	8.874	.064	54.926

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data. Those asterisked are unchanged from previous analyses.

**Supplementary Table 21h: Factors associated with proxy ratings of quality of life for people with Alzheimer’s disease made using dementia-specific quality of life measures – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran’s Q	p value (Cochran’s Q)	I <sup>2</sup>
Higher scores on cognitive screening measures	6	669	.041	-.036-.118	.3003	4.481	.482	0
Mini-Mental State Examination*	6	669	.041	-.036-.118	.3003	4.481	.482	0
Better functional ability	5	745	.224	.052-.382	.0110	22.280	<.001	82.047
Neuropsychiatric symptoms/BPSD	8	974	-.361	-.464--.249	<.0001	22.197	.002	68.465
Neuropsychiatric Inventory	7	934	-.341	-.448--.225	<.0001	19.313	.004	68.932

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data. Those asterisked are unchanged from previous analyses.

**Supplementary Table 21i: Factors associated with proxy ratings of quality of life for people with Alzheimer’s disease – factors pertaining to the family carer**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran’s Q	p value (Cochran’s Q)	I <sup>2</sup>
Higher scores on cognitive screening measures*	6	669	.041	-.036-.118	.3003	4.481	.482	0
Mini-Mental State Examination*	6	669	.041	-.036-.118	.3003	4.481	.482	0
Better functional ability*	5	745	.224	.052-.382	.0110	22.280	<.001	82.047
Neuropsychiatric symptoms/BPSD*	8	974	-.361	-.464--.249	<.0001	22.197	.002	68.465
Neuropsychiatric Inventory*	7	934	-.341	-.448--.225	<.0001	19.313	.004	68.932

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data. Those asterisked are unchanged from previous analyses.

**Supplementary Table 21j: Factors associated with proxy ratings of quality of life for the person with dementia, excluding studies that focused specifically on people diagnosed with Alzheimer’s disease – factors pertaining to the person with dementia factors**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran’s Q	p value (Cochran’s Q)	I <sup>2</sup>
Older age	11	1893	-.007	-.133-.120	.9182	71.381	<.001	85.991
Female gender	9	1637	.029	-.020-.078	.2455	1.889	.984	0
More advanced dementia	6	1266	-.306	-.438--.161	<.0001	34.496	<.001	85.506
Higher scores on cognitive screening measures	10	1310	.127	.005-.245	.0412	41.275	<.001	78.195
Mini-Mental State Examination	7	889	.062	-.098-.218	.4491	30.517	<.001	80.339
Taking medication	6	1080	-.098	-.179--.017	.0181	8.829	.116	43.367
Better functional ability	10	1556	.110	.010-.207	.0318	30.559	<.001	70.549
Basic activities of daily living*	10	1556	.110	.010-.207	.0318	30.559	<.001	70.549
Basic activities of daily living measures excluding Barthel Index & Katz Index of Independence in Activities of Daily Living	7	1009	.144	.021-.263	.0220	19.591	.003	69.373
Depression	9	1277	-.323	-.428--.209	<.0001	32.990	<.001	75.750
Neuropsychiatric symptoms/BPSD	9	1586	-.290	-.354--.223	<.0001	14.887	.061	46.262
Neuropsychiatric Inventory	5	711	-.284	-.385--.177	<.0001	8.768	.067	54.378
Neuropsychiatric symptom measures excluding Neuropsychiatric Inventory	5	1080	-.297	-.372--.219	<.0001	6.800	.147	41.175

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data. Those asterisked are unchanged from previous analyses.

**Supplementary Table 21k: Factors associated with proxy ratings of quality of life for the person with dementia, excluding studies that focused specifically on people diagnosed with Alzheimer’s disease made by health care professionals only – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran’s Q	p value (Cochran’s Q)	I <sup>2</sup>
Older age	5	989	-.095	-.290-.107	.3569	34.171	<.001	88.294
Female gender	5	1015	.037	-.025-.099	.2417	1.664	.797	0
Taking medication	5	886	-.120	-.207--.030	.0088	6.916	.140	42.161
Better functional ability	6	862	.082	.008-.156	.0300	5.544	.353	16.522
Basic activities of daily living*	6	862	.082	.008-.156	.0300	5.544	.353	16.522
Depression	5	583	-.347	-.417--.272	<.0001	3.665	.453	0
Neuropsychiatric symptoms/BPSD	5	1005	-.295	-.382--.203	<.0001	8.874	.064	54.926

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data. Those asterisked are unchanged from previous analyses.

**Supplementary Table 21l: Factors associated with proxy ratings of quality of life for people with dementia living in the community – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Older age	7	710	.068	-.073-.207	.3436	20.293	.002	70.433
Female gender	5	428	.061	-.035-.156	.2148	1.637	.802	0
Higher scores on cognitive screening measures	8	712	.006	-.093-.105	.9103	11.279	.127	37.940
Mini-Mental State Examination*	8	712	.006	-.093-.105	.9103	11.279	.127	37.940
Better functional ability	5	574	.163	-.063-.373	.1570	28.959	<.001	86.187
Depression	7	625	-.376	-.489--.251	<.0001	16.538	.011	63.720
Geriatric Depression Scale (all versions)	5	466	-.446	-.608--.248	<.0001	20.722	<.001	80.697
Neuropsychiatric symptoms/BPSD	7	609	-.419	-.519--.308	<.0001	13.330	.038	54.990
Neuropsychiatric Inventory	5	375	-.429	-.550--.291	<.0001	8.769	.067	54.384

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data. Those asterisked are unchanged from previous analyses.

**Supplementary Table 21m: Factors associated with proxy ratings of quality of life for people with dementia living in the community made by family carers only – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Older age*	7	710	.068	-.073-.207	.3436	20.293	.002	70.433
Female gender*	5	428	.061	-.035-.156	.2148	1.637	.802	0
Higher scores on cognitive screening measures*	8	712	.006	-.093-.105	.9103	11.279	.127	37.940
Mini-Mental State Examination*	8	712	.006	-.093-.105	.9103	11.279	.127	37.940
Better functional ability*	5	574	.163	-.063-.373	.1570	28.959	<.001	86.187
Depression	6	548	-.406	-.521--.277	<.0001	13.161	.022	62.010
Geriatric Depression Scale (all versions)*	5	466	-.446	-.608--.248	<.0001	20.722	<.001	80.697
Neuropsychiatric symptoms/BPSD*	7	609	-.419	-.519--.308	<.0001	13.330	.038	54.990
Neuropsychiatric Inventory*	5	375	-.429	-.550--.291	<.0001	8.769	.067	54.384

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data. Those asterisked are unchanged from previous analyses.

**Supplementary Table 21n: Factors associated with proxy ratings of quality of life for people with dementia living in residential care settings – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Older age	6	1418	-.093	-.227-.045	.1875	36.520	<.001	83.571
Female gender	7	1444	.032	-.020-.084	.2246	1.759	.941	0
More advanced dementia*	6	1266	-.306	-.438--.161	<.0001	34.496	<.001	85.506
Taking medication	5	886	-.120	-.207--.030	.0088	6.916	.140	42.161
Higher scores on cognitive screening measures	6	834	.260	.176-.341	<.0001	7.532	.184	33.617
Better functional ability	7	1177	.161	.037-.281	.0115	23.078	.001	74.001
Basic activities of daily living*	7	1177	.161	.037-.281	.0115	23.078	.001	74.001
Basic activities of daily living measures excluding Barthel Index & Katz Index of Independence in Activities of Daily Living	5	790	.182	.043-.314	.0107	13.498	.009	70.367
Depression	6	891	-.267	-.400--.124	.0003	19.642	.001	74.544
Neuropsychiatric symptoms/BPSD	7	1293	-.271	-.350--.188	<.0001	13.079	.042	54.126

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data. Those asterisked are unchanged from previous analyses.

**Supplementary Table 21o: Factors associated with proxy ratings of quality of life for people with dementia living in residential care settings made by health care professionals only – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Older age	5	989	-.095	-.290-.107	.3569	34.171	<.001	88.294
Female gender	5	1015	.037	-.025-.099	.2417	1.664	.797	0
Taking medication*	5	886	-.120	-.207--.030	.0088	6.916	.140	42.161
Depression	5	583	-.347	-.417--.272	<.0001	3.665	.453	0
Neuropsychiatric symptoms/BPSD	5	1005	-.295	-.382--.203	<.0001	8.874	.064	54.926

Note: those asterisked are unchanged from previous analyses.

**Supplementary Table 22a: Factors associated with the difference between self-ratings and informant ratings made by family carers only of the quality of life of the person with dementia – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Older age	9	1543	-.046	-.069-.046	.0716	.632	1.000	0
Female gender	9	1606	.075	.026-.124	.0028	5.137	.743	0
Higher level of education*	7	1212	.027	-.056-.110	.5198	10.832	.094	44.606
Higher scores on cognitive screening measures	18	2415	.126	.069-.183	<.0001	30.397	.024	44.074
Mini-Mental State Examination	16	2186	.124	.060-.186	.0001	28.605	.018	47.561
Better functional ability	14	1944	.211	.130-.290	<.0001	37.453	<.001	65.290
Basic activities of daily living	8	1206	.261	.133-.381	<.0001	27.266	<.001	74.327
Instrumental activities of daily living*	7	1019	.099	.037-.160	.0018	1.227	.976	0
Lawton's Instrumental Activities of Daily Living*	7	1019	.099	.037-.160	.0018	1.227	.976	0
Depression	8	709	-.325	-.470--.163	.0001	32.779	<.001	78.645
Geriatric Depression Scale (all versions)	6	422	-.422	-.599--.206	.0003	26.203	<.001	80.918
Neuropsychiatric symptoms/BPSD	12	1614	-.227	-.296--.156	<.0001	20.396	.040	46.067
Neuropsychiatric Inventory	11	1494	-.221	-.295--.145	<.0001	19.188	.038	47.883
Being married*	6	668	.075	-.002-.151	.0559	2.727	.742	0
Living alone	7	1399	-.061	-.114--.009	.0223	5.883	.436	0

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data. Those asterisked are unchanged from previous analyses.

**Supplementary Table 22b: Factors associated with the difference between self-ratings and informant ratings made by family carers only of the quality of life of the person with dementia – factors pertaining to the carer**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Older age*	7	1397	-.038	-.090-.015	.1629	3.621	.728	0
Female gender*	8	1538	.072	.022-.122	.0050	6.524	.480	0
Burden or stress	9	1672	-.229	-.296--.160	<.0001	15.501	.050	48.392
Zarit Burden Interview	7	1262	-.258	-.342--.171	<.0001	14.043	.029	57.273

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data. Those asterisked are unchanged from previous analyses.

**Supplementary Table 22c: Factors associated with the difference between self-ratings and informant ratings of the quality of life of the person with dementia made using the Quality of Life-Alzheimer's Disease (QoL-AD) – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Older age	7	1144	-.037	-.095-.022	.2172	1.239	.975	0
Female gender	5	987	.063	.000-.125	.0498	3.222	.521	0
Higher level of education*	6	1068	.016	-.079-.110	.7457	10.078	.073	50.389
Higher scores on cognitive screening measures	14	1695	.086	.036-.135	.0007	13.477	.412	3.540
Mini-Mental State Examination	13	1576	.091	.035-.145	.0014	13.463	.336	10.866
Better functional ability	12	1429	.254	.153-.350	<.0001	34.572	<.001	68.182
Basic activities of daily living	5	731	.263	.101-.411	.0017	10.803	.029	62.972
Instrumental activities of daily living*	5	818	.105	.036-.173	.0028	.760	.944	0
Lawton's Instrumental Activities of Daily Living*	5	818	.105	.036-.173	.0028	.760	.944	0
Depression	6	511	-.402	-.584--.182	.0006	31.243	<.001	83.996
Neuropsychiatric symptoms/BPSD	11	1475	-.234	-.309--.155	<.0001	20.272	.027	50.670
Neuropsychiatric Inventory	10	1355	-.227	-.309--.142	<.0001	19.115	.024	52.917

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data. Those asterisked are unchanged from previous analyses.

**Supplementary Table 22d: Factors associated with the difference between self-ratings and informant ratings of the quality of life of the person with dementia made using the Quality of Life-Alzheimer's Disease (QoL-AD) – factors pertaining to the carer**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Female gender*	6	1128	.080	.012-.147	.0217	6.093	.297	17.940
Older age*	5	987	.018	-.045-.081	.5771	3.457	.484	0
Burden or stress	7	1262	-.258	-.342--.171	<.0001	14.043	.029	57.273
Zarit Burden Interview	8	1353	-.248	-.319--.174	<.0001	12.557	.084	44.253

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data. Those asterisked are unchanged from previous analyses.



**Supplementary Table 22e: Factors associated with the difference between self-ratings and informant ratings of the quality of life of the person with dementia made using dementia-specific quality of life measures – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Older age	8	1235	-.046	-.102-.011	.1122	1.043	.994	0
Female gender	6	1078	.058	-.002-.118	.0584	2.758	.737	0
Higher level of education	5	1068	.018	-.078-.113	.7203	10.263	.068	51.280
Higher scores on cognitive screening measures	17	1867	.085	.039-.131	.0003	13.756	.617	0
Mini-Mental State Examination	16	1748	.086	.039-.133	.0004	13.740	.545	0
Better functional ability	13	1520	.239	.144-.330	<.0001	35.835	<.001	66.513
Basic activities of daily living	6	822	.218	.082-.346	.0019	12.141	.033	58.819
Instrumental activities of daily living	6	909	.106	.041-.170	.0015	.767	.979	0
Lawton's Instrumental Activities of Daily Living*	6	909	.106	.041-.170	.0015	.767	.979	0
Depression	9	683	-.293	-.443--.127	.0007	35.850	<.001	77.685
Geriatric Depression Scale (all versions)	7	396	-.374	-.572--.135	.0027	33.819	<.001	82.259
Neuropsychiatric symptoms/BPSD	13	1556	-.232	-.303--.158	<.0001	22.021	.037	45.507
Neuropsychiatric Inventory	12	1436	-.226	-.302--.147	<.0001	20.896	.034	47.357
Being married*	6	668	.075	-.002-.151	.0559	2.727	.742	0
Living alone	5	1014	-.032	-.094-.030	.3118	.078	.999	0

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data. Those asterisked are unchanged from previous analyses.

**Supplementary Table 22f: Factors associated with the difference between self-ratings and informant ratings of the quality of life of the person with dementia made using dementia-specific quality of life measures – factors pertaining to the carer**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Older age	6	1078	-.038	-.098-.022	.2160	3.621	.605	0
Female gender	7	1219	.066	.008-.124	.0269	6.255	.395	4.077
Burden or stress	10	1434	-.259	-.341--.174	<.0001	21.812	.009	58.738
Zarit Burden Interview*	10	1434	-.259	-.341--.174	<.0001	21.812	.009	58.738

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data. Those asterisked are unchanged from previous analyses.

**Supplementary Table 22g: Factors associated with the difference between self-ratings and informant ratings of the quality of life of the person with dementia made using health-related quality of life measures – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Higher scores on cognitive screening measures	5	1192	.208	-.077-.332	.0020	17.420	.002	77.038

**Supplementary Table 22h: Factors associated with the difference between self-ratings and informant ratings of the quality of life of people with Alzheimer's disease – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Older age	5	903	-.040	-.105-.026	.2324	.150	.997	0
Higher level of education	5	903	.060	-.006-.125	.0734	.798	.939	0
Higher scores on cognitive screening measures	13	1496	.086	.042-.144	.0004	8.458	.748	0
Mini-Mental State Examination	12	1386	.082	.029-.135	.0026	6.163	.862	0
Better functional ability	8	1150	.161	.067-.253	.0008	14.404	.044	51.401
Instrumental activities of daily living	6	928	.097	.032-.161	.0033	1.203	.945	0
Lawton's Instrumental Activities of Daily Living*	6	928	.097	.032-.161	.0033	1.203	.945	0
Depression	7	508	-.326	-.483--.149	.0004	23.464	.001	74.429
Geriatric Depression Scale (all versions)	6	386	-.375	-.552--.166	.0007	21.049	.001	76.246
Neuropsychiatric symptoms/BPSD	10	1241	-.243	-.335--.147	<.0001	21.567	.010	58.270
Neuropsychiatric Inventory	9	1121	-.238	-.340--.131	<.0001	20.327	.009	60.644

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data. Those asterisked are unchanged from previous analyses.

**Supplementary Table 22i: Factors associated with the difference between self-ratings and informant ratings of the quality of life of people with Alzheimer's disease – factors pertaining to the carer**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Female gender	5	963	.078	-.006-.162	.0703	5.897	.207	32.166
Burden or stress	7	1059	-.287	-.402--.164	<.0001	20.777	.002	71.122
Zarit Burden Interview*	7	1059	-.287	-.402--.164	<.0001	20.777	.002	71.122

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data. Those asterisked are unchanged from previous analyses.

**Supplementary Table 22j: Factors associated with the difference between self-ratings and informant ratings of the quality of life of people with dementia, excluding studies that focused specifically on people diagnosed with Alzheimer’s disease – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran’s Q	p value (Cochran’s Q)	I <sup>2</sup>
Older age	6	1346	-.043	-.096-.011	.1191	2.099	.910	0
Female gender	7	1415	.085	.033-.137	.0015	2.083	.912	0
Higher scores on cognitive screening measures	10	1707	.159	.071-.244	.0004	25.360	.003	64.512
Mini-Mental State Examination	9	1588	.170	.073-.263	.0006	24.883	.002	67.850
Better functional ability	9	930	.283	.172-.387	<.0001	21.198	.007	62.260

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data.

**Supplementary Table 22k: Factors associated with the difference between self-ratings and informant ratings of the quality of life of people with dementia living in the community – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran’s Q	p value (Cochran’s Q)	I <sup>2</sup>
Older age	6	1275	-.044	-.099-.011	.1204	.366	.996	0
Female gender	6	1275	.051	-.004-.106	.0676	1.145	.950	0
Higher scores on cognitive screening measures	11	1722	.114	.034-.192	.0053	23.729	.008	57.858
Mini-Mental State Examination	9	1493	.106	.013-.198	.0259	21.590	.006	62.946
Better functional ability	6	1305	.146	.085-.206	<.0001	5.928	.313	15.650
Depression	5	447	-.167	-.323--.003	.0459	10.887	.028	63.260
Neuropsychiatric symptoms/BPSD	6	986	-.211	-.270--.150	<.0001	3.932	.559	0
Neuropsychiatric Inventory	5	866	-.198	-.262--.133	<.0001	2.711	.607	0

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data.

**Supplementary Table 22l: Factors associated with the difference between self-ratings and informant ratings of the quality of life of people with dementia living in the community – factors pertaining to the carer Factors associated with the difference between self- and informant-rated quality of life of person with dementia quality of life: community living only studies: carer factors**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran’s Q	p value (Cochran’s Q)	I <sup>2</sup>
Older age	6	1275	-.041	-.096-.014	.1466	3.460	.629	0
Female gender	6	1275	.053	-.003-.107	.0623	1.405	.924	0
Burden or stress	8	1355	-.205	-.289--.118	<.0001	15.132	.034	53.739
Zarit Burden Interview	7	1036	-.227	-.327--.122	<.0001	13.748	.033	56.358

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data.

**Supplementary Table 23a: Baseline factors associated with self-ratings of quality of life for the person with dementia made by the person with dementia at follow-up in longitudinal studies – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
More advanced dementia	5	383	-.078	-.179-.025	.1376	.521	.971	0
Clinical Dementia Rating*	5	383	-.078	-.179-.025	.1376	.521	.971	0
Higher scores on cognitive screening measures	6	572	.050	-.034-.132	.2431	1.683	.891	0
Mini-Mental State Examination	6	572	.051	-.032-.134	.2266	1.617	.899	0
Better functional ability	5	371	.053	-.069-.173	.3941	5.239	.264	23.643
Neuropsychiatric symptoms/BPSD	6	572	-.111	-.198--.022	.0147	5.547	.353	9.869
Quality of life rating at baseline	9	1040	.243	-.000-.459	.0503	113.798	<.001	92.970
Quality of Life-Alzheimer's Disease rating at baseline	7	859	.211	-.099-.484	.1806	107.747	<.001	94.431

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data. Those asterisked are unchanged from previous analyses.

**Supplementary Table 23b: Baseline factors associated with informant ratings of quality of life for the person with dementia made by the family carer at follow-up in longitudinal studies – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Quality of life rating at baseline	6	949	.157	-.159-.444	.3296	106.253	<.001	95.294
Quality of Life-Alzheimer's Disease rating at baseline	5	812	.097	-.307-.472	.6458	118.082	<.001	96.613

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data.

**Supplementary Table 23c: Baseline factors associated with informant ratings of quality of life for the person with dementia made by health care professionals at follow-up in longitudinal studies – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Quality of life rating at baseline	5	429	.405	.249-.541	<.0001	10.235	.037	60.918

**Supplementary Table 23d: Baseline factors associated with ratings of quality of life for the person with dementia made using the Quality of Life-Alzheimer’s Disease (QoL-AD) at follow-up in longitudinal studies – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran’s Q	p value (Cochran’s Q)	I <sup>2</sup>
Older age	6	497	-.079	-.170-.013	.0912	2.901	.715	0
Female gender	5	480	.112	.016-.206	.0221	4.152	.386	3.659
More advanced dementia*	6	561	-.062	-.147-.024	.1600	.879	.972	0
Clinical Dementia Rating*	5	439	-.078	-.175-.021	.1227	.459	.977	0
Higher scores on cognitive screening measures	6	628	.064	-.017-.144	.1228	2.891	.717	0
Mini-Mental State Examination	6	628	.065	-.016-.146	.1132	2.798	.731	0
Better functional ability*	5	371	.115	.012-.216	.0287	2.867	.580	0
Neuropsychiatric symptoms/BPSD	6	572	-.112	-.193--.029	.0082	3.792	.580	0
Quality of life rating at baseline*	10	1352	.233	.022-.425	.0309	125.859	<.001	92.849
Quality of Life-Alzheimer’s Disease rating at baseline*	10	1352	.233	.022-.425	.0309	125.859	<.001	92.849

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data. Those asterisked are unchanged from previous analyses.

**Supplementary Table 23e: Baseline factors associated with ratings of quality of life for the person with dementia made using dementia-specific quality of life measures at follow-up in longitudinal studies – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran’s Q	p value (Cochran’s Q)	I <sup>2</sup>
Older age*	7	544	-.079	-.166-.009	.0771	2.901	.821	0
Female gender*	6	527	.112	.023-.199	.0138	4.176	.524	0
More advanced dementia*	6	561	-.062	-.147-.024	.1600	.879	.972	0
Clinical Dementia Rating*	5	439	-.078	-.175-.021	.1227	.459	.977	0
Higher scores on cognitive screening measures	8	770	.138	.024-.248	.0180	15.596	.029	55.116
Mini-Mental State Examination	7	675	.121	-.003-.242	.0554	13.562	.035	55.758
Better functional ability*	5	371	.115	.012-.216	.0287	2.867	.580	0
Depression*	5	447	-.144	-.255--.029	.0144	5.052	.282	20.826
Neuropsychiatric symptoms/BPSD*	7	619	-.120	-.199--.041	.0031	4.361	.628	0
Quality of life rating at baseline	14	1672	.296	.140-.437	.0003	129.614	<.001	89.970
Quality of Life-Alzheimer’s Disease rating at baseline*	10	1352	.233	.022-.425	.0309	125.859	<.001	92.849

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data. Those asterisked are unchanged from previous analyses.

**Supplementary Table 23f: Baseline factors associated with self-ratings of quality of life for the person with dementia made using dementia-specific quality of life measures at follow-up in longitudinal studies – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
More advanced dementia*	6	561	-.062	-.147-.024	.1600	.879	.972	0
Clinical Dementia Rating*	5	439	-.078	-.175-.021	.1227	.459	.977	0
Higher scores on cognitive screening measures	6	572	.050	-.034-.132	.2431	1.683	.891	0
Mini-Mental State Examination	6	572	.051	-.032-.134	.2266	1.167	.899	0
Better functional ability*	5	371	.053	-.069-.173	.3941	5.239	.264	23.643
Neuropsychiatric symptoms/BPSD*	6	572	-.111	-.198--.022	.0147	5.547	.353	9.869
Quality of life rating at baseline	8	929	.239	-.034-.478	.0849	107.995	<.001	93.518
Quality of Life-Alzheimer's Disease rating at baseline*	7	859	.211	-.099-.484	.1806	107.747	<.001	94.431

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data. Those asterisked are unchanged from previous analyses.

**Supplementary Table 23g: Baseline factors associated with informant ratings of quality of life for the person with dementia made by family carers using dementia-specific quality of life measures at follow-up in longitudinal studies – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Quality of life rating at baseline	6	951	.194	-.151-.497	.2691	128.606	<.001	96.112
Quality of Life-Alzheimer's Disease rating at baseline*	5	812	.097	-.307-.472	.6458	118.082	<.001	96.613

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data. Those asterisked are unchanged from previous analyses.

**Supplementary Table 23h: Baseline factors associated with ratings of quality of life for people with dementia, excluding studies that focused specifically on people diagnosed with Alzheimer's disease at follow-up in longitudinal studies – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Female gender*	6	527	.112	.023-.199	.0138	4.176	.524	0
More advanced dementia*	6	561	-.062	-.147-.024	.1600	.879	.972	0
Clinical Dementia Rating*	5	439	-.078	-.175-.021	.1227	.459	.977	0
Higher scores on cognitive screening measures	7	694	.147	.008-.282	.0390	17.798	.007	66.289
Mini-Mental State Examination	7	694	.148	.009-.282	.0367	17.580	.007	65.870
Depression*	5	447	-.144	-.255--.029	.0144	5.052	.282	20.826
Neuropsychiatric symptoms/BPSD	5	401	-.115	-.212--.015	.0238	2.023	.732	0
Quality of life rating at baseline	12	1455	.314	.202-.418	<.0001	47.617	<.001	76.899
Quality of Life-Alzheimer's Disease rating at baseline	8	1128	.307	.142-.455	.0004	48.904	<.001	85.686

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data. Those asterisked are unchanged from previous analyses.

**Supplementary Table 23i: Baseline factors associated with self-ratings of quality of life for people with dementia, excluding studies that focused specifically on people diagnosed with Alzheimer’s disease at follow-up in longitudinal studies – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran’s Q	p value (Cochran’s Q)	I <sup>2</sup>
Quality of life rating at baseline	7	849	.168	-.148-.453	.2977	109.614	<.001	94.526
Quality of Life-Alzheimer’s Disease rating at baseline	6	737	.165	-.210-.498	.3895	106.404	<.001	95.301

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data.

**Supplementary Table 23j: Baseline factors associated with ratings of quality of life for people with dementia living in residential care settings at follow-up in longitudinal studies – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran’s Q	p value (Cochran’s Q)	I <sup>2</sup>
Quality of life rating at baseline	6	965	.286	.103-.450	.0025	35.782	<.001	86.026

**Supplementary Table 24a: Moderating effect of age on the association between self-ratings of quality of life and factors pertaining to the person with dementia**

Factor	Number of studies	Point estimate	Standard error	95% CI	Z	p
Depression	67	-.00325	.00532	-.01368 to .00719	-.60974	.54203

**Supplementary Table 24b: Moderating effect of MMSE score on the association between self-ratings of quality of life and factors pertaining to the person with dementia**

Factor	Number of studies	Point estimate	Standard error	95% CI	Z	p
Depression	57	-.00306	.00583	-.01448 to .00836	-.52495	.59962

**Supplementary Table 25a: Moderating effect of age on the association between informant ratings of quality of life and factors pertaining to the person with dementia**

Factor	Number of studies	Point estimate	Standard error	95% CI	Z	p
Functional ability	87	-.00491	.00574	-.01616 to .00634	-.85482	.39265
Neuropsychiatric symptoms/BPSD	76	-.01372	.00591	-.02530 to -.00213	-2.32040	.02032
Global Deterioration indices	14	-.01558	.01869	-.05222 to .02106	-.83361	.40450
Depression	67	-.00325	.00532	-.01368 to .00719	-.60974	.54203

**Supplementary Table 25b: Moderating effect of age on the association between informant ratings of quality of life and factors pertaining to the carer**

Factor	Number of studies	Point estimate	Standard error	95% CI	Z	p
Burden/stress	25	-.01874	.01312	-.04446 to -.00698	-1.42792	.15332
Distress (Neuropsychiatric Inventory)	10	.00074	.01080	-.02043 to .02191	.06820	.94563

**Supplementary Table 25c: Moderating effect of MMSE score on the association between informant ratings of quality of life and factors pertaining to the person with dementia**

Factor	Number of studies	Point estimate	Standard error	95% CI	Z	p
Functional ability	67	-.00631	.00477	-.01565 to .00304	-1.32300	.18583
Neuropsychiatric symptoms/BPSD	61	-.00084	.00597	-.01253 to .01085	-.14098	.88789
Global Deterioration indices*	6					
Depression	57	-.00306	.00583	-.01448 to .00836	-.52495	.59962

Note: those asterisked are where moderator analysis was not conducted as there were data available for less than 10 studies

**Supplementary Table 25d: Moderating effect of MMSE score on the association between informant ratings of quality of life and factors pertaining to the carer**

Factor	Number of studies	Point estimate	Standard error	95% CI	Z	p
Burden/stress	18	.00319	.01440	-.02502 to .03141	.22185	.82443
Distress (Neuropsychiatric Inventory)*	8					

Note: those asterisked are where moderator analysis was not conducted as there were data available for less than 10 studies



**Supplementary Table 26a: Sensitivity analyses removing the inserted correlation of zero for non-significant p values. Factors associated with self-ratings of quality of life by the person with dementia: factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Older age	52	7671	-.024	.005--.053	.1042	74.548	.017	31.588
Female gender	39	5709	.009	-.022-.039	.5813	49.031	.108	22.498
White ethnicity	10	1562	.199	.137-.259	<.0001	13.734	.132	34.471
Higher income	7	1002	.166	-.008-.331	.0620	45.738	<.001	86.882
Higher level of education	40	4841	.068	.030-.106	.0005	63.786	.007	38.858
Underweight	7	1052	-.004	.125--.133	.9542	25.777	<.001	76.724
Alzheimer's (vs. other dementia subtypes)	9	1552	.148	-.030-.316	.1028	96.047	<.001	91.671
Longer disease duration	9	1470	-.008	.066--.083	.8246	13.668	.091	41.469
More advanced dementia	24	3541	-.098	-.048--.148	.0001	48.246	.002	52.328
Global Deterioration Scale*	6	886	-.103	-.177--.029	.0067	5.897	.316	15.207
Clinical Dementia Rating	15	2177	-.091	-.016--.165	.0180	40.310	<.001	65.270
Higher scores on cognitive screening measures	88	13102	.096	.065-.127	<.0001	229.036	<.001	62.015
Mini-Mental State Examination	80	11698	.090	.057-.123	<.0001	211.413	<.001	62.632
Alzheimer's Disease Assessment Scale-Cognitive Subscale*	5	3095	.066	.030-.100	.0003	3.239	.519	0
Taking medication	19	4606	-.142	-.192--.092	<.0001	42.001	.001	57.143
Acetylcholinesterase inhibitors	5	968	-.135	-.207--.061	.0004	4.714	.318	15.138
Polypharmacy	8	1396	-.151	-.203--.099	<.0001	1.392	.986	0
Psychotropic drugs	9	2519	-.159	-.251--.064	.0011	27.124	.001	70.506
Longer duration of care home stay	7	665	-.102	-.026--.178	.0091	5.420	.491	0
Better functional ability	76	12784	.182	.148-.216	<.0001	252.425	<.001	70.288
Alzheimer's Disease Co-operative Study-Activities of Daily Living Inventory	3	581	.152	-.069-.235	.2773	22.156	<.001	81.946
Disability Assessment for Dementia	3	581	.152	-.132-.414	.2936	20.451	<.001	90.221
Basic activities of daily living	48	8431	.228	.183-.272	<.0001	173.193	<.001	72.863
Barthel Index	16	2365	.210	.105-.311	.0001	95.399	<.001	84.277
Katz Index of Independence in Activities of Daily Living	11	1338	.225	.127-.319	<.0001	26.257	.003	61.915
Physical Self-Maintenance Scale*	6	703	.216	.132-.297	<.0001	6.403	.269	21.917
Basic activities of daily living measures excluding Barthel Index, Katz Index of Independence in Activities of Daily Living & Physical Self-Maintenance Scale	18	4353	.233	.165-.298	<.0001	58.459	<.001	70.920
Instrumental activities of daily living*	25	3330	.148	.087-.208	<.0001	65.771	<.001	63.510
Functional Activities Questionnaire*	5	398	.176	.077-.271	.0005	2.319	.678	0
Lawton's Instrumental Activities of Daily Living*	13	1660	.115	.059-.170	<.0001	14.161	.291	15.259
Instrumental activities of daily living measures excluding Lawton's Instrumental Activities of Daily Living & Functional Activities Questionnaire*	8	1372	.208	.059-.349	.0066	50.192	<.001	86.054
Presence of unmet needs*	5	838	-.204	-.305--.100	.0002	9.273	.055	56.866
More awareness*	10	1285	.145	.090-.198	<.0001	7.769	.558	0
Better self-rated memory functioning	8	1320	.035	-.019-.089	.2084	6.239	.512	0
Depression	79	11394	-.321	-.280--.361	<.0001	386.517	<.001	79.820
Cornell Scale for Depression in Dementia*	27	5537	-.245	-.300--.189	<.0001	102.956	<.001	74.746
Geriatric Depression Scale (all versions)	27	2787	-.455	-.359--.541	<.0001	218.578	<.001	88.105
Geriatric Depression Scale-15	15	1605	-.524	-.392--.635	<.0001	150.171	<.001	90.677
Geriatric Depression Scale-30*	11	1079	-.320	-.397--.240	<.0001	15.873	.103	36.999
Neuropsychiatric Inventory-Depression*	12	1855	-.262	-.363--.154	<.0001	55.863	<.001	80.309
Depression measures excluding Geriatric Depression Scale, Cornell Scale for Depression in Dementia & Neuropsychiatric Inventory-Depression*	28	2802	-.332	-.401--.259	<.0001	109.001	<.001	75.229
Anxiety	20	2479	-.255	-.174--.333	<.0001	76.351	<.001	75.115

Neuropsychiatric Inventory-Anxiety	8	970	-.094	-.031--.157	.0037	6.022	.537	0
Rating of Anxiety in Dementia*	6	925	-.328	-.462--.180	<.0001	21.077	.001	76.278
Anxiety measures excluding Rating of Anxiety in Dementia & Neuropsychiatric Inventory-Anxiety*	8	872	-.351	-.482--.204	<.0001	35.812	<.001	80.453
Neuropsychiatric symptoms/BPSD	53	9200	-.119	-.097--.141	<.0001	55.255	.353	5.892
Neuropsychiatric Inventory	39	7681	-.118	-.092--.144	<.0001	42.768	.274	11.149
Neuropsychiatric symptom measures excluding Neuropsychiatric Inventory	16	1605	-.131	-.082--.180	<.0001	12.231	.661	0
Pain*	10	2720	-.157	-.236--.077	.0001	24.305	.004	62.971
Better self-rated health	11	1702	.269	.167-.366	<.0001	44.359	<.001	77.457
Presence of co-morbid conditions	29	3573	-.228	-.173--.282	<.0001	73.744	<.001	62.031
Better quality of relationship with carer*	6	802	.384	.148-.579	.0019	62.659	<.001	92.020
Cared for by spouse (vs. other carer type)	7	1629	.137	.072-.201	<.0001	9.840	.132	39.025
Being married	19	3216	.099	.065-.134	<.0001	14.866	.671	0
Living alone	7	1449	-.160	-.012--.301	.0342	45.751	<.001	86.885
Greater social engagement*	11	1035	.314	.121-.483	.0017	94.157	<.001	89.379
Presence of religious beliefs/spirituality*	8	641	.352	.120-.547	.0035	60.621	<.001	88.453

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data. Those asterisked are unchanged from previous analyses.

**Supplementary Table 26b: Sensitivity analyses removing the inserted correlation of zero for non-significant p values. Factors associated with self-ratings of quality of life by the person with dementia: factors pertaining to the carer**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Older age	9	1662	-.067	-.002--.133	.0441	11.922	.155	32.899
Female gender	10	1562	.021	-.049-.090	.5631	15.283	.083	41.113
Higher level of education	10	1621	.097	.036-.158	.0020	12.622	.180	28.697
Depression	9	1008	-.148	-.021--.270	.0227	31.182	<.001	74.344
Center for Epidemiologic Studies Depression Scale*	5	564	-.118	-.244-.011	.0738	9.181	.057	56.432
Distress at NPS symptoms*	9	1089	-.140	-.202--.078	.0001	8.536	.383	6.284
Burden or stress	19	2713	-.153	-.091--.214	<.0001	41.462	.001	56.587
Zarit Burden Interview	14	1691	-.141	-.055--.226	.0015	35.267	.001	63.138
Burden or stress measures excluding Zarit Burden Interview*	5	1032	-.166	-.225--.105	<.0001	3.010	.556	0
Poorer mental health (GHQ)*	5	702	-.156	-.275--.034	.0126	6.753	.150	40.767
Carer quality of life (self-rated)	6	667	.277	.114-.424	.0010	21.397	.001	76.632

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data. Those asterisked are unchanged from previous analyses.

**Supplementary Table 27a: Sensitivity analyses removing the inserted correlation of zero for non-significant p values. Factors associated with informant ratings of quality of life: factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Older age	51	10314	-.030	.002--.063	.0626	119.267	<.001	58.077
Female gender	51	10743	.030	-.001-.061	.0616	119.932	<.001	57.476
White ethnicity*	7	1486	.101	.042-.159	.0008	7.612	.268	21.180
Higher level of education	27	4964	.045	.016-.074	.0024	27.401	.389	5.112
Underweight	4	1229	-.120	-.196--.042	.0025	5.634	.131	46.756
Alzheimer's (vs. other dementia subtypes)	7	2214	.069	-.031-.167	.1774	26.825	<.001	77.633
Longer disease duration	10	1530	-.076	-.026--.126	.0032	7.018	.635	0
More advanced dementia	39	7949	-.307	-.228--.381	<.0001	518.263	<.001	92.668
Clinical Dementia Rating	24	5735	-.278	-.172--.378	<.0001	394.685	<.001	94.173
Global Deterioration Scale	6	887	-.303	-.218--.384	<.0001	9.145	.103	45.328
Advanced dementia measures excluding Clinical Dementia Rating & Global Deterioration Scale*	9	1327	-.388	-.535--.216	<.0001	86.493	<.001	90.751
Higher scores on cognitive screening measures	81	14207	.193	.157-.230	<.0001	358.994	<.001	77.716
Dementia Rating Scale	4	527	.351	.173-.507	.0002	14.162	.003	78.817
Mini-Mental State Examination	72	12533	.182	.143-.221	<.0001	315.903	<.001	77.525
Cognitive screening measures excluding Dementia Rating Scale & Mini-Mental State Examination	12	4547	.216	.128-.300	<.0001	75.165	<.001	85.366
Taking medication	19	5401	.101	.058-.143	<.0001	36.547	.006	50.748
Acetylcholinesterase inhibitors	6	895	.161	.096-.225	<.0001	4.749	.447	0
Polypharmacy*	9	1834	-.060	-.105--.014	.0112	6.754	.563	0
Psychotropic drugs	11	3649	.128	.057-.198	.0004	35.279	<.001	71.655
Antipsychotic	5	1244	.191	.085-.293	.0005	11.304	.023	64.615
Antidepressants	5	1060	.125	.005-.241	.0414	10.512	.033	61.949
Anxiolytics	4	960	.105	-.067-.271	.2317	13.673	.003	78.060
Longer duration of care home stay	11	2178	-.114	-.054--.173	.0002	16.974	.075	41.085
Degree to which residential care is person-centred	6	1815	.167	.063-.266	.0016	13.219	.021	62.176
Community dwelling (vs. residential care)*	5	1011	.123	.062-.184	.0001	3.398	.494	0
Special dementia unit (vs. other residential facility)*	5	2366	.114	.069-.158	<.0001	4.753	.314	15.838
Better functional ability*	87	18707	.337	.292-.380	<.0001	893.737	<.001	90.377
Alzheimer's Disease Co-operative Study-Activities of Daily Living Inventory*	6	1264	.346	.223-.458	<.0001	25.967	<.001	80.745
Bristol Activities of Daily Living Scale*	5	859	.450	.393-.504	<.0001	4.094	.393	2.296
Disability Assessment for Dementia*	6	3206	.249	.110-.378	.0005	45.745	<.001	89.070
Basic activities of daily living*	61	13149	.371	.317-.423	<.0001	695.854	<.001	91.378
Barthel Index*	19	3429	.484	.372-.583	<.0001	268.501	<.001	93.296
Dependence Scale*	7	3523	.328	.154-.483	.0003	123.388	<.001	95.137
Katz Index of Independence in Activities of Daily Living*	16	2991	.300	.247-.354	<.0001	31.816	.007	52.854
Physical Self-Maintenance Scale*	9	1494	.333	.265-.398	<.0001	13.285	.102	39.780
Basic activities of daily living measures excluding Barthel Index, Dependence Scale, Katz Index of Independence in Activities of Daily Living & Physical Self-Maintenance Scale*	11	1859	.300	.208-.386	<.0001	40.364	<.001	75.225
Instrumental activities of daily living*	24	3234	.351	.270-.428	<.0001	134.793	<.001	82.937
Lawton's Instrumental Activities of Daily Living*	15	2306	.303	.210-.390	<.0001	72.120	<.001	80.588
Instrumental activities of daily living measures excluding Lawton's Instrumental Activities of Daily Living*	10	1039	.458	.382-.528	<.0001	16.148	.064	44.267
More awareness*	5	557	.275	.037-.484	.0241	31.084	<.001	87.132
Better self-rated memory functioning*	8	1185	.213	.054-.363	.0092	47.334	<.001	85.211

Depression	68	12382	-.307	-.262--.351	<.0001	456.872	<.001	85.335
Cornell Scale for Depression in Dementia*	28	6671	-.339	-.396--.280	<.0001	171.626	<.001	84.268
Geriatric Depression Scale (all versions)	18	1919	-.268	-.180--.352	<.0001	62.428	<.001	72.769
Geriatric Depression Scale-30*	10	1082	-.289	-.414--.154	<.0001	40.764	<.001	77.922
Geriatric Depression Scale-15	7	803	-.229	-.104--.347	.0004	18.424	.005	67.434
Neuropsychiatric Inventory-Depression*	12	2223	-.263	-.396--.118	.0004	117.702	<.001	90.654
Other depression measures excluding Geriatric Depression Scale, Cornell Scale for Depression in Dementia & Neuropsychiatric Inventory-Depression*	19	2503	-.309	-.392--.221	<.0001	93.689	<.001	80.787
Anxiety*	18	3143	-.148	-.189--.107	<.0001	20.328	.258	16.371
Neuropsychiatric Inventory-Anxiety*	12	2128	-.151	-.209--.092	<.0001	16.069	.139	31.545
Anxiety measures excluding Neuropsychiatric Inventory-Anxiety*	7	1201	-.163	-.235--.089	<.0001	8.765	.187	31.546
Neuropsychiatric symptoms/BPSD	74	14595	-.339	-.295--.381	<.0001	564.243	<.001	87.062
Cohen-Mansfield Agitation Inventory*	9	1332	-.150	-.213--.085	<.0001	10.839	.211	26.191
Neuropsychiatric Inventory	48	10355	-.352	-.296--.406	<.0001	427.307	<.001	89.001
Neuropsychiatric symptom measures excluding Neuropsychiatric Inventory & Cohen-Mansfield Agitation Inventory*	23	3685	-.353	-.417--.286	<.0001	107.094	<.001	79.457
Pain*	13	4048	-.203	-.307--.095	.0003	124.860	<.001	90.389
Better self-rated health*	8	1826	.198	.131--.263	<.0001	12.123	.097	42.260
Presence of co-morbid conditions	26	5188	-.104	-.064--.143	<.0001	45.393	.008	44.925
Cared for by spouse (vs. other carer type)	9	1613	.137	.081--.193	<.0001	9.920	.271	19.351
Being married	17	3552	.105	.060--.149	<.0001	26.545	.047	39.724
Living alone	11	1709	-.170	-.123--.216	<.0001	6.506	.771	0

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data. Those asterisked are unchanged from previous analyses.

**Supplementary Table 27b: Sensitivity analyses removing the inserted correlation of zero for non-significant p values. Factors associated with informant ratings of quality of life: factors pertaining to the carer**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Older age	13	2239	-.043	.022--.108	.1933	23.940	.021	49.874
Female gender	12	2364	.055	-.005--.116	.0743	20.183	.043	45.497
Higher level of education*	12	2313	.084	.035--.132	.0007	13.597	.256	19.098
More time spent caring (residential care only)*	6	772	-.159	-.253--.061	.0016	9.538	.089	47.578
More time spent caring (community only)	4	520	-.179	-.016--.332	.0317	9.410	.024	68.119
Depression*	14	2694	-.255	-.338--.169	<.0001	64.440	<.001	79.826
Center for Epidemiologic Studies Depression Scale*	6	905	-.299	-.458--.122	.0012	32.272	<.001	84.507
Geriatric Depression Scale (all versions)*	5	591	-.362	-.496--.211	<.0001	14.617	.006	72.634
Depression measures excluding Geriatric Depression Scale & Center for Epidemiologic Studies Depression Scale*	6	1449	-.202	-.313--.085	.0008	22.218	<.001	77.496
Burden or stress*	25	4460	-.324	-.398--.247	<.0001	180.102	<.001	86.674
Zarit Burden Interview*	18	3284	-.345	-.435--.248	<.0001	148.814	<.001	88.576
Burden or stress measures excluding Zarit Burden Interview*	8	1247	-.276	-.391--.152	<.0001	32.129	<.001	78.213
Distress at NPS symptoms*	10	1665	-.320	-.379--.258	<.0001	15.219	.085	40.863
Poorer mental health (GHQ)*	6	715	-.242	-.311--.170	<.0001	3.990	.551	0
Carer quality of life (self-rated)*	8	1509	.314	.212--.410	<.0001	28.246	<.001	75.218

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data. Those asterisked are unchanged from previous analyses.

**Supplementary Table 28a: Sensitivity analyses removing the inserted correlation of zero for non-significant p values. Factors associated with proxy ratings of quality of life: factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Older age	13	1934	-.017	.099--.132	.7735	70.895	<.001	83.073
Female gender	10	1378	-.004	-.058-.049	.8731	6.380	.701	0
More advanced dementia*	8	1421	-.302	-.413--.183	<.0001	35.674	<.001	80.378
Higher scores on cognitive screening measures	15	1788	.116	.023-.207	.0147	48.959	<.001	71.405
Mini-Mental State Examination	12	1367	.072	-.033-.175	.1784	35.776	<.001	69.253
Taking medication	6	966	-.142	-.067--.215	.0002	6.745	.240	25.866
Better functional ability	13	1975	.186	.089-.279	.0002	52.252	<.001	77.035
Basic activities of daily living	11	1699	.167	.067-.264	.0012	38.486	<.001	74.017
Basic activities of daily living measures excluding Barthel Index & Katz Index of Independence in Activities of Daily Living	8	1135	.228	.126-.325	<.0001	18.565	.010	62.269
Depression*	13	1651	-.317	-.409--.219	<.0001	47.495	<.001	74.734
Cornell Scale for Depression in Dementia*	5	811	-.200	-.361--.027	.0235	19.089	.001	79.046
Geriatric Depression Scale*	5	466	-.446	-.608--.248	<.0001	20.722	<.001	80.697
Neuropsychiatric symptoms/BPSD*	17	2559	-.316	-.373--.257	<.0001	37.956	.002	57.845
Neuropsychiatric Inventory*	12	1645	-.315	-.387--.238	<.0001	28.633	.003	61.582
Neuropsychiatric symptom measures excluding Neuropsychiatric Inventory*	6	1120	-.315	-.396--.228	<.0001	10.134	.072	50.659
Presence of co-morbid conditions*	6	873	-.121	-.186--.054	.0004	3.383	.641	0

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data. Those asterisked are unchanged from previous analyses.

**Supplementary Table 28b: Sensitivity analyses removing the inserted correlation of zero for non-significant p values. Factors associated with proxy ratings of quality of life: factors pertaining to the carer**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Older age	5	412	-.017	-.160-.126	.8173	7.963	.093	49.768

**Supplementary Table 29a: Sensitivity analyses removing the inserted correlation of zero for non-significant p values. Factors associated with the difference between self-ratings and informant-ratings of the quality of life of the person with dementia – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Older age*	12	2249	-.042	-.083--0.000	.0497	2.254	.997	0
Female gender*	11	2237	.007	-.052-.066	.8093	16.622	.083	39.840
Higher level of education*	7	1212	.027	-.056-.110	.5198	10.832	.094	44.606
Higher scores on cognitive screening measures*	23	3203	.128	.079-.175	<.0001	35.229	.037	37.552
Mini-Mental State Examination*	21	2974	.126	.074-.177	<.0001	33.508	.030	40.312
Better functional ability*	17	2080	.221	.147-.292	<.0001	40.001	.001	60.011
Basic activities of daily living*	8	1207	.204	.115-.291	<.0001	12.960	.073	45.988
Instrumental activities of daily living*	7	1019	.099	.037-.160	.0018	1.227	.976	0
Lawton's Instrumental Activities of Daily Living*	7	1019	.099	.037-.160	.0018	1.227	.976	0
Depression*	11	1354	-.277	-.397--.148	<.0001	46.807	<.001	78.635
Geriatric Depression Scale (all versions)*	9	1067	-.337	-.486--.168	.0002	47.848	<.001	83.281
Neuropsychiatric symptoms/BPSD*	14	1700	-.224	-.289--.157	<.0001	22.251	.052	41.576
Neuropsychiatric Inventory*	13	1580	-.218	-.287--.147	<.0001	21.047	.050	42.984
Presence of co-morbid conditions*	5	467	-.131	-.311-.058	.1739	15.201	.004	73.686
Being married*	6	668	.075	-.002-.151	.0559	2.727	.742	0
Living alone*	7	1402	-.061	-.113--.008	.0234	5.335	.502	0

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data. Those asterisked are unchanged from previous analyses.

**Supplementary Table 29b: Sensitivity analyses removing the inserted correlation of zero for non-significant p values. Factors associated with the difference between self-ratings and informant-ratings of the quality of life of the person with dementia – factors pertaining to the carer**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Older age*	7	1397	-.038	-.090-.015	.1629	3.621	.728	0
Female gender*	8	1538	.034	-.036-.104	.3398	11.970	.102	41.519
Burden or stress*	11	1753	-.242	-.317--.163	<.0001	25.123	.005	60.196
Zarit Burden Interview*	10	1434	-.259	-.341--.174	<.0001	21.812	.009	58.738

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data. Those asterisked are unchanged from previous analyses.

**Supplementary Table 30: Sensitivity analyses removing the inserted correlation of zero for non-significant p values. Baseline factors associated with ratings of quality of life for the person with dementia at follow-up in longitudinal studies – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Older age	5	390	-.096	.005--.195	.0616	2.913	.573	0
Female gender	6	457	-.157	-.316-.012	.0682	13.744	.017	63.621
More advanced dementia	5	529	-.066	-.154-.023	.1480	.760	.944	0
Clinical Dementia Rating	4	407	-.084	-.184-.019	.1088	.270	.966	0
Higher scores on cognitive screening measures	8	853	.171	.056-.281	.0037	18.486	.010	62.134
Mini-Mental State Examination	8	853	.172	.058-.281	.0033	18.222	.011	61.586
Better functional ability	4	339	.126	.018-.230	.0225	2.443	.486	0
Depression*	5	447	-.144	-.255--.029	.0144	5.052	.282	20.826
Neuropsychiatric symptoms/BPSD	6	587	-.127	-.045--.206	.0024	3.914	.564	0
Quality of life rating at baseline	15	1782	.265	.112-.406	.0008	141.101	<.001	90.078
Quality of Life-Alzheimer's Disease rating at baseline	10	1352	.210	-.021-.420	.0743	149.171	<.001	93.967

Note: where enough data existed individual measures were analysed separately. This analysis is included indented under the relevant factor label. The overall factor includes this and other relevant data. Those asterisked are unchanged from previous analyses.

**Supplementary Table 31: Effect sizes after poor quality articles were removed from the analysis for self-ratings of quality of life by the person with dementia – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Depression	78	11200	.315	.275-.355	<.0001	362.847	<.001	78.779
Anxiety	20	2956	.211	.135-.285	<.0001	76.021	<.001	75.007
Functional ability	78	12848	.172	.138-.206	<.0001	262.571	<.001	70.675
Neuropsychiatric symptoms/BPSD	55	9250	.108	.084-.132	<.0001	63.012	.188	14.302
Dementia diagnostic category	8	1233	.097	.029-.165	.0053	9.846	<.001	28.903
Cognitive screening measures	92	13447	.081	.053-.108	<.0001	193.861	<.001	53.059
Self-rated memory functioning	7	1141	.038	-.023-.098	.2204	6.225	.398	3.619
Age	55	7900	.026	.004-.048	.0215	48.970	.668	0
Disease duration	11	1739	.011	-.049-.071	.7169	13.827	.181	27.676



**Supplementary Table 32a: Effect sizes after poor quality articles were removed from the analysis for informant ratings of quality of life for the person with dementia – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Functional ability	86	17118	.348	.303-.391	<.0001	839.025	<.001	89.869
Global Deterioration indices	13	2073	.322	.189-.443	<.0001	121.704	<.001	90.140
Depression	66	12199	.302	.256-.347	<.0001	456.610	<.001	85.765
Pain	12	3654	.208	.088-.323	.0008	123.733	<.001	91.110
Cognitive screening measures	85	14518	.176	.141-.211	<.0001	346.654	<.001	75.768
Length of care home stay	11	2221	.103	.041-.163	.0011	18.471	.048	45.860
Co-morbidity	25	4895	.090	.051-.128	<.0001	39.714	.023	39.568
Gender	47	9932	.067	.044-.090	<.0001	56.471	.139	18.542
Medication	20	5609	.058	.030-.085	<.0001	19.736	.411	3.729
Diet	4	1361	.047	-.055-.148	.3672	10.368	.016	71.066
Age	58	11926	.025	-.003-.052	.0837	118.082	<.001	51.728

**Supplementary Table 32b: Effect sizes after poor quality articles were removed from the analysis for informant ratings of quality of life for the person with dementia – factors pertaining to the carer**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Burden/stress	25	4465	.328	.250-.401	<.0001	179.696	<.001	86.644
Depression	14	2698	.261	.174-.344	<.0001	65.084	<.001	80.026

**Supplementary Table 33: Effect sizes after poor quality articles were removed from the analysis for proxy ratings of quality of life for the person with dementia – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Cognitive screening measures	15	1845	.085	.000-.169	.0497	41.897	<.001	66.584

**Supplementary Table 34: Effect sizes after poor quality articles were removed from the analysis for baseline factors associated with ratings of quality of life at follow-up in longitudinal studies – factors pertaining to the person with dementia**

Factor	Number of studies	Number of participants	r	95% CI	p	Cochran's Q	p value (Cochran's Q)	I <sup>2</sup>
Baseline quality of life	15	1801	.328	.200-.445	<.0001	106.472	<.001	86.851
Cognitive screening measures	8	853	.171	.056-.281	.0037	18.486	.010	62.134
Neuropsychiatric symptoms/BPSD	6	587	.127	.045-.206	.0024	3.914	.562	0
Functional ability	4	339	.126	.018-.230	.0225	2.443	.486	0
Gender	5	495	.102	.010-.192	.0299	3.397	.494	0
Clinical Dementia Rating	4	446	.085	-.009-.177	.0768	.345	.651	0
Age	6	516	.076	-.014-.165	.0958	3.634	.603	0

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