

Dementia

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September 2025

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The lived experiences of dementia

This lived experience survey captures the voices of almost 3,500 people affected by dementia, including those living with the condition, unpaid carers and loved ones. It finds that one in five people affected by dementia have received no health care, social care or financial support. Of those who received support, fewer than half were satisfied with it, with only 29% saying dementia-related health care was easy to access. More than half believe this situation could be improved if increased support from professional carers trained in dementia was available.

Imperial trials at-home monitoring service for dementia patients

Digital Health, 27 August 2025

Imperial College Healthcare NHS Trust has launched an at-home monitoring service for dementia patients, called MinderCare. It uses a network of sensors installed in the home to send data back to a team of health professionals. The service aims to enrol 100 patients by September 2025, as part of a study.

1. Experiences and needs of residents with dementia in relocating to an innovative living arrangement within long-term care: A qualitative study

Authors: Brouwers, Mara;Landeweer, Elleke Gm;de Boer, Bram;Groen, Wim G.;Schreuder, Miranda C.;Verbeek, Hilde and Consortium, Relocare

Publication Date: 2025

Journal: Dementia (London, England) 24(7), pp. 1225–1240

Abstract: Competing Interests: Declaration of conflicting interestsThe author(s) declared no potential

conflicts of interest with respect to the research, authorship, and/or publication of this article.; During the last decade, an increasing number of care organizations have chosen to rebuild or build a new care facility to provide better person-environments for residents with dementia. This has inevitably led to an increase in relocations. This study investigated how residents with dementia experienced a relocation from a regular nursing home to an innovative living arrangement. A qualitative study was performed, using semi-structured interviews and observations. Two nursing homes offering 24 h care to residents with psychogeriatric symptoms that planned a relocation to an innovative living arrangement were selected. Sixteen residents were included. Five themes from the data described what was of importance to residents when moving, including (1) the physical environment of the new location, (2) the belongings of residents, (3) feeling at home, (4) the importance of social contact when relocating, and (5) the need to be engaged in daily life. This study found that the residents were not actively involved in the relocation process, despite the clear desire they expressed to be involved and of importance. As the residents with dementia were able to express what was important to them in this study, relocation processes should focus more on involving such residents and incorporating them within relocation processes.

2. Association of oral health and chewing ability with cognitive impairment and dementia in older adults: Longitudinal findings from a national panel study

Authors: Choi, Miri;Park, Hyewon and Park, Bomi

Publication Date: 2025

Journal: Archives of Gerontology and Geriatrics 138, pp. 105970

Abstract: Competing Interests: Declaration of competing interest The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.; Objective: Recent studies suggest that poor oral health may contribute to cognitive impairment. However, most previous studies were cross-sectional, limiting conclusions regarding temporal relationships. Using nationally representative data, we investigated the longitudinal association between oral health and the development of mild cognitive impairment (MCI) or dementia among adults aged ≥ 45 years, with a specific focus on those aged ≥ 65 years.; Methods: Data from the Korean Longitudinal Study of Aging were analyzed. Adults aged ≥ 45 years without dementia were followed up from 2018 to 2022. Baseline oral health was assessed using the Geriatric Oral Health Assessment Index (GOHAI) and self-reported chewing ability. Cases of MCI or dementia were identified using self-reported physician diagnoses during follow-up. Cox proportional hazard models were used to estimate the hazard ratios (HR) for developing MCI/dementia according to baseline oral health. Analyses were performed separately by sex and included a subgroup analysis of participants aged ≥ 65 years.; Results: Over the 4-year follow-up, participants with higher GOHAI scores exhibited significantly lower risks of cognitive impairment (adjusted HR: 0.98 per point increase, 95 % confidence interval (CI): 0.96-0.99). Participants reporting good chewing ability had approximately half the risk of cognitive decline compared with those reporting chewing difficulties (adjusted HR: 0.50, 95 %CI: 0.35-0.75). This association remained significant across sexes and within the subgroup aged ≥ 65 years.; Conclusions: Improved oral health and preserved chewing ability were significantly associated with a reduced risk of cognitive impairment and dementia, suggesting a potential role for oral health in dementia prevention strategies. (Copyright © 2025 Elsevier B.V. All rights reserved.)

3. Exploring experiences of dementia post-diagnosis support and ideas for improving practice: A co-produced study

Authors: Dooley, Jemima;Webb, Joe;James, Roy;Davis, Harry and Read, Sandy

Publication Date: 2025

Journal: Dementia (London, England) 24(7), pp. 1241–1257

Abstract: Competing Interests: Declaration of conflicting interestsThe author(s) declared no potential

conflicts of interest with respect to the research, authorship, and/or publication of this article.; It takes time to adjust to a diagnosis of dementia. Post-diagnosis support has an important part to play in navigating this transition. However, it is often scarce and variable according to location. This co-produced study explored experiences of support across the UK. The project was co-designed and implemented with people living with dementia. Five focus groups were attended by 18 people with dementia and 10 spouses from across the UK. The aim was to find out what support people currently received, what aspects they valued, and what they would like to see done differently. Most participants reported feeling abandoned after diagnosis, with little continuity of care. Many felt the burden of navigating post-diagnosis life was on them and their loved ones, with a perceived scarcity of support, and difficulties navigating the benefits system. Peer/voluntary support was seen as vital in promoting confidence, a source of relational support, and finding out crucial information relating to benefits, healthcare, and management of symptoms. Participants felt dementia was stigmatised, receiving less support than other medical conditions. Participants identified aspects of post-diagnosis support they valued, and collaborated on ideas for support structures and services they would like to see introduced. In concluding this study, we argue that post-diagnosis support services could be improved with the input of people living with dementia. This could reduce the burden on those receiving the diagnosis to find advice and support outside of health and social care systems. For future research, the financial implications of a dementia diagnosis have rarely been discussed and warrants further exploration.

4. Sex and gender differences in caregiver burden among family caregivers of persons with dementia: A systematic review and meta-analysis

Authors: Duangjina, Thitinan;Jeamjitvibool, Thanakrit;Park, Chang;Raszewski, Rebecca;Gruss, Valerie and Fritschi, Cynthia

Publication Date: 2025

Journal: Archives of Gerontology and Geriatrics 138, pp. 105977

Abstract: Competing Interests: Declaration of competing interest The authors declare no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.; Objective: This systematic review and meta-analysis examined sex and gender differences in caregiver burden among family caregivers of persons with dementia and explored variations by region and country income level.; Methods: Following PRISMA guidelines, a comprehensive literature search was conducted in four databases (CINAHL, PubMed, EMBASE, and PsycINFO), including studies up to December 2024. Forty-seven studies representing 24 countries were included in the systematic review, with 39 studies (41 effect sizes) included in the meta-analysis. A random-effects model was used to calculate pooled effect sizes (Cohen's d), and subgroup analyses were performed based on region and national income level.; Results: Across the 47 studies, 14,919 family caregivers participated, of whom 70 % were women. Most family caregivers were either spouses (44 %) or adult children (43 %). Care recipients were predominantly diagnosed with Alzheimer's disease. Female caregivers reported significantly greater burden than males (Cohen's $d = 0.21$, 95 % CI: 0.13-0.29, $p < 0.001$). Subgroup analyses showed higher burden in Asian countries ($d = 0.27$) compared to Western countries ($d = 0.19$), though the difference was not statistically significant. High-income countries showed greater disparities ($d = 0.21$) than middle-income countries ($d = 0.16$), with no significant difference. High heterogeneity was observed among Western and high-income countries.; Conclusion: Female family caregivers experience a higher burden than male caregivers across regions and economic settings. Although regional and income-level subgroup differences were not statistically significant, findings underscore the role of cultural and structural contexts in shaping caregiver burden. Gender-sensitive, context specific interventions are essential to address these disparities. (Copyright © 2025 The Authors. Published by Elsevier B.V. All rights reserved.)

5. The Role of Reminiscence in Arts-Based Interventions for Dementia Care: A Scoping Review

Authors: Healy, Teri-Lynn;Thompson, Genevieve and Archibald, Mandy M.

Publication Date: 2025

Journal: Dementia (London, England) 24(7), pp. 1334–1351

Abstract: Competing Interests: Declaration of Conflicting Interests The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.; Background: The number of people in Canada living with dementia is predicted to rise to 912,000 by 2030. Traditional treatments for dementia have been unsuccessful in eliminating negative responsive behaviours (wandering, agitation, vocalizations) and prompted the emergence of alternative strategies, such as art and music therapy. Although previous reviews have been conducted on aspects of the arts and older adulthood, such as the efficacy and benefits of creative arts therapies in people with dementia, to our knowledge, no review has specifically focused on the role of reminiscence within arts-based interventions for dementia care. Purpose: This scoping review aims to assess the state of the evidence on the role of reminiscence in visual art interventions for individuals with dementia, intending to map the range, nature, and focus of articles and identify gaps for future work in this context. Methods: The five-stage scoping review framework of Arksey and O'Malley (2005) guided this review. Data Sources: CINAHL, PubMed, Web of Science, Scopus, and Google Scholar. Results: 1508 articles were retrieved and screened using pre-established inclusion criteria; 21 empirical articles were retained. Data extracted illustrated themes of social connection, bridging the past and present, and increased enjoyment and confidence. Authors noted art's positive impact on individuals with dementia. The benefits of reminiscence in arts-based therapy were unanimously observed across diverse studies in our review and point to a call for future research. Conclusion: Reminiscence is a vital component within art interventions that allow for making a human connection. Art fosters communication, helping individuals navigate the challenges of everyday life

6. Protective effect of metformin against dementia in patients with obesity: Results from a global federated health network analysis

Authors: Lin, Yu-Liang; Hung, Yi-Jui; Chen, Jin-Hua; Sung, Jia-Ying; Hsu, Min-Huei; Dinh, Hoang Khanh; Chen, Kee-Hsin and Chen, Chieh-feng

Publication Date: 2025

Journal: Diabetes, Obesity & Metabolism 27(10), pp. 5899–5909

Abstract: Aims: Metformin, a first-line medication for Type 2 diabetes (T2D), has been suggested to reduce dementia risk. We investigated whether metformin use was associated with lower long-term incidence of dementia and all-cause mortality in obese patients.; Materials and Methods: We analysed electronic health record data from the TriNetX network. Patients were categorised into four body mass index (BMI) groups (25-29.9, 30-34.9, 35-39.9 and over 40). In each group, those prescribed metformin were compared with matched controls who were not prescribed metformin, using propensity score matching. Kaplan-Meier survival analysis was used to estimate dementia incidence and all-cause mortality over a 10-year follow-up.; Results: The matched cohorts included 132 920 (BMI 25-29.9), 142 723 (30-34.9), 94 402 (35-39.9) and 82 732 (over 40) patients per group. After 10 years of follow-up, metformin users exhibited significantly lower risks of both dementia and all-cause mortality compared to controls. Specifically, the hazard ratios for dementia across each BMI group were 0.875 (95% confidence interval CI]: 0.848-0.904), 0.917 (0.885-0.951), 0.878 (0.834-0.924) and 0.891 (0.834-0.953), respectively. For all-cause mortality, the corresponding hazard ratios were 0.719 (0.701-0.737), 0.727 (0.708-0.746), 0.717 (0.694-0.741) and 0.743 (0.717-0.771).; Conclusions: In this large, multi-centre cohort study, metformin use was associated with reduced risks of dementia and all-cause mortality in obese patients. The protective effect was observed across all BMI groups, with variations noted by population. These findings support the potential of metformin in lowering dementia risk in patients with obesity. Further studies are needed to explore the underlying mechanisms. (© 2025 John Wiley & Sons Ltd.)

7. Is there a relationship between hearing loss and language impairment in patients with dementia? A systematic review

Authors: Lodeiro-Fernández, L.; Maseda, A.; Lorenzo-López, L.; Cibeira, N.; Millán-Calenti, J. C.; Leira, J. and Martínez-Ferreiro, S.

Publication Date: 2025

Journal: Archives of Gerontology and Geriatrics 137, pp. 105948

Abstract: Competing Interests: Declaration of competing interest The authors declare the following financial interests/personal relationships which may be considered as potential competing interests: Silvia Martinez-Ferreiro reports financial support was provided by Spanish Ministry of Science and Innovation. If there are other authors, they declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.; Background: Hearing loss (HL) and language impairment occur in the context of various types of cognitive impairment. There is extensive scientific literature on the relationship between HL and cognitive impairment or the risk of dementia, but its impact on language impairment is not well understood. This systematic review investigates the potential relationship between HL and language impairment in dementia patients.; Method: We conducted literature searches in the Scopus, Web of Science, and Medline databases from inception to May 2024 in accordance with PRISMA guidelines. Data extraction and methodological quality assessment, including risk of bias, were carried out.; Results: The search returned 767 articles for evaluation, which resulted in 14 that met the inclusion criteria. Overall, the results included 3676 older individuals, of whom 677 had dementia. Significant associations were observed between HL and language impairment, with a stronger association observed in comprehension than in production, although there was no evidence of causality.; Conclusion: Addressing hearing loss may play a role in managing language deficits in patients with dementia. Central auditory processing (CAP) and cognitive load are as critical as, if not more vital than, peripheral HL in language impairment in dementia patients. The quantification and directionality of the possible effects of language and hearing impairment on the genesis of dementia require longitudinal studies. (Copyright © 2025 The Authors. Published by Elsevier B.V. All rights reserved.)

8. Comparisons of nonpharmacological caregiver interventions for behavioural and psychological symptoms of dementia: A systematic review and network meta-analysis

Authors: Meng, Xiangfei; Sun, Jiao; Du, Zhen; Wang, Wenxia; Sun, Dan; Chen, Yi; Zhi, Shengze and Wang, Sheng

Publication Date: 2025

Journal: International Journal of Nursing Studies 170, pp. 105153

Abstract: Competing Interests: Declaration of competing interest The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.; Background: Nonpharmacological caregiver interventions are valuable for reducing the behavioural and psychological symptoms of dementia, but the most effective type of nonpharmacological intervention remains unknown.; Objective: The present study aimed to compare different caregiver interventions for behavioural and psychological symptoms of dementia and caregiver reactions to these symptoms.; Methods: We systematically searched PubMed, Embase, the Cochrane Library, the Cumulative Index to Nursing and Allied Health Literature (CINAHL), and PsycINFO from database inception to October 18, 2023. The risk of bias was assessed via the Revised Cochrane risk-of-bias assessment tool for randomised trials (RoB 2), and the credibility of evidence was assessed via Confidence in Network Meta-Analysis. Random-effects network meta-analysis within a frequentist framework was performed. The primary outcomes were behavioural and psychological symptoms of dementia, and caregiver reactions related to behavioural and psychological symptoms of dementia.; Results: Seventy-one randomised controlled trials involving 8336 dyads and 12 caregiver interventions were included. For behavioural and psychological symptoms of dementia, multicomponent interventions resulted in effective improvements at postintervention (SMD = -0.30; 95 % CI, -0.47 to -0.12; P = 0.001) and on follow-up (SMD = -0.61; 95 % CI, -1.05 to -0.18; P = 0.006). For caregiver reactions related to behavioural and psychological symptoms of dementia, multicomponent

interventions (SMD = -0.37; 95 % CI, -0.58 to -0.16; P = 0.001), skills building (SMD = -0.26; 95 % CI, -0.42 to -0.10; P = 0.001), cognitive behavioural therapy (SMD = -0.22; 95 % CI, -0.41 to -0.03; P = 0.023), and education (SMD = -0.20; 95 % CI, -0.35 to -0.04; P = 0.017) resulted in effective improvements at postintervention. SUCRA analyses revealed that multicomponent interventions were the interventions with the highest ranking in reducing behavioural and psychological symptoms of dementia (SUCRA, 83.4 %) and improving caregiver reactions to these symptoms (SUCRA, 90.9 %). Meta-regression and subgroup analyses revealed that the covariables "continent", "mean age" and "duration" affected the effect size of the multicomponent interventions.; Conclusions: Multicomponent interventions were the best interventions for reducing behavioural and psychological symptoms of dementia and caregiver reactions to these symptoms and produced sustainable treatment effects.; Registration: The systematic review and meta-analysis have been registered in PROSPERO (CRD42024544701). (Copyright © 2025 Elsevier Ltd. All rights reserved).

9. Effectiveness of an educational intervention on mealtime support needs for people with dementia in residential care facilities: A cluster-randomized controlled trial

Authors: Passos, Lígia;Tavares, João;Batchelor, Melissa and Figueiredo, Daniela

Publication Date: 2025

Journal: Dementia (London, England) 24(7), pp. 1291–1313

Abstract: Competing Interests: Declaration of conflicting interestsThe author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.; BackgroundPeople with dementia face numerous challenges during mealtimes, including difficulties with food intake, cutlery use, and maintaining attention. These can lead to severe consequences such as malnutrition and aspiration pneumonia, affecting the well-being of these individuals.AimTo determine the effectiveness of an educational intervention in improving mealtime support needs and enhancing the well-being of both individuals with dementia and direct care workers.MethodsA cluster-randomized controlled trial was conducted in four residential care facilities. The study involved direct care workers and residents with dementia, with facilities randomly assigned to either an intervention or control group. The intervention comprised three weekly 2-hour training sessions, focusing on dementia-related mealtime challenges and practical support strategies. Data were collected at baseline and one-week post-intervention using questionnaires and observational tools to assess caregivers' skills, burnout levels, and job satisfaction, as well as residents' mealtime behavior and food intake.ResultsDirect care workers from the intervention group showed significant improvements in knowledge ($p < .001$; $d = 0.728$) and skills ($p < .001$; $d = 0.842$) compared to the control group. Additionally, there were notable reductions in burnout levels ($p = .001$; $d = 0.466$) and higher job satisfaction ($p = .003$; $d = 0.410$). People with dementia in the intervention group demonstrated better performance at mealtimes.ConclusionThe educational intervention effectively enhanced direct care workers' abilities to support people with dementia during mealtimes, leading to better outcomes for both caregivers and residents. Implementing such training programs can improve care quality and alleviate challenges in dementia care.

10. Social representations of dementia. A qualitative inquiry into perspectives of people with dementia, professionals, and informal caregivers

Authors: Romaioli, Diego;Pesce, Edoardo and Chiara, Giacomo

Publication Date: 2025

Journal: Dementia (London, England) 24(7), pp. 1270–1290

Abstract: Competing Interests: Declaration of conflicting interestsThe author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.; Using a theoretical framework that underscores the social dimension of meaning-making processes, this study delved into the social representations of dementia in the Italian context and the personal meanings

expressed by three distinct groups of participants. The study involved ninety-two episodic interviews with people living with dementia and those who had provided care as professionals or informal caregivers. The collected data underwent various types of analysis. A hierarchical descending analysis was initially conducted using IRaMuTeQ to elucidate the lexical worlds that form the shared idea of dementia. This was followed by a more interpretative thematic analysis using Atlas.ti. The results reveal the diverse perspectives of the groups in articulating the contents of social representations, which can guide actions in the care and management of the disease.

11. The risk of dementia in breast cancer survivors: a meta-analysis of observational studies

Authors: Tan, Shijun;Yang, Jiawei;Guo, Guiping;Hong, Shicui;Guo, Li and Situ, Honglin

Publication Date: 2025

Journal: Annals of Medicine 57(1), pp. 2529579

Abstract: Objective: Cognitive problems are among the most common post-treatment symptoms experienced by breast cancer patients, raising concerns about their long-term cognitive health. This meta-analysis aims to clarify the relationship between cognitive decline in breast cancer survivors and the risk of developing dementia.; Materials and Methods: PubMed, Embase, and Cochrane Library were searched for cohort studies published from database inception to August 27, 2024, using medical subject headings (MeSH) and keywords. All statistical analyses were performed using Stata statistical software version 14.0. If $p > 0.1$ and $I^2 \leq 50\%$, a fixed-effects model was adopted. If $I^2 > 50\%$, a random-effects model was adopted. The funnel plot and Egger's test were used to evaluate publication bias.; Results: The meta-analysis, comprising 9 studies and involving 887,678 individuals, revealed that breast cancer survivors did not exhibit an increased risk of all-cause dementia $RR = 0.997$, 95%CI (0.965, 1.029); $I^2 = 0.0\%$, $p = 0.386$], Intriguingly, endocrine therapy $RR = 0.904$, 95%CI (0.865, 0.946); $I^2 = 41.7\%$, $p = 0.161$] and chemotherapy $RR = 0.754$, 95%CI (0.604, 0.940); $I^2 = 0.0\%$, $p = 0.592$] may even serve as potential protective factors against dementia in breast cancer survivors.; Conclusion: This meta-analysis indicates that breast cancer survivors do not face an elevated risk of all-cause dementia. Furthermore, treatments such as endocrine therapy and chemotherapy may have a protective effect against dementia. Further research is needed to explore the underlying mechanisms and confirm these findings.

12. Risk factors for mortality in individuals with dementia: a systematic review and meta-analysis

Authors: Tang, Leyao;Feng, Ziling;Liu, Wenqi;Zhang, Wenyan;Liu, Yamin;Xiong, Ni;Chen, Wenhong;Wu, Xin Yin;Yang, Jianzhou and Dai, Wenjie

Publication Date: 2025

Journal: Archives of Gerontology and Geriatrics 137, pp. 105951

Abstract: Competing Interests: Declaration of competing interest The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.; Background: Individuals with dementia had an increased risk of mortality. This systematic review aimed to comprehensively update current evidence on risk factors for mortality in individuals with dementia.; Methods: A database search of PubMed, Embase, Web of Science, China National Knowledge Infrastructure, Wanfang, and Chinese Scientific Journals Full-text Database was conducted from inception until October 2024. The effect size was expressed as a pooled hazard ratio (HR) and 95 % confidence interval (CI). The heterogeneity was analyzed by Cochran's Q test and the I^2 statistic.; Results: Thirty-three eligible studies with 21 factors were included. The results showed that the risk factors for mortality in individuals with dementia were advanced age at survey (HR = 1.05, 95 % CI: 1.03-1.07), advanced age at dementia symptom onset (HR = 1.05, 95 % CI: 1.03-1.07), male sex (HR = 1.58, 95 % CI: 1.49-1.68), hypertension (HR = 1.21, 95 % CI: 1.09-1.34), diabetes (HR = 1.30, 95 % CI: 1.09-1.56), cerebrovascular disease (HR = 1.08, 95 % CI: 1.00-1.18),

lung disease (HR = 1.57, 95 % CI: 1.00-2.47), higher CCI score (HR = 1.11, 95 % CI: 1.00-1.22), and higher CDR score (HR = 1.47, 95 % CI: 1.02-2.13). Non-whites (HR = 0.68, 95 % CI: 0.63-0.73), and those with depression (HR = 0.88, 95 % CI: 0.79-0.98), dyslipidemia (HR = 0.77, 95 % CI: 0.69-0.85), treatment with AChEIs (HR = 0.73, 95 % CI: 0.66-0.81), and higher MMSE score (HR = 0.95, 95 % CI: 0.94-0.97) had a lower risk.; Conclusions: Age at survey, age at dementia symptom onset, sex, race, hypertension, diabetes, dyslipidemia, depression, cerebrovascular disease, lung disease, CCI, AChEIs, MMSE, and CDR were associated with mortality in individuals with dementia. (Copyright © 2025 Elsevier B.V. All rights reserved.)

13. Does pneumonia increase the risk of dementia and cognitive decline? A systematic review and meta-analysis

Authors: Yan, Zhen;Zhang, Min;Yu, Lifang and Zhang, Fulian

Publication Date: 2025

Journal: Annals of Medicine 57(1), pp. 2517376

Abstract: Objective: The link between pneumonia and elevated risk of dementia and cognitive decline is still unclear. This study aims to evaluate the link between pneumonia and the subsequent risk of developing dementia.; Methods: MEDLINE (via PubMed), EMBASE (Excerpta Medica Database), Cochrane Central Register of Controlled Trials (CENTRAL), Web of Science, Scopus, ClinicalTrials.gov and the World Health Organization International Clinical Trials Registry Platform (WHO ICTRP) databases were searched for studies, published up to 29 February 2024. Eligible studies provided data on adult patients diagnosed with pneumonia and reported outcomes related to dementia or cognitive decline. Quality of observational studies was assessed by the Newcastle-Ottawa Scale. Pooled hazard ratios (HRs) and odds ratios (ORs) with 95% confidence intervals (CI) were calculated using random-effects models. Subgroup analyses were done based on age, geography, study design and pneumonia type.; Results: Ten studies were included, encompassing a diverse population sample. Pooled analysis demonstrated a significant correlation between pneumonia and increased risk of dementia (HR = 1.738; 95% CI: 1.358 to 2.225), with substantial heterogeneity across the studies ($I^2 = 97.1\%$). Subgroup analysis indicated that the association was more pronounced in older adults and varied slightly by region and study design. The risk did not significantly differ between bacterial and non-specific pneumonia types.; Conclusions: This meta-analysis suggests that pneumonia is associated with a significantly higher risk of developing dementia. These findings underscore the need for diligent monitoring and preventive strategies for patients recovering from pneumonia, particularly among the elderly, to mitigate potential cognitive decline.PROSPERO registration number: CRD42024520631

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