Dementia

Current Awareness Bulletin

March 2025

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- **Bitesize searching databases for evidence: a quick guide to help you develop your literature searching skills**
  45 minutes. Learn how to transform a question into a search strategy, and how to find the best evidence in a database.
  Next sessions: 10th April @ 12 noon & 9th May @ 2pm

- **Simple and painless evidence into practice (BMJ Best Practice and the LKS Hub)**
  30 minutes. Learn about quick and hassle-free ways to seamlessly incorporate evidence into your daily work.
  Next sessions: 11th April @ 11am & 12th May @ 12 noon

- **Quickfire health literacy – getting your message across**
  30 minutes. Learn about the communication barriers patients may encounter, and ways to ensure they get the most from their care.
  Next sessions: 2nd April @ 1pm & 15th May @ 2pm

'Music as medicine' trialled for South Asian people with dementia

Digital Health, 20 December 2024

British health tech firm MediMusic and researchers from Anglia Ruskin University have been awarded £183,682 to investigate how AI technology and music can ease anxiety amongst people of South Asian backgrounds who are living with dementia. The 3 month project, funded by Innovate UK, will explore how a machine learning-based music recommendation app can be used as a form of therapy. MediMusic has created technology that digitally fingerprints music to develop relaxing playlists to help ease pain, anxiety and stress.

https://www.digitalhealth.net/2024/12/music-as-medicine-trialled-for-south-asian-people-with-dementia/#:~:text=The%20three%2Dmonth%20project%2C%20funded,well%20as%20their%20professional%20carers.

Position Statement and Practice Guidance: The link between adult-onset hearing loss and dementia.
British Society of Audiology, British Academy of Audiology and The British Society of Hearing Aid Audiologists; 2024.
[The aim of this position statement is to present a balanced view on the nature of the association between adult-onset hearing loss and dementia. The objectives are to provide: 1. An evidence-based summary on what is known about the nature of the association as well as the benefit of hearing intervention; 2. Guidance for clinicians, including how to describe the relationship between dementia and hearing loss; 3. More detailed definitions of the relevant terminology.]

https://www.baaudiology.org/app/uploads/2024/11/Position-statement-HL-and-dementia-a-guide-for-hearing-professionals-Nov-2024.pdf

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1. **Evaluation of Intensive Vs Standard Blood Pressure Reduction and Association with Cognitive Decline and Dementia: a Systematic Review and Meta-Analysis**

Authors: Aguiar, Isabela;Kelly, Francinny Alves;Lapenda, João;Pinheiro, Andressa;Costa, Marilia Pereira;Obeid, Jennifer;Ribeiro, Danilo;De Souza, Allan;Dichtl, Isis;Padovani, Anna Clara and Sousa, Marcio

Publication Date: 2025

Journal: Journal of the American College of Cardiology (JACC) 85(12), pp. 619

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2. **Dementia and influenza vaccination: Time trends and predictors of vaccine uptake among**

older adults

Authors: Appel, Andreas Moses;Janbek, Janet;Laursen, Thomas Munk;Gasse, Christiane;Waldemar, Gunhild and Jensen-Dahm, Christina

Publication Date: 2025

Abstract: Purpose: Older adults with dementia are at an increased risk of hospitalizations with respiratory infections and death, emphasizing the need for a greater focus on preventive measures. In this study, we investigated the uptake of influenza vaccines among older adults with and without dementia.; Methods: We conducted a cross-sectional study with data from national registries on the entire Danish population aged ≥65 years. We mapped time trends of vaccination for each vaccination season (September to August) from 2002/03 to 2018/19. Using multivariable logistic regression, we estimated the odds of vaccination in 2018/19 in nursing home residents and home-living older adults with and without dementia.; Results: We included 800,387 individuals in 2002/03 and 1,122,319 in 2018/19. After a period of similar and increasing uptake of influenza vaccines among people with and without dementia, the uptake plateaued from 2007/08 to 2018/19 and was consistently higher in those with dementia during this period. The odds of vaccination in 2018/19 were lower for home-living people with dementia compared to home-living people without dementia (OR: 0.76; 95 % CI: 0.74-0.78). The highest odds were among nursing home residents both with (OR: 1.28; 95 % CI:1.24-1.33) and without dementia (1.18; 95 % CI: 1.14-1.22).; Conclusion: Between 2002/03 and 2018/19 vaccine coverage among older adults in Denmark was <60 %, regardless of dementia status, not reaching the WHO target of 75 %. Home-living older adults with dementia were 24 % less likely to receive an influenza vaccine, representing an important target group for future vaccination programs.; Competing Interests: Declaration of competing interest The authors declare the following financial interests/personal relationships which may be considered as potential competing interests: Christiane Gasse reports a relationship with Novo Nordisk Foundation and Alfred Benzon Foundation that includes funding/grants. (Copyright © 2025 The Authors. Published by Elsevier Ltd.. All rights reserved.)

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3. Nurses' competence and needs to assist advance directives for institutionalized people with dementia and their family

Authors: Chao, Hui-Chen;Chen, Yen-Lin;Lin, Hsiu-Ching;Wang, Jing-Jy and Yang, Ya-Ping

Publication Date: 2025

Abstract: There is growing recognition of advance directives (AD) in dementia, however a gap remains between their perceived importance and actual implementation. This emphasizes the need to enhance healthcare professionals' support for people with dementia (PWD) with regards to making AD. This study aimed to investigate the competence, difficulties, and support needs of nurses in assisting institutionalized PWD to make AD. This mixed methods study included both quantitative and qualitative data analysis. Purposive sampling was used to recruit potential participants, and a self-developed questionnaire was used for data collection. Data were analyzed using descriptive statistics and t-test for quantitative information, and content analysis for qualitative information. A total of 188 questionnaires from 19 institutions were completed. The scores of knowledge, attitudes and skills in assisting PWD with making AD were 33.9, 39.4 and 39.5, respectively. The nurses stated that the difficulties in assisting PWD with making AD were a lack of relevant expertise, understanding the AD, and that they were unsure of how to handle conflicting viewpoints within the family. More in-service training and online courses on dementia and AD were required, as well as the creation of health education pamphlets and patient decision aids to help PWD and their families make decisions about AD. The results of this study can serve as a reference for understanding the competencies, improvements, needed support and in-service education of nurses in an institutional setting to assist PWD with making AD. We recommend the promotion of AD through related leading associations and

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4. From Gatekeeper to Facilitator: Balancing Between Sexual Rights and Protection From Harm in Dementia Adults

Authors: Cheng, Han-Yun and Liu, Li-Yuan

Publication Date: 2025

Journal: American Journal of Geriatric Psychiatry 33(5), pp. 558–571

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5. The perceptions of European geriatricians on the co-occurrence and links between dementia, delirium and frailty

Authors: Faherty, Mary;Curtin, Catriona;Bellelli, Giuseppe;Brunetti, Enrico;Bo, Mario;Morandi, Alessandro;Cherubini, Antonio;Fedecostante, Massimiliano;Ferrara, Maria Cristina;Coin, Alessandra;Shenkin, Susan D.;Soysal, Pinar and Timmons, Suzanne

Publication Date: 2025

Journal: European Geriatric Medicine

Abstract: Purpose: This study aimed to explore the perceptions of geriatricians and experienced geriatric trainees in Europe of the complex relationship between dementia, delirium and frailty, including their relative prevalence, overlaps and causality.; Methods: An online anonymous survey was administered across 30 European countries, via the mailing list of the European Geriatric Medicine Society (EuGMS), national member groups and the authors' professional networks. Questions were framed in the context of recently hospitalised 80-year-old patients.; Results: Within the 440 included surveys, respondents particularly over-estimated frailty prevalence in older hospitalised patients, with two-thirds choosing between 41 and 80% prevalence, when the literature suggests only 23-46%, but paradoxically underestimated the frequency of frailty in people with delirium (more than three quarters of responses across 21-80%; literature suggests 71-93%). Severe dementia and previous delirium were correctly considered the strongest risks for future inpatient delirium. However, many considered pre-frailty a moderate (44%) or even strong (19%) risk for future delirium, while a minority considered severe dementia a low risk. Respondents viewed delirium superimposed on dementia (DSD) as having the strongest influence on in-hospital mortality and discharge to residential care, dementia as having the strongest influence on future residential care admission, and frailty as the condition most strongly influencing future mortality.; Conclusion: Geriatricians and experienced geriatric trainees across Europe gave varied responses to questions about delirium, dementia and frailty prevalence, co-occurrence and consequences. This indicates a need for the performance and wide dissemination of robust, prospective research examining all three conditions in older hospital cohorts. We suggest a merging of selective delirium-frailty and dementia-delirium interests to the dementia-delirium-frailty triumvirate.; Competing Interests: Declarations. Conflict of interests: All authors have no competing interest to declare for this article. Ethical approval: Ethics approval was obtained from the Social Research Ethics Committee in University College Cork, Ireland. The survey did not collect personal data and IP addresses were not recorded. Informed consent: A detailed information front page was provided to all participants outlining the purpose of the survey and how their data would be used. Informed consent was via a tick box in advance of starting the survey. Consent to publish: Participants were informed that the information they provided may contribute to research publications and/or conference presentations. They gave informed consent based on this information. (© 2025. The Author(s).)

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6. Exploring Sexual Consent Capacity and Sexual Expression in Older Adults Living With Dementia

Authors: Flores, Renee J. and Reyes-Ortiz, Carlos

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7. Update on autoimmune dementia and its precursors

Authors: Hansen, Niels

Abstract: Autoimmune dementia is a new disease entity increasingly coming into focus, and novel neural antibodies associated with dementia and its precursors have been described. However, the significance of these novel and emerging autoantibodies in conjunction with cognitive disorders is unclear. Antibodies such as Leucin-Rich, Glioma Inactivated 1 (LGI1) and N-Methyl-D-Aspartate Receptor (NMDAR) are already known to be pathogenic by triggering anomalies in synaptic plasticity and learning processes in animal models after having been transferred from humans to animals. In this review we describe various pathogenic mechanisms of antibodies such as complement dependent cytotoxicity, the internalization of membrane receptors, antagonistic effects, and alterations in vesicle endocytosis at the synaptic level. We also discuss established autoantibodies such as membrane-surface and intracellular antibodies in connection with cognitive disorders, as well as autoantibodies associated with neurodegenerative dementia, and autoimmune encephalitis with primary dementia syndrome. Test methods and the response to immunotherapy are also briefly explained. This overview provides a differentiated presentation of a heterogeneous dementia entity with its precursors, which requires more research to develop a differentiated treatment guideline.; Competing Interests: Declaration of Competing Interest The author declares no conflict of interest. (Copyright © 2025 The Authors. Published by Elsevier B.V. All rights reserved.)

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8. Using artificial intelligence for predictive analysis of dementia awareness among community adult learners and evaluation of dementia-friendliness in community environments

Authors: Hou, Chia-Hui and Liu, Yi-Hui

Abstract: With the rapid advancement of artificial intelligence and information technology, big data analytics have become increasingly applied in healthcare and older adult care. However, in Taiwan, awareness of dementia remains limited and participation in dementia-related programs is low. As the older adult population grows and long-term care budgets become strained, enhancing the awareness of dementia in communities is vital. This study developed a "Dementia Awareness Prediction Model using machine learning to predict the need for dementia education among adult learners, thereby improving resource allocation efficiency. A total of 229 survey responses were collected, and three machine-learning algorithms—Decision Trees, Decision Forests, and Logistic Regression—were used to build predictive models. The results show that all three models effectively predict dementia awareness, with Decision Forests and Logistic Regression demonstrating superior accuracy. Using a reduced set of attributes, the models achieved an average accuracy of over 95.90%, indicating high predictive performance. These findings provide valuable insights for enhancing dementia awareness and optimizing resource distribution in both public and private sectors. • Model Development: Created a high-precision "Dementia Awareness Prediction Model" using machine learning. • Top Performance: Logistic Regression excelled, with Decision Forests showing exceptional stability and accuracy. • Exceptional Accuracy: Models achieved over 93.67% accuracy, underscoring effective feature

selection. • Critical Insights: Revealed low dementia awareness and community support, indicating urgent need for enhanced education. • Policy Impact: Provides valuable guidance for targeted education programs and efficient resource allocation. • Future Focus: Expands research scope and integrates AI into policy-making for improved dementia support.

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9. Pandemic Impacts on Paid and Unpaid Dementia Caregivers: Mental Health, Resilience, and Policy Needs

Authors: Jang, Seyeon and Chen, Jie

Publication Date: 2025

Journal: American Journal of Geriatric Psychiatry 33(4), pp. 426–427

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10. The effectiveness of educational interventions in enhancing health professionals' and students' pain assessment for people living with dementia: A systematic review

Authors: Kodagoda Gamage, Madushika,W.;Pu, Lihui;Moyle, Wendy;Barton, Matthew and Todorovic, Michael

Publication Date: 2025

Journal: Nurse Education Today 148, pp. 106606

Abstract: Objectives: To evaluate the effectiveness of educational interventions in improving the knowledge, attitudes, beliefs, self-efficacy, and confidence of health professionals' and students' pain assessment in dementia.; Design: A systematic review was conducted and reported according to Preferred Reporting Items for Systematic Reviews and Meta-Analyses guidelines.; Data Sources: Eight English databases were searched: Medline, Psychological Information Database, Cochrane Library, PubMed, Cumulative Index of Nursing and Allied Health Literature, ProQuest, Scopus, and Web of Science.; Review Methods: Databases were searched without any time limit using synonyms for "health personnel", "health students", "pain assessment", "dementia", "educational intervention", "knowledge", "attitude", "beliefs", "self-efficacy", and "confidence". The review included studies published up to 26 March 2024. Reference lists and review papers were screened to identify additional papers. Data was synthesised according to the intervention designs and outcome measures and presented narratively.; Results: The seven studies retained involved 517 registered nurses, 17 physical therapists, eight occupational therapists, 17 physicians, 99 nursing students, and 161 medical students. All seven studies evaluated the effectiveness of educational interventions on knowledge, three on attitudes, two on confidence, one on self-efficacy, and none on beliefs of pain assessment in dementia. Health professionals' and students' knowledge scores improved irrespective of the training delivery mode and duration. Their confidence scores improved irrespective of training duration. Health professionals' self-efficacy scores improved upon completion of online training. Overall attitude scores for most health professionals and students did not increase upon educational intervention completion, irrespective of the training delivery mode and duration. Educational interventions mainly focused on methods that assess pain in both communicative and non-communicative people with dementia.; Conclusions: Educational interventions enhance health professionals' and students' knowledge, self-efficacy, and confidence in pain assessment in dementia. Studies showed mixed findings related to attitudes, and there is a limited understanding of interventions' effectiveness in correcting erroneous beliefs.; Competing Interests: Declaration of competing interest The authors declare no conflicts of interest. (Copyright © 2025 The Authors. Published by Elsevier Ltd.. All rights reserved.)

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11. Frailty and social contact with dementia risk: A prospective cohort study

Authors: Liu, Yufei;Chang, Jie;Zhao, Yiwei;Gao, Peiyang and Tang, Yi

Publication Date: 2025

Abstract: Background: Frailty and social contact are significant factors influencing dementia risk. While previous studies have separately examined these factors, their combined impact on dementia remains underexplored.; Methods: This study included 338,567 UK biobank participants from 2006 to 2010, with follow-up until December 2022. Additionally, 30,408 participants with brain magnetic resonance imaging data were analyzed for hippocampal volume. Cox proportional hazards regression and linear regression models were used to assess associations.; Results: The study followed 338,567 participants (mean SD] age, 60.4 5.2] years; 54.1 % men) for a median of 13.7 years, documenting 7362 cases of all-cause dementia. Both frailty and lower social contact independently increased the risk of all-cause dementia, Alzheimer's disease (AD), and vascular dementia (VaD). Compared to individuals with non-frailty and high social contact, those with lower social contact and higher frailty had a significantly increased risk of all-cause dementia, with the highest risk observed in individuals with frailty and low social contact (HR = 2.65, 95 % CI: 2.27-3.11). Similar patterns were found for AD and VaD. Furthermore, hippocampal volume was significantly reduced in individuals with frailty and low social contact (β = -0.24, 95 % CI: -0.43 to -0.06) compared to those with non-frailty and high social contact.; Limitations: The study predominantly included European descent individuals, with most frailty and social contact data based on baseline self-reports.; Conclusions: The combination of frailty and low social contact is associated with the highest risk of dementia. These findings suggest that both physiological and social factors should be simultaneously considered in dementia prevention strategies.; Competing Interests: Declaration of competing interest On behalf of all authors, the corresponding author states that there is no conflict of interest. All authors disclose no financial or non-financial interests that are directly or indirectly related to the work submitted for publication. (Copyright © 2025 Elsevier B.V. All rights reserved.)

12. The role of the social environment on dementia caregivers' pre-death grief: A mixed-methods systematic review

Authors: Ng, Yong Hao;Jiao, Keyuan;Suen, Margaret H. P.;Wang, Juan and Chow, Amy Y. M.

Abstract: This systematic review examined the role of social environment in pre-death grief experiences of dementia caregivers. Ninety-three Chinese and English articles were included from a comprehensive search of empirical studies using nine databases. Six social environment domains were generated: the person with dementia, dyadic relationship, family members and the wider community, health and social care services, place of care, and social-cultural contexts. A complex interplay between caregivers and their social environments that aggravate and attenuate pre-death grief experiences is evident. Research has focused mainly on the effects of people with dementia and dyadic relationships and has paid modest attention to the effects of family, relatives, and health and social care services. Caregivers' experiences with their friends, fellow caregivers, the wider community, and social-cultural norms are influential but understudied. Future research could adopt a systems thinking approach with sociological perspectives to generate a comprehensive and nuanced understanding of pre-death grief experiences.

13. Sweet Solutions: Unlocking the Diabetes-Dementia Connection for Better Outcomes

Authors: Posan, Emoke

Abstract: Type 2 diabetes and Alzheimer's dementia represent important health challenges in our society today. Understanding the relationship between these conditions is crucial. This article explores

14. Survival outcomes among hospitalized patients with dementia: a propensity score matching analysis

Authors: Rodríguez, Henry Oliveros;Diaz-Dussan, Natalia;Guzmán-Sabogal, Yahira;Proaños, Juliana and Tuta-Quintero, Eduardo

Publication Date: 2025

Journal: Acta Neurologica Belgica

Abstract: Background: Hospitalized patients with dementia exhibit high mortality rates, underscoring the importance of investigating variables associated with reduced survival. This study aims to determine the incidence of dementia among hospitalized patients and survival rates at 1 and 3 years post-hospitalization.; Methods: A retrospective cohort study was conducted using administrative databases from the Ministry of Health of Colombia. One- and three-year survival rates, along with adjusted hazard ratios for survival accounting for comorbidities included in the Charlson Index, were assessed using a Cox proportional hazards model. This analysis was performed for patients with dementia versus a control group without dementia. Additionally, findings were compared with those from an inverse propensity score weighting model.; Results: 6.769 (1.04%) patients were diagnosed with dementia, and 5798 (85.65%) were over 65 years of age. The unadjusted HR, the HR adjusted using the proportional hazards Cox model, and the HR obtained through propensity score matching (PSM) were 10.32 (95% CI 9.82 to 10.84), 1.69 (95% CI 1.60 to 1.78), and 1.32 (95% CI 1.02 to 1.71), respectively. The 1-year adjusted mortality rates for patients with dementia and those without were 12.5% and 1.31%, respectively, while the corresponding 3-year adjusted mortality rates were 21.25% and 2.76%. Through PSM, we determined that the mean survival time for patients with dementia, in comparison to those without, was - 0.98 months (95% CI: -0.65 to -1.94; p < 0.001).; Conclusions: Dementia significantly reduces survival rates of hospitalized patients, regardless of other comorbidities. Specifically, our research revealed that dementia was associated with a decrease in 3-year survival by an average of 0.98 months.; Competing Interests: Declarations. Competing interests: The authors declare no competing interests. Consent for publication: Not applicable. Ethics approval and consent to participate: The Institutional Ethics Review Board of the Universidad de La Sabana (approval number: 450-9Nov2018) approved the conduct of the study and considered it unnecessary to obtain an approval consent in accordance with national regulations and retrospective nature of the administrative databases, which are completely anonymous. (© 2025. The Author(s).)

15. Implementing a Quality Improvement Initiative to Screen for Dementia in a Down Syndrome Specialty Clinic

Authors: Santoro, Stephanie L.;Harisinghani, Ayesha;Bregman, Caroline;Cottrell, Clorinda;Pulsifer, Margaret B.;Shaffer, Mikayla;Torres, Amy;Skotko, Brian G. and Oreskovic, Nicolas M.

Publication Date: 2025

Journal: American Journal of Medical Genetics.Part A 197(4), pp. e63948

Abstract: Using quality improvement methods, we aimed to implement a protocol to assess for dementia among adults with Down syndrome (DS). To track implementation, interval retrospective chart review of patients with DS with visits to the Massachusetts General Hospital DS Program (MGH DSP) was conducted quarterly. The impact of a newly implemented protocol created and informed by clinical experts in the MGH DSP including laboratory tests, imaging, referrals, and screening tools for dementia and mental health concerns, was analyzed using statistical process control charts. From December 2021 to December 2022, the MGH DSP developed and implemented a new clinical protocol to screen for dementia in 44 adults with DS, ages 40 and above, at a total of 48 visits. We found high

rates of completion of two screening surveys (85% and 81%, respectively) and an 84% adherence to our overall protocol elements by clinical staff. Among those with dementia-like symptoms, medical evaluation was collected and summarized. We show that it is possible to successfully implement a new protocol, including the use of a dementia screener, in line with published evidence-based care guidelines for adults with DS. We present our protocol as one successful approach focused on pre-visit screening for symptoms of dementia and mental health concerns and evaluating for co-occurring medical conditions in adults with DS. (© 2024 Wiley Periodicals LLC.)

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16. Barriers for access and utilization of dementia care services in Europe: a systematic review

Authors: Sorrentino, Michele;Fiorilla, Claudio;Mercogliano, Michelangelo;Stilo, Irene;Esposito, Federica;Moccia, Marcello;Lavorgna, Luigi;Salvatore, Elena;Sormani, Maria Pia;Majeed, Azeem;Triassi, Maria and Palladino, Raffaele

Publication Date: 2025

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17. Chronic Postsurgical Pain Raises Risk of Dementia

Authors: Sun, Mingyang;Wang, Xiaolin;Lu, Zhongyuan;Yang, Yitian;Lv, Shuang;Miao, Mengrong;Chen, Wan-Ming;Wu, Szu-Yuan and Zhang, Jiaqiang

Publication Date: 2025

Abstract: Purpose: This study aimed to investigate the association between chronic postsurgical pain (CPSP) and the risk of dementia, addressing a significant gap in the existing literature and highlighting potential implications for clinical practice and public health.; Patients and Methods: Utilising data from Taiwan's National Health Insurance Research Database, a propensity score-matched cohort study was conducted involving 142,682 patients who underwent major surgery between 2004 and 2018. CPSP was defined as prolonged analgesic use post-surgery, and dementia diagnosis was tracked until December 31, 2022. Multivariable Cox regression models were employed to calculate adjusted hazard ratios (aHRs) for dementia risk in CPSP versus non-CPSP groups.; Results: Before propensity score matching, the CPSP cohort (n = 37,438) exhibited a higher risk of dementia, with aHRs of 1.35 (95% CI: 1.30-1.40). After matching, the aHR remained elevated at 1.31 (95% CI: 1.26-1.37), indicating a significant association between CPSP and dementia risk. Subgroup analysis confirmed this association across various demographic and clinical factors, with sensitivity analysis reinforcing the robustness of the findings.; Conclusion: This study establishes CPSP as an independent predictor of dementia risk, highlighting the importance of postoperative pain management in mitigating long-term cognitive outcomes. Approximately 30% of dementia risk post-CPSP presents an opportunity for risk reduction through effective CPSP management strategies, emphasising the need for targeted interventions to address this critical healthcare issue.; Significance: This study provides compelling evidence that chronic postsurgical pain (CPSP) significantly increases the risk of dementia, highlighting a critical and previously underexplored connection between postoperative pain and long-term cognitive decline. By establishing CPSP as an independent predictor of dementia, our findings underscore the importance of effective pain management strategies in surgical patients, particularly to mitigate the heightened risk of dementia and improve long-term outcomes. (© 2025 European Pain Federation - EFIC ®.)

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18. Association of Metformin use with risk of dementia in patients with type 2 diabetes: A systematic review and meta-analysis

Authors: Tang, Chunbian;Hao, Jiayi;Tao, Fengran;Feng, Qingguo;Song, Ying and Zeng, Baoqi

Publication Date: 2025

Journal: Diabetes, Obesity & Metabolism 27(4), pp. 1992–2001

Abstract: Aim: There is ongoing debate concerning the association of metformin with the risk of dementia in type 2 diabetes mellitus (T2DM). This study was conducted to evaluate the impact of metformin therapy on dementia in patients with T2DM.; Materials and Methods: PubMed, Embase, Cochrane Library, Web of Science and the ClinicalTrials.gov website were searched until 9 April 2024. Cohort studies investigating the effects of metformin therapy compared with other antidiabetic drugs or no therapy in T2DM were included. The hazard ratio (HR) and the 95% confidence interval (CI) were computed using the random effects model.; Results: Twenty cohort studies (24 individual comparisons) involving 3 463 100 participants were identified. A meta-analysis revealed that people with T2DM who take metformin are linked to a lower incidence of all-cause dementia compared to non-user (n = 17, HR = 0.76, 95% CI = 0.65-0.91, p = 0.002, I 2 = 98.9%) and sulfonylureas (n = 5, HR = 0.88, 95% CI = 0.85-0.90, p < 0.001, I 2 = 9.7%), but not to thiazolidinedione (n = 2, HR = 0.53, 95% CI = 0.08-3.41, p = 0.503, I 2 = 92.7%). Additionally, metformin showed favourable effects in non-specified T2DM (n = 19, HR = 0.75, 95% CI = 0.64-0.89), but not in newly diagnosed T2DM (n = 5, HR = 1.01, 95% CI = 0.81-1.27).; Conclusion: Metformin might correlate with a lower dementia incidence in people with T2DM. However, it is crucial to interpret these results with caution considering the high heterogeneity. (© 2025 John Wiley & Sons Ltd.)

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19. Association between multimorbidity and the risk of dementia: A systematic review and meta-analysis

Authors: Xin, Bo;Zhang, Di;Fu, Hong and Jiang, Wenhui

Publication Date: 2025

Journal: Archives of Gerontology & Geriatrics 131, pp. N.PAG

Abstract: • First meta-analysis on multimorbidity's impact on dementia risk. • Risk of dementia varies with different multimorbidity patterns. • Multimorbidity is crucial for dementia risk assessment. Multimorbidity has become increasingly prevalent and poses challenges in managing cognitive function. This study aimed to (1) systematically review and perform a meta-analysis to understand the relationship between multimorbidity and the risk of dementia and (2) examine the impact of different multimorbidity patterns on this relationship. A systematic review was conducted using PubMed, Embase, PsychINFO, CINAHL, and Cochrane Central to gather studies published up to December 16, 2023. For the meta-analysis, studies with consistent study designs, multimorbidity definitions, and stages of dementia were included. Heterogeneity was assessed using the I2 statistic, and Egger's and Begg's tests were used to evaluate publication bias. Of the 12,074 studies identified, 11 were deemed suitable for systematic review, and eight were included in the meta-analysis. Meta-analysis of the longitudinal studies revealed that baseline multimorbidity was significantly associated with an increased risk of dementia compared with individuals without multimorbidity (HR: 1.34, 95 % CI: 1.08–1.68). Meta-analysis of the cross-sectional studies indicated that multimorbidity was significantly associated with a higher risk of being in the prodromal stages of dementia than in individuals without multimorbidity (OR: 1.32, 95 % CI: 1.16–1.51). The risk of dementia varied according to diverse multimorbidity patterns, and the cardiovascular-metabolic condition-related patterns were the most common and associated with high dementia risk. Our findings provide quantitative evidence of a significant association between multimorbidity and the risk of dementia. To develop effective dementia prevention strategies, an in-depth understanding of specific multimorbidity patterns is invaluable for managing cognitive function.

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20. Initiation and Persistence of Antipsychotic Medications at Hospital Discharge Among Community-Dwelling Veterans With Dementia

Authors: Zhang, Audrey D.;Zepel, Lindsay;Woolson, Sandra;Miller, Katherine E. M.;Schleiden, Loren J.;Shepherd-Banigan, Megan;Thorpe, Joshua M. and Hastings, Susan Nicole

Publication Date: 2025

The following databases are used in the creation of this bulletin: Amed, British Nursing Index, Cinahl & Medline.

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