

Dementia

Current Awareness Bulletin

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From King's Fund

Inconclusive findings on the effects of art therapy for people with dementia

Title: Art therapy for people with dementia

Background: Dementia is a common condition that affects people's memory. It can also affect people's thinking, emotions and behaviour. Dementia has a major impact on health and society across the world. Some types of treatment other than medication may help people with dementia. Art therapy is a type of psychological therapy, which means a treatment for problems of the mind and behaviour. Art can be used as a way to express and communicate thoughts and feelings. The aim of art therapists is to work with patients in ways that help them change and 'grow' on a personal level. This is done by using art materials in a safe environment that allows this process.

Study Characteristics: We looked at research trials of people with dementia doing art therapy, compared with usual care and other activities. We looked at effects of art therapy on memory and thinking, emotions, well-being, social behaviour and quality of life. We also looked at negative effects and costs of art therapy. We found two research studies with a total of 88 older people taking part. There were results for 60 people. One study compared groups doing art therapy or simple calculation activities over 12 weeks. The other study compared groups doing art therapy or recreational activities over 40 weeks. The evidence is current to October 2017.

Key Results: These two studies found no clear changes in memory or most other outcomes looked at when comparing art therapy to other activities.

Quality of the Evidence: The studies were limited by many factors that reduced the quality of findings - considered 'very low' with well-known methods for evaluating this. Each study used different types of art therapy. This made it difficult to look at all the results together. One study had a high rate of people not completing the research trial. The studies included small numbers of people, which makes it difficult to be sure how accurate the findings are. This also makes it difficult to know if the effects will be the same in more people. Art therapy is difficult to test for its effects. More research is needed on this topic. There is not enough information from research trials about the effects of art therapy for people with dementia. This review suggests ways to do this.

Authors' conclusions: There is insufficient evidence about the efficacy of art therapy for people with dementia. More adequately-powered and high-quality studies using relevant outcome measures are needed.

Title: Life expectancy with and without dementia: a population-based study of dementia burden and preventive potential.

Citation: American journal of epidemiology; Oct 2018

Author(s): Wolters, Frank J; Tinga, Liselotte M; Dhana, Klodian; Koudstaal, Peter J; Hofman, Albert; Bos, Daniel; Franco, Oscar H; Ikram, M Arfan

Abstract: Reliable population estimates of life-expectancy with dementia are required for shaping health care policy. 10,348 persons from the population-based Rotterdam Study were followed from 1990-2015 for dementia and death. We created multi-state lifetables, and assessed the effect of postponing disease onset. During 120,673 person-years, 1,666 persons developed dementia, and 6,150 died. Overall life-expectancy of women ranged from 18.0 years (95% confidence interval: 17.8-18.2) at age 65 to 2.3 years (2.2-2.3) at age 95. Of total life-expectancy at age 65, 5.7%, i.e. 1.0 year (1.0-1.1), was lived with dementia,

increasing with age to 42.1% (1.0 year, 0.9-1.0) of life-expectancy at age 95. For men, overall life-expectancy ranged from 15.6 years (15.4-15.9) at age 65 to 1.8 years (1.7-1.8) at age 95, of which 3.7% (0.6 year, 0.5-0.6) and 35.3% (0.6 year, 0.5-0.7) was lived with dementia, respectively. Postponing dementia onset by 1-3 years resulted in 25-57% reductions in years lived with dementia. Survival after dementia diagnosis ranged from 6.7 (95%CI 5.3-8.1) years when diagnosed before age 70, to 2.6 years (2.3-2.9) >90 years. Dementia places a large burden on individuals and society in terms of healthy life-years lost, but this is potentially highly amendable by preventive interventions at the population level.

Title: Screening and detection of delirium in older ED patients: performance of the modified Confusion Assessment Method for the Emergency Department (mCAM-ED). A two-step tool.

Citation: Internal & Emergency Medicine; Sep 2018; vol. 13 (no. 6); p. 915-922

Author(s): Hasemann, Wolfgang; Grossmann, Florian F.; Stadler, Rahel; Bingisser, Roland; Breil, Dieter; Hafner, Martina; Kressig, Reto W.; Nickel, Christian H.

Abstract: Delirium is frequent in older Emergency Department (ED) patients, but detection rates for delirium in the ED are low. To aid in identifying delirium, we developed and implemented a two-step systematic delirium screening and assessment tool in our ED: the modified Confusion Assessment Method for the Emergency Department (mCAM-ED). Components of the mCAM-ED include: (1) screening for inattention, the main feature of delirium, which was performed with the Months Backwards Test (MBT); (2) delirium assessment based on a structured interview with questions from the Mental Status Questionnaire by Kahn et al. and the Comprehension Test by Hart et al. The aims of our study are (1) to investigate the performance criteria of the mCAM-ED tool in a consecutive sample of older ED patients, (2) to evaluate the performance of the mCAM-ED in patients with and without dementia and (3) to test whether this tool is efficient in keeping evaluation time to a minimum and reducing screening and assessment burden on the patient. For this prospective validation study, we recruited a consecutive sample of ED patients aged 65 and older during an 11-day period in November 2015. Trained nurses assessed patients with the mCAM-ED. Results were compared to the reference standard [i.e. the geriatricians' delirium diagnosis based on the criteria of the Text Revision of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR)]. Performance criteria were computed. We included 286 consecutive ED patients aged 65 and older. The median age was 80.02 (Q1 = 72.15; Q3 = 86.76), 58.7% of included patients were female, 14.3% had dementia. We found a delirium prevalence of 7.0%. In patients with dementia, specificity and positive likelihood ratio were lower. When compared to the reference standard, delirium assessment with the mCAM-ED has a 0.98 specificity and a 39.9 positive likelihood ratio. In 80.0% of all cases, the first step of the mCAM-ED, i.e. screening for inattention with the MBT, took less than 30 s. On average, the complete mCAM-ED assessment required 3.2 (SD 2.0), 5.6 (SD 3.2), and 6.2 (SD 2.3) minutes in cognitively unimpaired patients, patients with dementia and patients with dementia or delirium, respectively. The mCAM-ED is able to efficiently rule out delirium as well as confirm the diagnosis of delirium in elderly patients with and without dementia and applies minimal screening and assessment burden on the patient.

Title: Personalized Goal Attainment in Dementia Care: Measuring What Persons with Dementia and Their Caregivers Want.

Citation: Journal of the American Geriatrics Society; Oct 2018

Author(s): Jennings, Lee A; Ramirez, Karina D; Hays, Ron D; Wenger, Neil S; Reuben, David B

Objectives: To develop a process of goal-setting and measurement of goal attainment in a dementia care management program.

Design: Observational.

Setting: Dementia care management program in an urban academic medical center.

Participants: Persons with dementia (N=101) and their caregivers; nurse practitioner dementia care managers (N=5).

Intervention: Specification of a personalized health goal and action plan and measurement of goal attainment using goal attainment scaling in a clinical care visit.

Measurements: Goal attainment at 6 and 12 months; focus groups of 5 dementia care managers.

Results: Eighty-four percent of participant goals were nonmedical, 47% were related to quality of life, and 29% were caregiver support goals. Eighty-eight percent of participants felt that the goal they set was meaningful and 74% that the goal-setting process captured something different from usual care, and 85% found the process helpful in planning for future care. At 6 months, 74% of dyads had achieved or exceeded their expected level of goal attainment. Dementia care managers felt that the goal-setting process improved their understanding of what was most important to the patient, helped set expectations about disease progression and care needs, and provided positive reinforcement when goals were accomplished and an opportunity for revision when goals were not met.

Conclusion: Goal setting using goal attainment scaling can be incorporated into the care of persons with dementia to establish and attain person-centered goals. Research is needed to further develop personalized goal attainment as an outcome measure for dementia care.© 2018 American Geriatrics Society and Wiley Periodicals, Inc.

Title: Rehabilitation to live better with dementia.

Citation: Geriatrics & gerontology international; Oct 2018

Author(s): Maki, Yohko; Sakurai, Takashi; Okochi, Jiro; Yamaguchi, Haruyasu; Toba, Kenji

Abstract: The goal of dementia treatment is to improve the quality of life for both people with dementia and their families. Rehabilitation as a non-pharmacological approach, coordinated with pharmacological treatment, aims to allow patients to live better by slowing the progression, and relieving the behavioral and psychological symptoms of dementia. In dementia, the manifestation of symptoms caused by neurological impairment is modified by various factors; thus, multidimensional assessment and approaches are effective based on the concept of the International Classification of Functioning, which emphasizes the healthy components of every person's functioning. Regarding the process of rehabilitation, every person with dementia should take initiative throughout the course of rehabilitation, and shared decision-making is a fundamental requirement at every phase of intervention. The needs of rehabilitation differ depending on the stage of dementia. In the early stages, cognitive rehabilitation is needed, and interventions are carried out using preserved functions and compensatory strategies. As the disease progresses, capacities of instrumental and then basic activities of daily living deteriorate, and interventions need to be tailor-made and carried out in the context of actual living situations. In the early-to-moderate stages, prevention and management of behavioral and psychological symptoms of dementia are required. In the interventions to alleviate behavioral and psychological symptoms of dementia, it is critical to consider the individual and the meaning behind his/her behaviors from a holistic perspective. Family carers also need support, and education to learn coping strategies can be beneficial for both people with dementia and their carers. Rehabilitation can empower people with dementia and their families to live better with dementia.

Title: Pre-eclampsia and risk of dementia later in life: nationwide cohort study.

Citation: BMJ (Clinical research ed.); Oct 2018; vol. 363; p. k4109

Author(s): Basit, Saima; Wohlfahrt, Jan; Boyd, Heather A

Objective: To explore associations between pre-eclampsia and later dementia, overall and by dementia subtype and timing of onset.

Design: Nationwide register based cohort study.

Setting: Denmark.

Population: All women with at least one live birth or stillbirth between 1978 and 2015.

Main outcome measure: Hazard ratios comparing dementia rates among women with and without a history of pre-eclampsia, estimated using Cox regression.

Results: The cohort consisted of 1 178 005 women with 20 352 695 person years of follow-up. Women with a history of pre-eclampsia had more than three times the risk of vascular dementia (hazard ratio 3.46, 95% confidence interval 1.97 to 6.10) later in life, compared with women with no history of pre-eclampsia. The association with vascular dementia seemed to be stronger for late onset disease (hazard ratio 6.53, 2.82 to 15.1) than for early onset disease (2.32, 1.06 to 5.06) ($P=0.08$). Adjustment for diabetes, hypertension, and cardiovascular disease attenuated the hazard ratios only moderately; sensitivity analyses suggested that body mass index was unlikely to explain the association with vascular dementia. In contrast, only modest associations were observed for Alzheimer's disease (hazard ratio 1.45, 1.05 to 1.99) and other/unspecified dementia (1.40, 1.08 to 1.83).

Conclusions: Pre-eclampsia was associated with an increased risk of dementia, particularly vascular dementia. Cardiovascular disease, hypertension, and diabetes were unlikely to mediate the associations substantially, suggesting that pre-eclampsia and vascular dementia may share underlying mechanisms or susceptibility pathways. Asking about a history of pre-eclampsia could help physicians to identify women who might benefit from screening for early signs of disease, allowing for early clinical intervention.

Title: The knowledge and attitudes of general practitioners to the assessment and management of pain in people with dementia.

Citation: BMC family practice; Oct 2018; vol. 19 (no. 1); p. 166

Author(s): Jennings, Aisling A; Linehan, Maura; Foley, Tony

Objective: Pain in people with dementia is underdiagnosed and undertreated. General practitioners (GPs) play a pivotal role in dementia care but their perspectives on pain in people with dementia remains under-researched. The aim of this study was to explore GPs' knowledge and attitudes towards pain assessment and management in people with dementia.

Methods: This was a descriptive cross-sectional study. A questionnaire was adapted from a previous study and piloted with 5 GPs. The questionnaire was posted to a census sample of all GPs in Cork city and county in the southern region of Ireland. The questionnaire collected demographic information, responses to a series of Likert-type statements assessing GPs' knowledge and attitudes, and provided an opportunity for the GP to give qualitative feedback on their experiences of managing pain in dementia. SPSS v25 was used for statistical analysis. Qualitative responses were thematically analysed.

Results: Of the 320 questionnaires posted, 157 completed questionnaires were returned (response rate of 49%). The sample was representative of GPs nationally in terms of years in GP practice and practice location. Over two-thirds (108/157) of respondents had a nursing home commitment. Only 10% of respondents (16/157) were aware of any dementia-specific

pain assessment tools. The larger the nursing home commitment of the GP the more likely they were to be familiar with these tools ($p = 0.048$). The majority of respondents (113/157) believed people with dementia could not self-report pain. Respondents were uncertain about the safety of using opioid medications to treat pain in people with dementia with only 51.6% agreeing that they were safe. The qualitative comments highlighted the importance the GPs placed on surrogate reports of pain, GPs' uncertainty regarding the value of formal pain assessment tools and the challenges caused by under-resourcing in general practice.

Conclusion: This study has highlighted aspects of pain assessment and management in dementia that GPs find challenging. Guidance on pain assessment and management in people with dementia do not appear to be translating into clinical practice. The findings will inform educational interventions being developed by our research team as part of the implementation of the Irish national dementia strategy.

Title: Awareness and understanding of dementia in South Asians: A synthesis of qualitative evidence.

Citation: Dementia (London, England); Oct 2018; p. 1471301218800641

Author(s): Hossain, Muhammad; Crossland, John; Stores, Rebecca; Dewey, Ann; Hakak, Yohai

Abstract: Despite a growing elderly South Asian population, little is known about the experience of diagnosis and care for those living with dementia. There have been a number of individual qualitative studies exploring the experiences of South Asian people living with dementia and their carers across different contexts. There has also been a growing interest in synthesizing qualitative research to systematically integrate qualitative evidence from multiple studies to tell us more about a topic at a more abstract level than single studies alone. The aim of this qualitative synthesis was to clearly identify the gaps in the literature and produce new insights regarding the knowledge and understanding of the attitudes, perceptions, and beliefs of the South Asian community about dementia. Methods Following a systematic search of the literature, included qualitative studies were assessed by two independent reviewers for methodological quality. Data were extracted and pooled using the Joanna Briggs Institute Qualitative Assessment and Review Instrument (QARI). Findings were synthesized using the Joanna Briggs Institute approach to qualitative synthesis by meta-aggregation. Results Seventeen papers were critically appraised, with 13 meeting the inclusion criteria. Participants were mostly of South Asians of Indian background; followed by Pakistani with a few Sri Lankans. Missing South Asian countries from the current evidence base included those from Bangladesh, Bhutan, Maldives, and Nepal. Three meta-synthesis themes emerged from the analysis: (1) a poor awareness and understanding of dementia, (2) the experience of caregiving, and (3) the attitudes toward dementia care provision. Conclusions A consistent message from this qualitative synthesis was the limited knowledge and understanding of dementia amongst the South Asians. Whilst symptoms of dementia such as 'memory loss' were believed to be a part of a normal ageing process, some South Asian carers viewed dementia as demons or God's punishments. Most studies reported that many South Asians were explicit in associating stigmas with dementia.

Title: Hearing loss, cognitive ability, and dementia in men age 19-78 years.

Citation: European journal of epidemiology; Oct 2018

Author(s): Osler, Merete; Christensen, Gunhild Tidemann; Mortensen, Erik Lykke; Christensen, Kaare; Garde, Ellen; Rosing, Maarten Pieter

Abstract: Hearing loss in later life has been associated with risk of dementia. The impact of risk factors for dementia may change during life, and it is unknown whether hearing loss early in midlife represents a risk factor for dementia. We examined whether hearing loss diagnosed in midlife was associated with an increased risk of dementia. A cohort comprising 942,567 Danish men enrolled in the mandatory conscription board examination was followed from conscription (age 19). Cognitive ability was measured at conscription, while hearing loss was ascertained either by physicians diagnosis at conscription or by the Danish National Patient Registry from 1977 to 2016 (ICD-8:388; 389; ICD-10:H90; H91). Differences in cognitive ability in relation to hearing loss at conscription were calculated using t test, while the risk of dementia associated with hearing loss was estimated using Cox regression with adjustment for cognitive ability, education, depression, diabetes, hypertension, and cerebrovascular disease. Men with hearing loss at conscription had about 2 points (corresponding to 0.20 SD) lower mean cognitive score than those without hearing loss. During follow-up, 59,834 men had a hearing loss diagnosis, while 9114 were diagnosed with dementia. Midlife hearing loss was associated with an increased rate of dementia diagnosed before age 60 (adjusted Hazard Ratio (HR) = 1.90 [95% CI 1.59-2.76]) or at a later age (adjusted HR = 1.15 [95% CI 1.06-1.25]). Our study supports the evidence that early identification and correction of hearing loss holds promise for prevention of dementia later in life.

Title: Using photo-elicitation to explore the lived experience of informal caregivers of individuals living with dementia.

Citation: British journal of health psychology; Oct 2018

Author(s): Rayment, Georgie; Swainston, Katherine; Wilson, Gemma

Objective: This study aims to explore the subjective lived experience of informal caregivers supporting an individual with dementia.

Design: This study uses the interpretive phenomenological approach utilizing the method of photo-elicitation and in-depth semi-structured interviews.

Methods: Six individuals were given a disposable camera to capture photographs which they felt illustrated their own lived experiences of being a caregiver of an individual living with dementia. Photographs were printed and used to form discussion within an in-depth semi-structured interview. The photographs provided an innovative way of capturing the lived experiences of formal dementia caregivers and allowed the interview data to be grounded in their daily living, centering around their own lived experiences.

Results: Three themes emerged from data analysis: 'conceptualising the role of informal caregiver', 'support for the informal caregiver', and 'the caregivers own needs'.

Conclusions: Findings demonstrated the complexity of the relationship between the caregiver and the person living with dementia, and the shift in this relationship specifically due to the role of carer, with notable differences between spousal caregivers and adult-child caregivers. The importance of social, emotional, and practical support for caregivers was highlighted, as well as significance of the caregiver's individual needs. What is already known on this subject? Informal caregivers of individuals living with dementia cover much of the associated health care costs. Informal caregiving of individuals living with dementia can lead to negative health outcomes of the carer. Health outcomes of informal caregivers living with dementia are grounded in culture and are influenced by multiple factors. What does this study add? The complexity of the transition from family member to informal caregiver has both a physical and emotional impact on caregivers. The transition, and experiences of informal caregiving, is dependent on the relationship to the individual living with dementia. Caregiver support and recognizing the caregiver's individual needs were imperative to caregiver well-being.

Title: Headache disorder and the risk of dementia: a systematic review and meta-analysis of cohort studies.

Citation: The journal of headache and pain; Oct 2018; vol. 19 (no. 1); p. 95

Author(s): Wang, Jing; Xu, Weihao; Sun, Shasha; Yu, Shengyuan; Fan, Li

Objective: Until now, headache disorders have not been established as a risk factor for dementia. The aim of this study was to determine whether headache was associated with an increased risk of dementia.

Methods: We systematically searched electronic databases, including PubMed, Embase, and Web of Science, for studies investigating the association between headache and dementia. We then conducted a meta-analysis to determine a pooled-effect estimate of the association.

Results: We identified 6 studies (covering 291,549 individuals) to investigate the association between headache and the risk of all-cause dementia or Alzheimer's disease (AD). Pooled analyses showed that any headache was associated with a 24% greater risk of all-cause dementia (relative risk [RR] = 1.24; 95% confidential interval [CI]: 1.09-1.41; P = 0.001), and that any headache was not statistically significantly associated with an increased risk of AD (RR = 1.47; 95% CI: 0.82-2.63; P = 0.192).

Conclusions: Our results indicated that any headache was associated with an increased risk of all-cause dementia. However, additional studies are warranted to further confirm and understand the association.

Title: Coffee Consumption and Risk of Dementia and Alzheimer's Disease: A Dose-Response Meta-Analysis of Prospective Studies.

Citation: Nutrients; Oct 2018; vol. 10 (no. 10)

Author(s): Larsson, Susanna C; Orsini, Nicola

Abstract: Coffee consumption is associated with a reduced risk of several diseases but uncertainty remains about the influence of coffee consumption on the risk of dementia. We performed a dose-response meta-analysis to summarize the prospective data on coffee consumption and associated risk of dementia and Alzheimer's disease. We identified studies by searching PubMed (from January 1966) and Web of Science (from January 1945) through 4 October 2018 and by scrutinizing the reference lists of pertinent publications. Two researchers independently reviewed the literature. Results were combined using a restricted cubic spline random-effects dose-response meta-analysis based on a one-stage approach. Eight relevant prospective studies were identified. These studies included 7486 dementia cases diagnosed among 328,885 individuals during an average follow-up of 4.9-25 years. Meta-analysis of all eight studies indicated no statistically significant association between coffee consumption and the risk of dementia and no deviations from a linear trend ($p = 0.08$). The relative risk of dementia per 1 cup/day increment of coffee consumption was 1.01 (95% confidence interval (CI) 0.98-1.05; $p = 0.37$). Meta-analysis of five studies that focused on Alzheimer's disease revealed no association between coffee consumption and Alzheimer's disease and no deviations from a linear trend ($p = 0.79$). The relative risk of Alzheimer's disease per 1 cup/day increment of coffee consumption was 1.01 (95% confidence interval 0.95-1.07; $p = 0.80$). These results do not support an association between coffee consumption and an increased risk of overall dementia or Alzheimer's disease specifically, but further research on the association of coffee consumption with dementia risk is needed.

Title: Impairments in balance and mobility identify delirium in patients with comorbid dementia.

Citation: International psychogeriatrics; Oct 2018; p. 1-5

Author(s): Gual, Neus; Richardson, Sarah J; Davis, Daniel H J; Bellelli, Giuseppe; Hasemann, Wolfgang; Meagher, David; Kreisel, Stefan H; MacLulich, Alasdair M J; Cerejeira, Joaquim; Inzitari, Marco; Morandi, Alessandro

Abstract: Diagnosing delirium superimposed on dementia (DSD) remains challenging because of a lack of specific tools, though motor dysfunction in delirium has been relatively under-explored. This study aimed to use dysfunction in balance and mobility (with the Hierarchical Assessment of Balance And Mobility: HABAM) to identify DSD. This is a cross-sectional multicenter study, recruiting consecutive patients ≥ 70 years admitted to five acute or rehabilitation hospitals in Ireland, Italy, Portugal, and Switzerland. Delirium was diagnosed using DSM-5 criteria; dementia was determined by the Mini-Mental State Examination and the Questionnaire of Cognitive Decline in the Elderly. HABAM score was recorded at admission. Out of 114 patients (mean age \pm SD = 82 ± 7 ; 54% female), dementia alone was present in 24.6% ($n = 28$), delirium alone in 18.4% ($n = 21$) and DSD in 27.2% ($n = 31$). Patients with DSD had a mean HABAM score 7 points greater than those with dementia alone (19.8 ± 8.7 vs 12.5 ± 9.5 ; $p < 0.001$); 70% of participants with DSD were correctly identified using the HABAM at a cut off of 22 (sensitivity 61%, specificity 79%, AUC = 0.76). Individuals with delirium have worse motor function than those without delirium, even in the context of comorbid dementia. Measuring motor function using the HABAM in older people at admission may help to diagnose DSD.

Title: The association between blood pressure variability (BPV) with dementia and cognitive function: a systematic review and meta-analysis protocol.

Citation: Systematic reviews; Oct 2018; vol. 7 (no. 1); p. 163

Author(s): VARIABLE BRAIN consortium

Objective: A body of empirical work demonstrates that wide fluctuations in a person's blood pressure across consecutive measures, known as blood pressure variability (BPV), hold prognostic value to predict stroke and transient ischemic attack. However, the magnitude of association between BPV and other neurological outcomes remains less clear. This systematic review aims to pool together data regarding BPV with respect to incident dementia, cognitive impairment, and cognitive function.

Methods: Electronic databases (MEDLINE, EMBASE, and SCOPUS) will be searched for the key words blood pressure variability and outcomes of dementia, cognitive impairment, and cognitive function. Authors and reference lists of included studies will also be contacted to identify additional published and unpublished studies. Eligibility criteria are as follows: population-adult humans (over 18 years but with no upper age limit) without dementia at baseline, with or without elevated blood pressure, or from hypertensive populations (systolic blood pressure ≥ 140 mmHg and/or diastolic blood pressure ≥ 90 mmHg or use of antihypertensive drug for hypertension) and from primary care, community cohort, electronic database registry, or randomized controlled trial (RCT); exposure-any metric of BPV (systolic, diastolic or both) over any duration; comparison-persons without dementia who do not have elevated BPV; and outcome-dementia, cognitive impairment, cognitive function at follow-up from standardized neurological assessment, or cognitive testing. Article screening will be undertaken by two independent reviewers with disagreements resolved through discussion. Data extraction will include original data specified as hazard ratios, odds ratios, correlations, regression coefficients, and original cell data if available. Risk of bias assessment will be undertaken by two independent reviewers. Meta-analytic methods will be

used to synthesize the data collected relating to the neurological outcomes with Comprehensive Meta-Analysis Version 2.0 (Biostat Inc., Engelwood, NJ).

Discussion: This systematic review aims to clarify whether BPV is associated with elevated risk for dementia, cognitive impairment, and cognitive function. An evaluation of the etiological links between BPV with incident dementia might inform evidence-based clinical practice and policy concerning blood pressure measurement and hypertension management. The review will identify sources of heterogeneity and may inform decisions on whether it is feasible and desirable to proceed with an individual participant data meta-analysis.

Title: A grounded theory analysis of the experiences of carers for people living with dementia from three BAME communities: Balancing the need for support against fears of being diminished.

Citation: Dementia (London, England); Oct 2018; p. 1471301218804714

Author(s): Baghirathan, Subitha; Cheston, Richard; Hui, Rosa; Chacon, Anndeloris; Shears, Paula; Currie, Katie

Abstract: An estimated 25,000 people of Black, Asian and other Minority Ethnic (BAME) origins live with dementia in UK - a number which is expected to increase sevenfold by 2051. People from many BAME communities experience dementia in a markedly different way to their white British counterparts. For instance diagnosis is more likely to occur at an advanced stage of the illness, while there is a lower take-up of mainstream dementia services. This research study focused on the experiences of caregivers for family and friends living with dementia from South Asian, African Caribbean and Chinese communities in Bristol. Data were collected through interviews with 27 participants and 8 focus groups attended by 76 participants. Additionally, interviews were carried out with 16 paid staff and volunteers working for Voluntary and Community Sector Organisations (VCSOs) that provided services for older people from these three communities. As concepts emerged during data analysis, so these were checked with each community. The grounded theory, 'fear of diminishment' was present across all communities: participants both needed and wanted support, but they were reluctant to accept this if it came at the cost of being diminished as a person. To resolve this dilemma, informants turned to BAME-led VCSOs, which provided ongoing support and advocated on behalf of their members. However, the services provided by these VCSOs varied and reflected differences in the ways in which communities enacted the theory. Given the increasing importance of cultural diversity within dementia care, this study has important implications for communities across the UK and elsewhere, and points towards the need for sustainable and equitable resourcing of dementia care within BAME-led VCSOs.

Title: Dance interventions for people with dementia: systematic review and practice recommendations.

Citation: International psychogeriatrics; Oct 2018; p. 1-11

Author(s): Mabire, Jean-Bernard; Aquino, Jean-Pierre; Charras, Kevin

Objective: Dance interventions are pleasant social activities that are often offered to people with dementia in care settings. Effectiveness of dance as a psychosocial intervention for people with dementia has been studied to some extent, but several methodological issues remain unexplored. This review aimed to analyze studies on dance interventions for people with dementia and to identify practice recommendations for the development of these interventions.

Methods: An electronic database search was run in December 2017 to identify records of dance interventions for people with dementia. We included all studies regardless of experimental design. Selected records were analyzed according to five criteria: study design and intentions of interventions; profile of participants and in/exclusion criteria; treatment indications and contraindications; description and performance of the interventions; and involved physical, cognitive, psychological, and social processes in dance.

Results: Fourteen records were included in which various study designs were observed. Description and performance of the interventions were well documented. Nine practice recommendations for implementing dance interventions were identified according to primary intentions of the intervention (therapeutic or recreational): indications; contra-indications; participant profile; dosage; session sequencing; setting of intervention; observance/attendance; contributors and facilitators; and assessments.

Conclusions: Dance is a holistic intervention that can be implemented with a therapeutic or a leisure intention. Practice recommendations about dance interventions remain incomplete and insufficiently studied. Such recommendations could be helpful for clinicians to implement dance interventions in facilities where they work to better target people who could benefit from them, and for researchers to develop research in this field.

Title: Effects of care assistant communication style on communicative behaviours of residents with dementia: a systematic multiple case study.

Citation: Scandinavian journal of caring sciences; Oct 2018

Author(s): Stanyon, Miriam; Thomas, Shirley; Gordon, Adam; Griffiths, Amanda

Objective: To determine whether varying the communication style of care assistants, encouraging them to use direct instructions and allowing more time for residents' responses influenced the communicative behaviour of care home residents living with dementia.

Design: This study used a multiple systematic case study design. Participants were video-recorded during morning care routines in three communication conditions: usual communication, direct instructions and pacing (allowing more time for resident responses). Each dyad acted as its own control.

Setting: The study took place in a residential care home in the East Midlands, UK.

Participants: Three dyads (person with dementia/care worker)

Measures: The level of compliance with instructions was measured. Validated measures were used to rate positive communicative behaviour (engagement with care tasks, eye contact and initiation of interaction) and negative communicative behaviour (e.g. shouting and kicking).

Results: Care assistants were able to employ direct instructions after brief training. The use of direct instructions was positively correlated with positive communicative behaviour from residents ($p < 0.05$). The pacing condition was not employed adequately to evaluate effectiveness. Negative communicative behaviour (resistiveness to care) was rare.

Conclusion: The use of direct instructions by care assistants holds promise for effective communication with people with dementia and warrants further investigation in larger samples and in varied contexts.

Title: The impact of Nursing Homes staff education on end-of-life care in residents with advanced dementia: a quality improvement study.

Citation: Journal of pain and symptom management; Oct 2018

Author(s): Di Giulio, Paola; Finetti, Silvia; Giunco, Fabrizio; Basso, Ines; Rosa, Debora; Pettenati, Francesca; Bussotti, Alessandro; Villani, Daniele; Gentile, Simona; Boncinelli, Lorenzo; Monti, Massimo; Spinsanti, Sandro; Piazza, Massimo; Charrier, Lorena; Toscani, Franco

Objective: End-of-life care in nursing homes (NH) needs improvement. We carried out a study in 29 NHs in the Lombardy Region (Italy). We aimed to compare End-of-Life care in NH residents with advanced dementia before and after an educational intervention aimed to improving palliative care.

Methods: The intervention consisted of a 7-hour lecture, followed by two 3-hour meetings consisting of case discussions. The intervention was held in each NH and well attended by NH staff. This multicenter, comparative, observational study included up to 20 residents with advanced dementia from each NH: the last 10 who died before the intervention (pre-intervention group, 245 residents) and the first 10 who died at least 3 months after the intervention, (post-intervention group, 237 residents). Data for these residents were collected from records for 60 days and 7 days death.

Results: The use of "comfort hydration" (<1000 ml/day subcutaneously) tended to increase from 16.9 to 26.8% in the post-intervention group. The number of residents receiving a palliative approach for nutrition and hydration increased, though not significantly, from 24% pre- to 31.5% post-intervention. On the other hand, the proportion of tube-fed residents and residents receiving intravenous hydration decreased from 15.5% to 10.5%, and from 52% to 42% respectively. Cardiopulmonary resuscitations decreased also from 52/245 (21%) to 18/237 (7.6%) cases ($p=0.002$).

Conclusion: The short educational intervention modified some practices relevant to the quality of End-of-Life care of advanced dementia patients in NHs, possibly raising and reinforcing beliefs and attitudes already largely present.

Title: A systematic review of non-pharmacological interventions for BPSD in nursing home residents with dementia: from a perspective of ergonomics.

Citation: International psychogeriatrics; Oct 2018; p. 1-13

Author(s): Wang, Gubing; Albayrak, Armagan; van der Cammen, Tischa J M

Objective: Non-pharmacological interventions for Behavioral and Psychological Symptoms of Dementia (BPSD) have been developed; however, a systematic review on the effectiveness of this type of intervention from a perspective of ergonomics is lacking. According to ergonomics, the capabilities of Persons with Dementia (PwD) should be considered in the interventions for the outcomes to be reliable. We aimed to systematically review the non-pharmacological interventions for BPSD in nursing home residents with an additional assessment criterion based on ergonomics, specifically, capability consideration.

Methods: The electronic databases MEDLINE, EMBASE, and PsycINFO were searched for non-pharmacological interventions treating BPSD in nursing homes. The interventions were categorized according to the capabilities of PwD required to participate. Study quality was assessed by National Health and Medical Research Council (NHMRC) evidence hierarchy and the capability consideration.

Results: Sixty-four clinical trials met the inclusion criteria; 41 trials reported a significant reduction in at least one BPSD symptom; 20 trials reported no significant reduction in BPSD symptoms; three trials reported adverse effects after the intervention. Interventions were categorized into sensory-, cognition-, and movement-oriented. Capabilities of PwD were not considered in 28 trials, especially for sensory capabilities.

Conclusions: The majority of the clinical trials reported a significant reduction in BPSD. The quality of evidence for nonpharmacological interventions in these trials is low due to the lack

of capability consideration, data inhomogeneity, and inadequate study design and reporting. Future studies should focus on improving the quality of evidence by including capability consideration and examining if a relationship between capability consideration and effectiveness of non-pharmacological interventions exists.

Title: Haven: Sharing receptive music listening to foster connections and wellbeing for people with dementia who are nearing the end of life, and those who care for them.

Citation: Dementia (London, England); Oct 2018; p. 1471301218804728

Author(s): Garabedian, Claire E; Kelly, Fiona

Abstract: This paper reports on research exploring the effects of music played for 12 dyads: a care home resident ('resident') with dementia and someone closely connected to him/her ('carer'). Six individualised music interventions (3 live and 3 pre-recorded) were played by the first author on solo cello within five Scottish non-NHS care homes. All interventions were video-recorded. Semi-structured interviews with carer participants, key staff, and managers explored their responses to interventions. Thick descriptions of video recordings and interview transcripts were thematically coded using Nvivo. A key finding was that structural elements of the interventions combined with characteristics of the music played facilitated an internalised experience of 'haven'; sonically transporting listeners away from their present reality and fulfilling the basic human needs for inclusion, comfort, identity, occupation and attachment.

Title: The results of a cross-over placebo-controlled study of the effect of lavender oil on behavioral and psychological symptoms of dementia.

Citation: Rejuvenation research; Oct 2018

Author(s): Zalomonson, Svetlana; Freud, Tamar; Punchik, Boris; Samson, Tali; Lebedinsky, Svetlana; Press, Yan

Objective: Studies of the effect of aromatherapy on patients with behavioral and psychological symptoms of dementia (BPSD) have yielded contradictory results. One possible explanation for this lack of consistent results is the site of application of the oil. The aim of the study was to evaluate the effect of lavender oil on the rate of BPSD when applied close to and away from the olfactory system.

Methods: A cross-over placebo-controlled study was conducted in the two psychogeriatric LTC departments. Patients in Department A received lavender oil on their face during the first month and on their foot in the second, sunflower seed oil on their foot in the third month and on their face in the fourth month. Patients in Department B received sunflower seed oil on their face during the first month and on their foot in the second, and lavender oil on their foot in the third month and on their face in the fourth month.

Results: Forty two patients completed the study. The mean age was 76.1 ± 11.2 years. After four months of treatment the mean Neuropsychiatric Inventory score in Department A dropped from 13.1 ± 8.3 (median 12,0) to 3.5 ± 3.8 (median 2.0; $P < 0.0001$) and in Department B dropped from 9.7 ± 9.6 (median 6.0) to 1.4 ± 2.5 (median 0; $P < 0.0001$). This reduction was not associated with the type of oil or the site of application.

Conclusions: Based on these results lavender oil has no advantage over sunflower seed oil in the reduction of BPSD, regardless of the place of application.

Title: Beyond Tube-Feeding: Relationship-Centered, Comfort Care for Individuals with Eating Challenges in Dementia.

Citation: Journal of the American Geriatrics Society; Oct 2018

Author(s): Morrison, Jill M; Wu, Sarah; Keller, Heather H

Title: The legal implications of dementia in the workplace: establishing a cross-disciplinary research agenda.

Citation: Ageing & Society; Nov 2018; vol. 38 (no. 11); p. 2181-2196

Author(s): Egdell, Valerie; Stavert, Jill; McGregor, Rebecca

Abstract: Dementia is a growing issue in the United Kingdom (UK) with over 800,000 people affected. Of these people, in excess of 40,000 are aged under 65 years. Thus, a significant number of individuals may be experiencing symptoms of dementia while in employment. In addition, as working lives extend, the potential impact of dementia on the workplace could be substantial. However, to date, there has been little research on experiences of dementia in the workplace. The research that exists highlights the lack of support for workers with dementia. Dementia may be considered to be a disability under the Equality Act 2010. Therefore, the legislation potentially provides a framework for individuals to request that their employer make reasonable adjustments to support their continued employment. International human rights law is potentially another tool that could be utilised to obtain necessary adjustments. This paper argues that in developing the evidence base on workplace experiences of dementia, it is important that the legal framework be considered. This paper reviews the existing literature on dementia in the workplace and embeds this in the legislative framework in order to establish a cross-disciplinary research agenda. While the paper focuses on the UK legal context, the argument presented in the paper is still relevant to other national contexts.

Title: Being occupied: supporting 'meaningful activity' in care homes for older people in England.

Citation: Ageing & Society; Nov 2018; vol. 38 (no. 11); p. 2218-2240

Author(s): Smith, Nick; Towers, Ann-Marie; Palmer, Sinead; Beecham, Jennifer; Welch, Elizabeth

Abstract: The benefits of meaningful activity in later life are well documented. Studies show that being occupied contributes to both physical and mental health as well as quality of life. Research also suggests that activity may be beneficial to people residing in care homes, including people living with dementia. This paper presents findings from a study which used the Adult Social Care Outcomes Toolkit (ASCOT) to measure quality of life in six care homes located in the south-east of England. The study found, like previous ones, that care home residents' days were characterised by a lack of activity. Drawing on observations, interviews and focus groups with residents and staff from these homes, this paper attempts to understand why care home residents do not engage in meaningful activities. We reject the idea that these low levels of activity are a natural part of the ageing process or that they can be explained by notions of resident choice. Instead, the findings point to both insufficient funding and working practices within care homes as more substantive explanations. These explanations inform a discussion of how the low levels of engagement in meaningful activity could be addressed and residents' quality of life improved.

Title: Dementia and Human Rights.

Citation: Ageing & Society; Nov 2018; vol. 38 (no. 11); p. 2397-2399

Author(s): de Albuquerque Green, Caroline Emmer

Title: Evaluation of an integrated service delivering post diagnostic care and support for people living with dementia and their families.

Citation: Health & Social Care in the Community; Nov 2018; vol. 26 (no. 6); p. 819-828

Author(s): Piercy, Hilary; Fowler-Davis, Sally; Dunham, Margaret; Cooper, Carol

Abstract: Greater integration of health and social care services is considered vital to ensure sustainable long-term quality provision for the growing numbers of people living with dementia and their families. Integration of services is at the heart of government policy in England. We evaluated a new integrated service for post diagnostic dementia care, funded as a pilot and delivered through a partnership of statutory and voluntary sector health and social care organisations. The service used an adapted Admiral Nursing service model with a workforce of Admiral Nurses (ANs) and Dementia Advisers (DAs). A mixed method approach was used to assess implementation and outcomes. It involved collection of service activity data, carer reported experience survey data, focus group discussions and interviews with the service delivery team, and the management group. Qualitative data was analysed using a framework approach. About 37.8% of the eligible population registered with the service over the 14-month pilot period. The self-referral route accounted for the majority of referrals, and had enabled those not currently receiving specialist dementia care to engage with the service. Carer satisfaction surveys indicated high levels of satisfaction with the service. The caseload management system offered specific benefits. Individual caseloads ensured continuity of care while the integrated structure facilitated seamless transfer between or shared working across AN and DA caseloads. The skill mix facilitated development of the DA role increasing their potential contribution to dementia care. Challenges included managing large workloads and agreeing responsibilities across the skill mix of staff. This model of fully integrated service offers a novel approach to address the problems of fragmented provision by enabling joined-up working across health and social care.

Title: Combatting dehydration, one drop at a time.

Citation: Nursing & Residential Care; Nov 2018; vol. 20 (no. 11); p. 575-577

Author(s): Palmer, Sarah

Abstract: Motor problems, difficulties recognising signals of thirst and dysphagia can all lead to dehydration, especially in people living with dementia. Sarah Palmer discusses an inventive solution to this problem, developed by an arts student.

Title: Confusion states: Sorting out delirium, dementia, and depression.

Citation: Nursing Made Incredibly Easy; Nov 2018; vol. 16 (no. 6); p. 13-16

Author(s): Laske, Rita Ann; Stephens, Barbara A.

Title: The personal benefits of musicking for people living with dementia: a thematic synthesis of the qualitative literature.

Citation: Arts & Health: International Journal for Research, Policy & Practice; Oct 2018; vol. 10 (no. 3); p. 197-212

Author(s): Dowlen, Robyn; Keady, John; Milligan, Christine; Swarbrick, Caroline; Ponsillo, Nick; Geddes, Lucy; Riley, Bob

Abstract: This review aimed to explore the psychological, social and emotional benefits of music activities for people living with dementia through a systematic review of qualitative literature. Eighteen studies were identified that covered a wide range of music programmes for people with dementia, with the majority of programmes focusing on active musical participation. A thematic synthesis revealed four key benefits of music engagement for people with dementia, namely: Taking Part, Being Connected, Affirming Identity and Immersion "in the moment". Overall, engaging with music was seen to have a number of psychological, social and emotional benefits for people with dementia. However, only seven studies actively included people with dementia in the research process. Going forward, it would appear essential that people with dementia are encouraged to take a more active role in research exploring musical experiences and that a heightened emphasis is placed upon participatory approaches to knowledge generation.

Title: Technology integrated health management for dementia.

Citation: British Journal of Community Nursing; Oct 2018; vol. 23 (no. 10); p. 502-508

Author(s): Rostill, Helen; Nilforooshan, Ramin; Morgan, Amanda; Barnaghi, Payam; Ream, Emma; Chrysanthaki, Theti

Abstract: Pioneering advances have been made in Internet of Things technologies (IoT) in healthcare. This article describes the development and testing of a bespoke IoT system for dementia care. Technology integrated health management (TIHM) for dementia is part of the NHS England National Test Bed Programme and has involved trialing the deployment of network enabled devices combined with artificial intelligence to improve outcomes for people with dementia and their carers. TIHM uses machine learning and complex algorithms to detect and predict early signs of ill health. The premise is if changes in a person's health or routine can be identified early on, support can be targeted at the point of need to prevent the development of more serious complications.

Title: Paradoxical and powerful: Volunteers' experiences of befriending people with dementia.

Citation: Dementia (14713012); Oct 2018; vol. 17 (no. 7); p. 821-839

Author(s): Greenwood, Diane E.; Gordon, Carolyn; Pavlou, Claire; Bolton, Jessica V.

Abstract: This qualitative UK study explored the lived experiences of volunteer befrienders to people with dementia, using interpretative phenomenological analysis. Individual semi-structured interviews were conducted with nine befrienders aged between 25 and 66 years. The relationship that developed between befriender and befriender was at the heart of befrienders' experiences. It comprised numerous paradoxical processes that generated issues of power, equality and boundaries, characterising befriending as a complex and unique phenomenon. Befriending was expressed as a deeply personal and human experience, often with emotional power and profound meaning. Befrienders' personal learning included seeing past dementia stereotypes, challenging their own assumptions and boundaries, and reflecting on love, life and humanness. Dissemination of these findings could help to challenge the stigma around dementia, and enhance recruitment and support of dementia befrienders. Future research should consider befriender experiences of the relationship, additional measures of befriending effectiveness, and exploration of befriender attrition and support.

Title: Community-dwelling older men with dementia are at high risk of hip fracture, but not any other fracture: The Concord Health and Aging in Men Project.

Citation: Geriatrics & Gerontology International; Oct 2018; vol. 18 (no. 10); p. 1479-1484

Author(s): Hsu, Benjumin; Bleicher, Kerrin; Waite, Louise M; Naganathan, Vasi; Blyth, Fiona M; Handelsman, David J; Le Couteur, David G; Seibel, Markus J; Cumming, Robert G

Objective: The aim of the present longitudinal study of community-dwelling older men was to examine the association between cognitive status at baseline, and falls, fractures and bone loss over time.

Methods: In the Concord Health and Aging in Men Project, 1705 community-dwelling men aged 70–97 years had detailed baseline clinical assessment of cognitive status (dementia, mild cognitive impairment [MCI] and normal cognition), as well as depression, physical activity, neuromuscular function, health status, sociodemographics, comorbidities, medication use and serum 25 hydroxyvitamin D, 1,25 dihydroxyvitamin D and parathyroid hormone levels. During a mean follow-up period of 6 years, participants were contacted 4-monthly to ascertain incident falls and fractures, the latter being confirmed by radiographic reports. Bone mineral density was measured by dual X-ray absorptiometry at multiple time-points.

Results: At baseline, 120 men were assessed to have MCI and 93 men to have dementia. Over time, there were 162 first incident fractures, including 43 hip and 32 vertebral fractures. In univariate models, baseline dementia, but not MCI, predicted an increased incidence of hip fracture (HR 6.95, 95% CI 3.47–13.96), but not vertebral (HR 2.26, 95% CI 0.79–6.46) or non-hip non-vertebral fracture (HR 0.73, 95% CI 0.27–1.99). The strong risk of hip fractures associated with dementia remained after accounting for potential confounders (HR 4.44, 95% CI 1.97–9.98). In multivariate analyses, dementia (incidence rate ratio 2.26, 95% CI 1.70–2.99), but not MCI, was associated with an increased risk of falls compared with normal cognition. There was no association between baseline dementia and change in bone mineral density.

Conclusions: Older men with dementia, but not MCI, have a greater tendency to fall and sustain hip fractures, but not any other types of fractures.

Title: Effects of play activities program for nursing home residents with dementia on pain and psychological well-being: Cluster randomized controlled trial.

Citation: Geriatrics & Gerontology International; Oct 2018; vol. 18 (no. 10); p. 1485-1490

Author(s): Tse, Mimi M.Y.; Lau, Joyce L.; Kwan, Rick; Cheung, Daphne; Tang, Angel S.K.; Ng, Shamay S.M.; Lee, Paul H.; Yeung, Suey S.Y.

Objective: The prevalence of chronic pain among nursing home residents with dementia is high. This present study aimed to explore the effectiveness of a play activities program among nursing home residents with dementia.

Methods: Each nursing home was randomly assigned to an experimental group or control group. A 1-h play activities program was offered weekly for 8 weeks to the experimental group, whereas participants in the control group read books and magazines for 15 min weekly for the 8 weeks. Outcome measures were assessed at baseline, post-intervention (at week 8) and 4 weeks after the intervention.

Results: A total of 53 nursing home residents from four nursing homes were recruited. There were significant treatment effects on pain, depression and happiness level when comparing the experimental group and control group. However, there were no treatment

effects on activities of daily living, social engagement, behavioral symptoms and mobility between the two groups.

Conclusion: The play activities program was useful in reducing pain and improving the psychological health of nursing home residents with dementia.

Title: 'Festival in a Box': Development and qualitative evaluation of an outreach programme to engage socially isolated people with dementia.

Citation: Dementia (14713012); Oct 2018; vol. 17 (no. 7); p. 896-908

Author(s): Eades, Michael; Lord, Kathryn; Cooper, Claudia

Abstract: We co-designed and piloted 'Festival in a Box', an outreach programme to enable socially isolated people with dementia to engage with and enjoy cultural activities in their homes. It comprised 3–4 weekly home visits, each led by a professional artist to create art works using materials brought in 'the box'. Activities included music, poetry, pottery, crafts and photography. We qualitatively interviewed 13 participants (6 people with dementia, 4 artists, 3 befrienders). Six participants with dementia completed, enjoyed and engaged with the planned visits. Main themes were: engagement, reflection on value of previous cultural activities, precariousness and isolation in current neighbourhood and the importance of a voice and being heard. Befrienders reported their preconceptions of what participants could do were challenged. Artists reported shifts in their preconceptions about dementia and the influence of the project on their professional practice. We propose that the 'Festival in a Box' pilot study suggests a means through which community arts festivals could work with socially isolated people with dementia to contribute to the creation of 'Dementia Friendly Communities'. A larger-scale pilot study is now needed to develop this hypothesis.

Sources Used:

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

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