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Title	Understanding the key components of effective dementia education and training
Type	Article
URL	https://clock.uclan.ac.uk/43073/
DOI	##doi##
Date	2022
Citation	Hill, James Edward orcid iconORCID: 0000-0003-1430-6927, Rahman-Amin, Malayka and Harrison, Joanna orcid iconORCID: 0000-0001-8963-7240 (2022) Understanding the key components of effective dementia education and training. <i>British Journal of Neuroscience Nursing</i> , 18 (3). pp. 137-140. ISSN 1747-0307
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It is advisable to refer to the publisher's version if you intend to cite from the work. ##doi##

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Commentary: Understanding the key components of effective dementia education and training for health and social care professionals

Abstract

Inadequate and poor care can lead to reduced quality of life for people living with dementia and a higher overall cost to healthcare. Dementia education and training for health and social care staff has been set as a priority by the Department of Health. It is vital to identify what specific factors are important when undertaking dementia care training. This commentary article critically appraises and evaluates a systematic review based on identifying key factors in delivering effective dementia care training.

Commentary on: Surr CA, Gates C, Irving D, Oyebode J, Smith SJ, Parveen S, Drury M, Dennison A. Effective Dementia Education and Training for the Health and Social Care Workforce: A Systematic Review of the Literature. *Rev Educ Res.* 2017 Oct;87(5):966-1002. doi: 10.3102/0034654317723305.

Key points

- Dementia education and training can be effective if factors related to the mode of delivering training are considered.
- Dementia education and training was found to be most effective if staff considered the training to be relevant to their role, involved active face-to-face participation, underpinned practice-based learning with theory, the training was delivered by an experienced facilitator, was at least eight hours in duration and provided structured guidelines for care practice.
- Future research would benefit from there being standardised outcome sets for dementia education and training

Introduction

There are approximately 850,000 people living with dementia in the UK and this number is set to rise to around 1.6 million by 2040 (Wittenberg et al, 2019). Dementia may be categorised as a health inequality, with research indicating that people with dementia receive less primary, preventative healthcare than people without dementia (Cooper et al, 2017). Inadequate and poor care leads to a reduced quality of life for people living with dementia and a higher overall cost to healthcare due to avoidable hospital admissions and longer hospital stays (Parveen et al, 2020).

Dementia education and training for health and social care staff that improves personalised care has been identified as a priority by the Department of Health and Social Care and was listed as one of the 18 key commitments in the Dementia 2020 Challenge (Department of Health and Social Care, 2018). As part of the Challenge, the UK Government sent a mandate to Health Education England (HEE) to support the development of an informed and effective workforce for people living with dementia (Department of Health, 2020). Part of this involved commissioning research to understand 'What Works' when it comes to dementia training, by identifying the programmes and approaches that lead to the best outcomes for people with dementia and their families (Department of Health, 2015)

The most recent systematic review in this area by Surr et al. (2017) aimed to address this question by identifying studies that delivered dementia education and training to health and social care professionals. Their systematic review aimed to identify the factors associated with effective educational and training programs for dementia across service settings.

Aims of the commentary

This commentary aims to critically appraise the methods used within the review by Surr et al (2017) and reflect on the applicability of these findings in practice.

Methods

The authors carried out a robust multi-database literature search examining studies written in English and published between 2000 and April 2015. Reference lists of key papers and e-alerts were used to include additional articles published between search completion and the end of November 2015. Initially, only studies that focussed on evaluating a dementia education or training program were to be included. Additional inclusion criteria were added at the data extraction stage to ensure included papers were relevant to the aims of the review. These were: study reports on primary research, evaluates a dementia training program or pedagogical approach to delivery of the training, is delivered to staff working in health or social care settings and reports on at least one of Kirkpatrick's (1984) four levels of training evaluation: 1) Reaction, 2) Learning, 3) Behaviour and 4) Results. Two reviewers independently undertook a comprehensive screening of data extraction and assessment bias using an adapted version of the Caldwell, Henshaw, & Taylor's (2005) criteria and the Critical Skills Appraisal Programme qualitative review checklist. Data synthesis was undertaken using a critical interpretive synthesis approach (CIS). CIS is a relatively new review type, synthesising arguments in the form of a coherent theoretical framework from both qualitative and quantitative research (Dixon-Woods, et al., 2006).

Findings

In total 152 papers were included in the review, with 63% of studies adopting a quantitative methodology, 14% qualitative and 22% using a mixed methods approach. In terms of quality, 34% were rated as high, 52% medium and 14% were rated as low. One of the main limitations

of the included studies was that few studies compared the efficacy of different training methods against each other. In addition, the majority of studies did not attempt to address potential methodological bias, with many using self-report and non-validated measures or questionnaires to assess changes in outcomes. In relation to Kirkpatrick's 4 levels of training evaluation, the greatest proportion of positive outcomes was observed at level 2 regarding improvement of knowledge skills, confidence and attitude change. This was followed by level 1 (learner's reaction to and satisfaction with the program), level 3 (extent to which staff behaviours or practices have changed) and level 4 (results or outcomes that have occurred because of training for people with dementia). See Table 1 below for the ratio of positive studies and quality assessment for each of Kirkpatrick's levels of assessment.

Table1. Summary of number of positive studies (ratio) and quality associated with Kirkpatrick's levels of assessment.

Kirkpatrick's (1984) Level	Ratio of number of positive studies			Quality of included studies
Level 1: Learner's reaction to and satisfaction with the program	54/74 wholly positive 16/74 papers both positive and negative, 1/74 predominantly negative 3/74 compared two or more training approaches			23% low quality, 52% moderate quality 25% high quality
Level 2: Extent to which learning has occurred, including knowledge, skills, confidence, attitude change	87/109 wholly positive, 16/109 mixed outcomes, 6/109 no change			14% low quality, 55% moderate quality, 31% high quality
Level 3: Extent to which staff behaviours or practices have changed	35/60 wholly positive (for structured application of learning)			10% low quality, 47% moderate quality, 43% high quality (reported in paper but likely an error)
Level 4: Results or outcomes that have occurred because of training	People with dementia	Situated learning approach, clinical supervision/mentorship, trainer qualities	26/38 wholly positive or mixed outcomes (for situated learning)	4% low quality, 46% moderate quality, 50% high quality – this figure relate to overall number of studies included (n=50), where 76% of studies examined outcome or results for people with dementia, 32% staff and 8% family members
	Carers	Working positively with and engaging families	2/4 positive (but caution to be applied to interpretation owing to low	

			number of studies)	
	Staff	16 studies reported on outcomes related to staff, but studies showed training more likely to lead to no change than positive outcomes across staff outcome categories.		

In relation to moderating factors of dementia training relating to each level of Kirkpatrick's model, the researchers found that for:

- Level 1 Reaction – Four main factors were identified which may impact on the effectiveness of learner's reactions satisfaction level of training. These were: learners should perceive the training to be particular to their job role, learning activities should be interactive case-based scenarios in groups, the material supporting the session should be of high quality and delivered by a highly skilled and knowledgeable facilitator.
- Level 2 Learning – Several factors were identified that may impact on what learners think they will be able to do differently as a result, how confident they are that they can do it, and how motivated they are to make changes. These were: active teaching methods supported by online multimedia materials, simulation-based learning, learner debriefing and feedback, duration of training (4 hours to 10 days) and combining theory with practice.
- Level 3 Behaviour – Around half of the studies that evaluated behavioural change indicated having structured application of learning into practice - such as specific tools or methods to guide change which includes reciprocal cycle testing and supported by a specialist.
- Level 4 Results – Having a situated learning approach appeared to be the strongest moderating factor when examining positive outcomes of the training for people with dementia. Sixteen studies reported on outcomes related to staff, but studies showed training had no influence on positive staff outcomes. Studies reporting positive outcomes included a duration of 8+ hours training in total, multiple individual sessions, suggesting training needs to permit greater depth of staff engagement in the overall programme and individual session length. training had no influence on positive staff outcomes

Commentary

Using the Joanna Briggs Institute (JBI) Critical Appraisal tool for systematic reviews, this review achieved nine out of 11 criteria, indicating that this review provides a fairly accurate and comprehensive summary of available studies that address the question of interest. The main criteria which were not achieved were the lack of clarity around synthesising studies. The researchers appeared to have used a vote counting method to analyse their findings this was not clearly defined within the methods. Furthermore, further information on the coding procedure used to identify themes would help with the transparency of the review.

Publication bias was not assessed as it was not applicable to this review type. Further methodological limitations were identified such as the factors were not statistically compared, making it difficult to see to what degree these factors influenced the effectiveness training. Additionally, a wide range of outcomes were used, with different focus and varying scales, making simple vote counting less valid as a method for this type of analysis.

There were certain factors which were consistently associated with positive outcomes across multiple levels of the Kirkpatrick model. These were that training should be active learning-based, delivered face-to-face and supported by online materials. These sessions should be specific to the individual role and last 8+ hours in total. Where simulation-based training is used, an appropriate amount of time should be given to feedback and debriefing. Finally, methods should be provided to support the integration of new methods into practice using relevant models of implementation.

With the COVID-19 pandemic shining a light on the importance of a skilled and supported health and social care workforce, renewed efforts are being made by researchers, policy influencers and thought leaders to urge the government to invest in training and workforce development (Local Government Association, 2021). A clear evidence base for effective features of dementia education and training for health and social care staff is imperative. Based on this review, it is advised that the factors identified by the researchers are applied to the development of dementia education and training, but it is important to ensure that the factors are consistently assessed session by session.

Future research would benefit from there being standardised outcome sets for dementia education and training. If standard factors could be identified and assessed consistently, this would enable comparison of higher quality, multi-centremulti-armrandomised controlled trials of dementia education and training. Where possible these multi-arms randomised controlled trials should compare the association between these factors and standardised outcomes which are important for dementia training.

CPD reflective questions

1. What are the main limitations to the systematic review?
2. What factors would you need to consider when designing a dementia training programme?
3. What outcomes do you think are important in assessing dementia training programs?

This report is independent research funded by the National Institute for Health Research Applied Research Collaboration North West Coast (ARC NWC). The views expressed in this publication are those of the author(s) and not necessarily those of the National Institute for Health Research, the NHS or the Department of Health and Social Care.

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