Psychological interventions for carers of people with dementia: a systematic review of quantitative and qualitative evidence

Elvish R, Lever SJ, Johnstone J, Cawley R, Keady J

CRD summary
The authors concluded that multicomponent and technology-based interventions combining individual and group sessions were the most effective for carers of people with dementia. This review seems a reasonable attempt to synthesise evidence from different study designs, but some methodological limitations and the variable and uncertain quality of included studies makes the reliability of the conclusion uncertain.

Authors' objectives
To evaluate the effects of psychological interventions for carers of people with dementia. This review represents an update of previous reviews in this topic area.

Searching
MEDLINE, PsycINFO, ERIC and PubMed were searched for studies published in English between 2005 and 2011. Search terms were reported.

Study selection
Eligible for inclusion were qualitative and quantitative studies of psychological theory-based interventions for carers of people with dementia. The primary outcome of interest was any psychosocial measure of carer well-being. Quantitative studies had to report random assignment, but did not have to report an effect size.

Over half of the included studies were conducted in the USA; three were in the UK, and the remainder in Mexico, Switzerland, Denmark, Norway and Taiwan. The included interventions were broadly classified as psycho-educational skill-building (most were based on cognitive-behavioural theory or stress and coping models); psychotherapy-counselling; multicomponent (such as combination of counselling, support group, and telephone support); and technology-based (such as use of telephone or other technology as the vehicle of intervention delivery). The qualifications of practitioners delivering the interventions varied, and a mixture of individual and group delivery sessions over varying periods of time were reported. Most control groups received an active intervention (such as written information). Most studies examined depression, burden, social support and well-being in relation to carers. A variety of outcome measures were used.

The authors did not state how many reviewers were involved in the selection of studies.

Assessment of study quality
The quality of quantitative studies was assessed using a checklist adapted from published guidelines which focus on reporting. A maximum score for each item led to an overall possible score of 76. Qualitative studies were assessed with a checklist adapted from the Critical Appraisal Skills Programme (CASP), with a maximum score for each item leading to an overall achievable score of 24.

Study quality was assessed by two reviewers. Disagreements were resolved by discussion.

Data extraction
Data were extracted (largely on direction of effect) on the various outcomes by two reviewers. Disagreements were resolved by discussion.

Methods of synthesis
Studies were combined in a narrative synthesis, and this was reported according to type of intervention.

Results of the review
Twenty studies (17 quantitative and three qualitative studies; sample size range 20 to 642) were included in the review.
Most quantitative studies scored over half of the achievable score for quality, but scores for each item by study were not presented. Two qualitative studies seemed reasonable quality; and one was considered to be poor by the review authors.

**Psycho-educational skill building interventions (seven quantitative studies; one qualitative study):** Quantitative studies showed a positive impact of the intervention, at least in terms of stabilising levels of depression, anxiety, emotional well-being, quality of life and attitudes towards caregiving (some studies showed no change in the intervention group and a decline in control groups). According to the review authors, a UK-based qualitative study that focused on diverse ethnic populations indicated the need for more culturally sensitive services at the point of dementia diagnosis and also provided insight on delays in seeking a diagnosis. Overall, study quality was mixed.

**Psychotherapy-counselling interventions (one qualitative study):** The qualitative component of a mixed methods study was reported. The authors stated that this study did not examine carer views, and provided only case vignettes and clinician views. Study quality was considered to be poor.

**Multicomponent interventions (five quantitative studies; one qualitative study):** Quantitative studies showed a positive impact of the interventions, largely in terms of improvements in depression and social support. The qualitative study showed the intervention to be stimulating and rewarding, and increased caregivers' ability to cope with everyday life and social relations.

**Technology-based interventions (five quantitative studies):** Studies showed positive impacts of the intervention in terms of improved depression, burden, and social support. These studies were considered by the authors as the most promising in terms of methodological quality.

**Authors' conclusions**

Multicomponent and technology-based interventions using a combination of individual and group sessions were the most effective for carers of people with dementia. Interventions based on cognitive-behavioural models could produce meaningful change.

**CRD commentary**

The review question and inclusion criteria were clearly specified. The search strategy included appropriate sources, but restriction to studies published in English may have meant that relevant studies were missed. It was unclear how many reviewers were involved in selecting the studies, but the remainder of the review process contained steps to minimise reviewer error and bias. Variation amongst the included studies suggested that a narrative synthesis was appropriate.

Some analyses were based on multiple studies with the same data set (except for those that focused on psycho-educational skill building), and particular aspects of study quality were difficult to verify. In relation to quality assessment, justification for developing criteria after data extraction was unclear, and this could represent a source of bias in itself. These aspects limit confidence in the robustness of the included studies and review findings. Qualitative and quantitative results were presented separately, but there was some attempt to bring together the complementary aspects of these findings in the discussion. It was not entirely clear why psycho-educational skills building interventions were not included among others highlighted to be particularly effective.

This review appears to be a reasonable attempt to synthesise evidence from different study designs, but some methodological limitations and the variable and uncertain quality of included studies makes the reliability of the conclusion uncertain. The authors' specific recommendations for research seem justified.

**Implications of the review for practice and research**

**Practice:** The authors stated that future practice would benefit from the standardisation of training and qualifications of practitioners delivering interventions for carers of people with dementia. Evidence supports the use of interventions that aim to increase knowledge of dementia and increase communication.

**Research:** The authors suggest a number of recommendations for future research, including: an increase in the number of culturally-sensitive UK-based studies, together with cost-effectiveness analysis of various interventions; evaluating the impact of mode of delivery (particularly for technology-based interventions) on process and outcome measures; an exploration of processes of change within psychological interventions; multi-centre studies on psychotherapy and counselling; and increased focus on specific methodological issues such as consideration of clinical and statistical
significance, reporting of power calculation and effect sizes, and evaluating treatment fidelity in multicomponent interventions.

**Funding**
British Association for Counselling and Psychotherapy.

**Bibliographic details**

**Original Paper URL**
http://bacp.co.uk/research/Systematic_Reviews_and_Publications/dementia_carers.php

**Indexing Status**
Subject indexing assigned by CRD

**MeSH**
Dementia; Humans; Mental Disorders; Caregivers; Adaptation, Psychological; Home Nursing; Stress, Psychological; Alzheimer Disease

**AccessionNumber**
12012027447

**Date bibliographic record published**
13/10/2012

**Date abstract record published**
24/01/2014

**Record Status**
This is a critical abstract of a systematic review that meets the criteria for inclusion on DARE. Each critical abstract contains a brief summary of the review methods, results and conclusions followed by a detailed critical assessment on the reliability of the review and the conclusions drawn.