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Updated meta-review of evidence on support for carers

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Updated meta-review of evidence on support for carers

Abstract

Objective: To update a 2010 meta-review of systematic reviews of effective interventions to support carers of ill, disabled, or older adults. In this article, we report the most promising interventions based on the best available evidence.

Methods: Rapid meta-review of systematic reviews published from January 2009 to 2016.

Results: Sixty-one systematic reviews were included (27 high quality; 25 medium quality; and nine low quality). The quality of reviews has improved since the original review, but primary studies remain limited in quality and quantity. Fourteen high quality reviews focused on carers of people with dementia; four on carers of those with cancer; four on carers of people with stroke; three on carers of those at end of life with various conditions; and two on carers of people with mental health problems. Multicomponent interventions featured prominently, emphasising psychosocial or psychoeducational content, education and training. Improved outcomes for carers were reported for mental health, burden and stress, and wellbeing or quality of life. Negative effects were reported in the reviews following respite care. As with earlier work, we found little robust evidence on the cost-effectiveness of reviewed interventions.

Conclusions: There is no 'one size fits all' intervention to support carers. There is potential for effective support in specific groups of carers, such as shared learning, cognitive reframing, meditation, and computer-delivered psychosocial support for carers of people with dementia. For carers of people with cancer, effective support may include psychosocial interventions, art therapy, and counselling. Carers of people with stroke may also benefit from counselling. More good quality, theory-based, primary research is needed.

Introduction

There is growing policy and research interest in carers, that is those who provide support, on an unpaid basis, to ill, disabled or older people in need of assistance or support with daily living. In 2009, the Department of Health in England commissioned a meta-review of the evidence base relating to the outcomes and cost-effectiveness of interventions to support unpaid carers to inform the Standing Commission on Carers, an independent advisory body providing expert advice to the UK government.¹

The meta-review, published in 2010, concluded that the strongest evidence of effectiveness of interventions related to education, training and information for carers. Beyond this, there was little robust evidence about any of the interventions included in the reviewed literature, largely reflecting the mainly poor quality of underlying primary research, which was often based on small numbers, tested interventions that had no theoretical underpinning, and considered outcome measures that might have little relevance to the recipients of the interventions.¹

The first legal entitlement to support for carers in the UK was incorporated into the 2014 Care Act.² Although the Act is targeted at local authorities and social care services, increased emphasis on joint commissioning and provision means that the entitlement to support also has implications for the health service. It is against this background, and the increase in published evidence since the meta-review in 2010, that an updated meta-review appears to be timely to help inform health services and future research commissioning on the needs of different types of carers and interventions to support them. In this article we summarise the findings of an updated meta-review of evidence on support for carers. We focus on the best evidence emerging from that review; the full details are available elsewhere.³

Methods

We conducted a rapid meta-review of systematic reviews focusing on non-pharmacological support interventions for carers (all ages) of ill, disabled, or older adults aged 18 years or over, including those with dementia, learning disabilities and mental health problems. We considered any outcome that related directly to carers, and interventions had to be relevant to the UK health and social care system. In the absence of a widely accepted definition of a rapid meta-review, we used an approach that involved systematic and transparent methods to appraise relevant reviews, aiming to produce a synthesis that went beyond listing key research areas and findings. This approach is less exhaustive than that of a full systematic review of reviews undertaken over a longer period. We adapted systematic review methodology to ensure we maintained high methodological standards, explicitly noting the potential limitations. In correspondence with the earlier review, we adapted (as necessary) the methods of the original meta-review, and focused on the best evidence, as we describe below.

Database search strategies from the 2010 review were checked and updated (Appendix 1)

[Note to Production Editor: Appendix 1 is online only]. The searches were re-run in

January 2016 on fourteen databases searched in the original meta-review. In addition,

PROSPERO was searched to identify any recently completed systematic reviews. All

searches were restricted to English language papers. Details of inclusion and exclusion

criteria are published elsewhere.³

Screening of titles and abstracts was divided equally between two reviewers, with a 20% sample of retrieved abstracts divided equally between two further reviewers to double screen. Text mining software in EPPI-Reviewer 4 ⁴ was used to ensure no relevant records had been missed during the single reviewer initial screening stage. Two reviewers independently made

final study selection decisions, with disagreements resolved by discussion or involvement of a third reviewer.

We followed the approach and scoring for quality assessment used in the original metareview, adapted from criteria developed by Egan and colleagues (2008). Our initial searches found that there had been substantial development in the volume, content and complexity of the literature since the publication of the original meta-review in 2010. As the average quality of reviews had improved, we focused on those that would provide the most robust information. To achieve this, a number of post-protocol decisions were agreed, including the application of a second tier of quality assessment based on entry criteria for the Database of Abstracts of Reviews of Effects (DARE). Following this, we classified reviews as 'high' 'medium' or 'low' quality. 'Medium' quality reviews had to meet criteria used for the original meta-review as described above. 'High' quality reviews (using DARE criteria) had to reach a minimum score of four points comprising one each for reporting inclusion criteria, search strategy and synthesis; additionally one point for either (1) quality assessment or (2) included study details. All other reviews were classified to be 'low' quality.

We followed the approach to data extraction used in the 2010 review. In doing so, we summarised the high quality review characteristics and recorded outcomes grouped by seven measures: physical health; mental health; burden and stress; coping; satisfaction; well-being or quality of life; ability and knowledge. We extracted basic data for the medium quality reviews. For low quality reviews, we recorded bibliographic detail only.

We adopted a pragmatic approach to the synthesis, focussing on the included high quality reviews and aiming to identify any intervention effect (positive or negative); size of effect; heterogeneity; details of the population; intervention/comparator; and outcome. We discussed review quality, highlighting the better quality primary studies and findings of interest. We

summarised the medium and low quality reviews to identify any differences regarding review coverage and characteristics of included studies.

We sought views from four carers (known to us through previous work) to provide feedback on draft findings.

Results

We initially identified 103 systematic reviews; after applying our post-protocol quality threshold, we included 61 reviews (27 high quality; 25 medium quality; nine low quality). We first briefly summarise the overall findings of the reviews, with the full results available in the final report.³ We then focus on the findings from the 27 high quality reviews. The PRISMA flow chart is shown in Figure 1.

Overview of all included reviews

Patterns in the literature were similar to the original 2010 meta-review. While the overall quality of reviews has improved, primary study evidence remains limited in quality and quantity. Among the high quality reviews, fourteen focused on carers of people with dementia; four on carers of those with cancer; four on carers of people with stroke; three on carers of those with various conditions at the end of life; and two on carers of people with mental health problems. Many primary studies originated in the USA and Europe (including several in the UK). Where socio-demographic data were reported, carers in general were white, female and spouses or adult children of the person being supported. The age at which caregiving roles commenced ranged from early forties up to at least 70 years old.

Reviews considered a range of interventions while details of control group interventions were sparse or not reported. Multicomponent interventions featured prominently, making it difficult to identify causal relationships. Interventions generally focused on psychosocial or psychoeducational content, education and skills training. Multiple outcomes for carers were

uncovered, primarily in mental health, burden and stress, and wellbeing or quality of life. We did not observe any material differences in review topics across the high, medium and low quality reviews. As with the original work, we found little information on intervention cost-effectiveness.

There was some overlap of primary studies in the reviews we included. The effect of this overlap is difficult to judge without substantial additional analysis. There is a risk that the overlap exaggerates effects from the undue influence of individual studies, and presents difficulties in interpretation and synthesis arising from contradictory assessments of the same study.

As noted, we here draw on findings from the 27 high quality reviews.⁷⁻³⁴ Table 1 shows a subset of these reviews highlighting the most promising interventions and outcomes; this subset comprises reviews where the authors considered there to be satisfactory quality primary study evidence. Full results relating to the summary in Table 1 are shown in Table 2.

[Table 1 about here]

Carers of people with dementia

Seven of 14 high quality reviews contained satisfactory primary study quality evidence on at least one carer outcome.

Chien et al.⁸ concluded that carers of people with dementia benefit from support groups and that the use of theoretical models to aid intervention design had a significant impact on the effect size for psychological well-being and depression. The overall quality of 30 primary studies included in this review was reported to be high or moderate. For depression, the effect size was small to moderate but with high statistical variation in the analysis of 17 studies. A small reduction in carer burden and stress was indicated in further analysis of 24 studies with low statistical heterogeneity; the effect appeared to persist over time. The quality of primary

studies was generally good, but the lack of control group data, high statistical heterogeneity for mental health outcomes, and reporting limitations in this review meant it was difficult to be totally confident about the review author's conclusions.

In a well-conducted and well-reported review of eight studies, Hurley et al. ¹¹reported tentative evidence on effectiveness of meditation-based interventions for improving scores of depression and carer burden. This conclusion was supported by primary study evidence at the end of the intervention in five moderate quality studies for depression, and in three low to moderate quality studies for carer burden. Results for both outcomes were mixed at follow-up.

In a review of seven studies looking at carer education focused on skills training, Jensen et al. 12 highlighted that educational programmes have a moderate effect in reducing carer burden and a small effect in reducing depression; effects were unclear for quality of life and transition to long term care. The analysis of depression included two studies (one high quality). The result for carer burden was based on five moderate quality studies with some statistical heterogeneity which favoured interventions of shorter duration. This review appeared largely well-conducted and provided additional analysis of outcomes separated by low and high income countries.

A further well-conducted Cochrane review by Lins et al. 13 of 11 studies observed that telephone counselling without any additional intervention can reduce depressive symptoms and also meets important needs identified by carers. The conclusion on depressive symptoms was supported in the analysis of three moderate quality studies with no evidence of statistical heterogeneity. A positive effect on depression was also found in a moderate quality study focusing on an enhanced version of the intervention comprising telephone counselling with additional video sessions and workbook. Two moderate quality, qualitative studies substantiated the review authors' conclusion on carer satisfaction with the intervention.

Positive control group effects for self-efficacy and satisfaction were also reported, but the quality of studies in these analyses was mixed. Theoretical underpinnings of the included studies were reported.

Marim et al.¹⁴, in a well-conducted and well-reported review of seven high quality studies, concluded that interdisciplinary education and support programmes have a positive impact on carer burden when compared to standard care.

In their review of 14 studies, McKechnie et al. ¹⁶ found that computer-mediated psychosocial interventions can benefit carers of people with dementia. The best evidence of effectiveness related to improvements in scores for depression in the analyses of four high quality studies; for anxiety from two high quality studies; and reductions in stress and burden from five (out of nine) medium to high quality studies, with remaining studies in the latter analysis showing inconsistent results. Not all of the included studies had control groups and there were potential limitations regarding transparency of the review process.

The well-conducted Cochrane review by Vernooij-Dassen et al.¹⁹ of 11 studies suggested that cognitive reframing for family carers shows promise as part of an individualised, multi-component intervention. The inclusion of cognitive reframing appeared to reduce psychological morbidity and subjective stress but without any effects on appraisals of coping or burden. In support of this conclusion, moderate to large effects were reported for reduced depression in the analysis of six studies; small effects for anxiety from the analysis of four studies; and similarly small effects were reported for stress and distress from four studies. All primary studies had some methodological limitations, but overall quality was considered by the review authors to be satisfactory.

A further review by Shoenmakers et al.¹⁸ of respite care for carers of people with dementia identified a negative impact on carer burden (similar to findings in the original meta-review), but this was based on unclear primary study quality and so is not included in Table 1.

Carers of people with cancer

Three of four high quality reviews contained satisfactory primary study quality evidence on at least one carer outcome. Lang and Lim²¹ reported that art therapy was effective in reducing anxiety, stress and negative emotions in family carers of patients with cancer. This conclusion reflects a statistically significant pooled effect in two studies for anxiety; effects for reduced stress from baseline in each of two studies; and an improvement in carer emotional balance in one study. This was a well reported review of moderate quality primary studies. However, findings may be limited by the reliance on two small-sized studies each with the same lead author.

Regan et al.²³ included six moderate to strong quality primary studies out of 23 studies overall. The authors found that couples-based psychosocial interventions showed promise, particularly in respect of improving couple communication and relationship functioning, and in reducing psychological distress. These conclusions were supported by the evidence presented. In addition, there were reductions in physical distress in one study of disease management, psychoeducation and telephone counselling; and in another study evaluating the FOCUS intervention (family coping skills and uncertainty reduction). Improvements were also noted following the FOCUS intervention for quality of life (physical and emotional functioning (two studies)).

In their review of six studies, Waldron et al.²⁴ showed that psychosocial or psychoeducation interventions focusing on problem-solving and communication skills may improve quality of

life in carers of people with cancer. The evidence was provided by a small effect size in the analysis of two good quality studies. The review was well-conducted and reported.

Carers of people with stroke

One of four high quality reviews contained satisfactory primary study quality evidence on at least one carer outcome. Cheng et al. 25, 26 suggested that there was limited evidence of effect for psychosocial interventions on family functioning of carers for people with stroke. This conclusion was based on a small effect size favouring counselling over no treatment from the analysis of two moderate quality studies. In addition, satisfaction with psychoeducation, counselling or support was higher than with usual care in two moderate quality studies. This was a well-conducted review with small numbers of studies included in each analysis across multiple outcomes. Theoretical frameworks underpinning the interventions were reported.

Carers of people with various conditions at the end of life

No satisfactory quality primary evidence was reported in any of the three high quality reviews (not reported in Table 1). 30-32

Carers of people with mental health problems

The original meta-review did not identify reviews that evaluated interventions for carers of people with mental health problems. In this update, we found two high quality reviews in this area, ^{33, 34} but neither reported sufficient satisfactory quality primary evidence and they are therefore not shown in Table 1.

Cost-effectiveness of interventions to support carers

Three high quality reviews reported on cost-effectiveness^{20, 28, 31} and overall these showed limited or inconclusive evidence.

Discussion and conclusions

As with the original 2010 meta-review, ¹ reviews of interventions that might support carers of people with dementia predominated in our update. This reflects continued interest internationally in policy and practice in relation to dementia care. We also identified high quality reviews of interventions to support carers of people with mental health problems, which were absent previously. However, the quality of primary evidence in these reviews was insufficient to support any intervention effect.

Multicomponent interventions continue to dominate the evidence, with an emphasis on psychosocial or psychoeducational content. Education or training for carers and communication skills training were also evident. In terms of outcomes, the most common focus across all carer groups was on mental health, burden and stress, and wellbeing or quality of life. Reviews usually reported multiple outcomes, some of which were not clearly defined.

The findings of our meta-review indicate potential for effective support in specific groups of carers. We highlight promising interventions and outcomes from high quality reviews where satisfactory quality evidence as reported by the review authors was available from analysis of more than one study, intervention type was clearly defined, and where results of the synthesis were not mixed or inconsistent. Similar to the original meta-review, we find that the evidence on the effectiveness of respite care in supporting carers of people with dementia remains paradoxical. Carers advising on this review pointed to the usefulness of respite care as a support to them but there remains a lack of evidence of effect in empirical research. Also, as with the original work, we found little information about the cost-effectiveness of any of the interventions reviewed.

There is some evidence that interventions involving contact between carers of people with dementia and other people who know about dementia may improve some aspects of carers' mental health and of their perceptions of burden and stress. However, the evidence remains difficult to interpret, given that very different types of intervention appear to produce this effect, while we have no clear understanding of what control groups were experiencing as 'usual care'. This inevitably raises the 'something better than nothing' question; that is, given the restricted social interactions some carers have, *any* contact may have beneficial effects. Alternatively, the evidence could reflect the real value of being able to share experiences with and learn from others, but this benefit does appear to be regardless of how the sharing and learning is achieved.

In relation to those caring for a person with cancer, the message seems a little clearer. Here, interventions with a psychosocial element may improve carers' physical and mental health, quality of life and relationship functioning. Art therapy, which could also be characterised as providing some psychosocial support, may also affect mental health positively. The only other group of carers for which there are any clear messages is those helping someone after a stroke. Here, counselling was shown to improve family functioning.

How carers view the evidence reported here

We noted earlier that our review involved four carers acting as advisers who provided further insight into the evidence presented here. They highlighted that carers of people with different conditions experience different caring experiences and trajectories. From their perspective, a challenge is to know what a true 'control' carer or condition might be, thus presenting possible difficulties for a future controlled research design. They also felt that variations in caring situations and across carers made it difficult to see that a single intervention could be the 'answer' in supporting carers. This reflects our findings on the promising effect of multicomponent interventions, along with the need for evaluation of constituent parts, and

attention to the potential differential impact on different carers. All interventions suggesting a positive effect on carers were seen as acceptable, but advisors pointed out that what was actually available to carers was limited and incomplete. They also pointed out that standard services that were provided to the person they cared for were also of value to carers.

Strengths and limitations

Our systematic approach to this update, which is described in detail in the full report³, with clear search strategies, fully documented inclusion and exclusion criteria, decision making by more than one team member, and clearly documented data extraction and quality assessment, provides confidence that we have not missed any major sources of evidence and that our conclusions are firmly rooted in the best evidence available.

The nature of a meta-review means that it is difficult to uncover definitively what interventions work, for whom, and why. Other limitations may include the restriction to reviews published in English; the short timescale for this review (7 months), which prevented a systematic investigation of primary study overlap across the included reviews; and post-protocol decisions dictated by growth in the literature since the original meta-review.

Reviews included in this update appear to be of a higher quality overall since the original meta-review; they were generally well-conducted and reported although there were some methodological limitations. Even those reviews that we defined to be of high quality did not always assess or report the quality of included primary studies. The primary studies from the included reviews had worldwide coverage; our focus on health systems in high income countries means that results can largely be seen as relevant to the UK context.

Review authors' conclusions generally reflected the evidence they presented. However, whether due to poor quality of the primary research or to limitations of the reviews themselves, many relied on analysis of small numbers of studies, and in some cases single

studies. There was also lack of information about what support, if any, carers in control groups received, which may reflect the quality of primary studies. There is little consistency in the messages about the *type* of interventions that have been argued to have positive effects for carers, particularly for carers of people with dementia. With little understanding of the experiences of the control group, we have no way of addressing this question.

The inclusion of multiple interventions in a single review, the use of multicomponent interventions in the underlying primary research, and the reported overlap of primary studies in different reviews made it difficult, in many parts of our work, to interpret cause and effect (in the few places where effect was evident).

The original meta-review highlighted the problem of intervention research that does not consider theory of change or an intervention logic to inform either the design of the intervention or the choice of appropriate outcome domains when it is evaluated. This remains an issue but, in the updated work, some review authors acknowledged this problem and, in one case, focussed exclusively on interventions where such theory was evident. ¹⁹ The lack of underpinning theory means that primary research often includes multiple outcome measures, none of which are identified as primary, adding further to the difficulties of ascribing cause and effect.

Implications for health care and research

This updated meta-review identified some promising interventions for specific groups of carers, indicating improvements in mental health, burden and stress, wellbeing and quality of life. Interventions include shared learning, cognitive reframing, meditation, and computer-delivered psychosocial interventions for carers of people with dementia; psychosocial

interventions, art therapy, and counselling for carers of people with cancer. Counselling may also help carers of people with stroke.

More good quality, theory-based, primary research is warranted. Evidence is needed on the differential impact of interventions for different types of carers, and on effectiveness of constituent parts in multicomponent programmes. Further research triangulating qualitative and quantitative evidence on respite care is urgently required. Overlap of primary studies is a problem in meta-reviews generally and warrants future methodological investigation.



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Declaration of Conflicting Interests

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Table 1: Best evidence for interventions that may have an effect on carers

Type of carer	Outcome improved	Type of intervention
Dementia	Anxiety	Cognitive reframing ¹⁹
	Anxiety	Psychosocial interventions (computer-mediated) ¹⁶
	Burden	Educational interventions aimed at teaching skills ¹²
	Burden	Inter-disciplinary education and support ¹⁴
	Burden (although outcome not explicitly defined)	Support groups ⁸
	Burden and stress	Cognitive reframing ¹⁹
	Burden and stress	Psychosocial interventions (computer-mediated) ¹⁶
	Depression	Cognitive reframing ¹⁹
	Depression	Meditation based interventions ¹¹
	Depression	Psychosocial interventions (computer-mediated) ¹⁶
	Depression	Support groups ⁸
	Depression	Telephone counselling ¹³
Cancer	Mental health	Art therapy ²¹
	Physical distress	Couples-based psychosocial interventions ²³
	Psychological distress	Couples-based psychosocial interventions ²³
	Quality of life	Psychosocial intervention based on problem solving and communication skills ²⁴
	Quality of life: relationship functioning	Counselling therapy ²³
Stroke	Family functioning	Counselling ^{25, 26}

Table 2. Summary overview of reviews highlighting the most promising interventions and outcomes for carers as listed in Table 1

1 st author, year of publication	Type of intervention(s)	Outcome	n/N	Measures used	Synthesis approach (summary statistic)		95% CI Or summar	•	Outcome calculated at
Carers of peo	ople with dementia								
Chien, 2011 ⁸	Support groups led by professionals or other trained group	Depression	17/30	NR	Meta-analysis (Hedges' g)	-0.40	-0.72 to -0.08	NR	End of intervention
	members	Depression	6/30	NR	Meta-analysis (Hedges' g)	-0.57	-1.09 to -0.05	NR	Follow-up of 1 to 3 months
		Burden	24/30	Unclear	Meta-analysis (Hedges' g)	-0.23	-0.33 to -0.13	NR	Unclear
			24/30	Unclear	Meta-analysis (Hedges' g)		ivity analysis that effects p		Unclear
Hurley, 2014 ¹¹	Meditation-based intervention	Depression	7/8	CES-D; HDRS; SCL-90; POMS	Narrative	found stareduction pre-post (including statistical reduced stareduced staredu	tincluding 2 atistically signs in depressing 1 RCT) for all y significant scores. There is follow-up.	on score 2 studies und non- t trends for	End of intervention or follow-up (4 weeks to 4 months)
Jensen, 2015 ¹²	Educational interventions aimed at teaching skills	Burden	5/7 RCTs	Zarit Burden Scale	Meta-analysis (SMD)	-0.52	-0.79 to -0.26	<0.0001	Unclear

1 st author, year of publication	Type of intervention(s)	Outcome	n/N	Measures used	Synthesis approach (summary statistic)	Meta- analysi s results	95% CI	P value	Outcome calculated at
							Or summary arrative synt		
Lins, 2014 ¹³	Telephone counselling with or without additional intervention	Depressive symptoms	4/9 RCTs	CES-D; Brief Symptom Inventory	Narrative	telephone RCT) or sessions. significan reported counselli	sults over time counselling without (2 RC A statisticall nt group differ favouring teles ng combined and a workbo	with (1 CTs) video y rence was ephone with video	Unclear
Marim, 2013 ¹⁴	Interdisciplinary education & support programmes	Burden	7/7 RCTs	Zarit Burden Interview	Meta-analysis (MD)	-1.79	-4.27 to 0.69	0.16	Unclear
	programmes	Burden	4/7	Zarit Burden Interview	Meta-analysis (MD) Sensitivity analysis – removal of heterogeneous RCTs	-1.62	-2.16 to -1.08	<0.00001	Unclear
McKechnie, 2014 ¹⁶	Computer-mediated psychosocial interventions (complex & multifaceted) with and	Depression	7/14	CES-D; Composite measure (detail NR)	Narrative	CES-D;	found improv 3 medium-qua effect (where	ality studies	Unclear
	without professional	Anxiety	2/14	STAI	Narrative	Reductio	n in STAI.		Unclear

1 st author, year of publication	Type of intervention(s)	Outcome	n/N	Measures used	Synthesis approach (summary statistic)	Meta- analysi s results	95% CI	P value	Outcome calculated at
							Or summar	•	
	support	Stress & Burden	9/14	RMBC	Narrative	found po	m-/high-quali sitive interve There were in across the re	ention consistent	Unclear
Vernooij- Dassen, 2011 ¹⁹	Cognitive reframing (one element of Cognitive Behavioural Therapy)	Anxiety	4/11 RCTs	STAI; HAM-A; BSI anxiety sub-scale	Meta-analysis (SMD)	-0.21	-0.39 to -0.04	NR	Unclear
		Depression	6/11 RCTs	CES-D, BDI, BSI depression subscale; MAACL depression subscale	Meta-analysis (SMD)	-0.66	-1.27 to -0.05	NR	Unclear
			5/11 RCTs	CES-D, BDI, BSI depression subscale; MAACL depression subscale	Meta-analysis (SMD)	-0.24	-0.42 to -0.07	NR	Unclear
		Stress or distress	4/11 RCTs	Revised Burden Interview; PSS;	Meta-analysis (SMD)	-0.24	-0.40 to -0.07	0.0059	Unclear

¹ Removal of 1 RCT due to heterogeneity

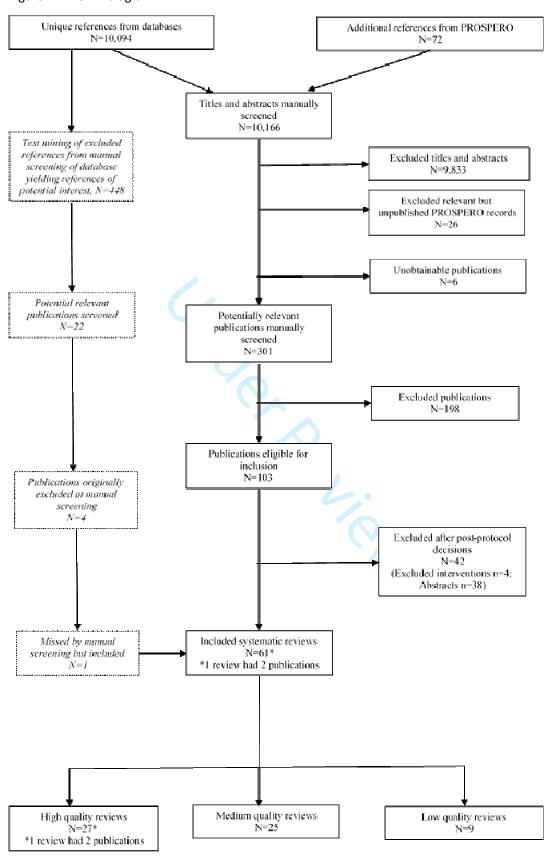
1 st author, year of publication	Type of intervention(s)	Outcome	n/N	Measures used	Synthesis approach (summary statistic)	Meta- analysi s results	95% CI	P value	Outcome calculated at
							Or summary arrative synth		
				investigator developed scales					
Lang, 2014 ²¹	Art-making class/creative arts interventions: Art therapy	Anxiety	2/2	BAI	Meta-analysis (WMD)	4.83	3.12 to 6.55	<0.001	Unclear
Regan, 2012 ²³	Couple-based psychosocial interventions	Physical distress	2/23	SRHS; PAL-C; BCTRI; FACT- G; EPIC; SF-36	Narrative	disease n psychoed counselli and FOC	Int reductions finanagement, ducation/telephing intervention US intervention tesults were north.	one n (1 study) on (1	Unclear
		Psychologi cal distress	7/23	Various	Narrative	intervent control (improver studies); intervent control g	ant improvemention partners ve 2 studies); with ments from bas improvements ion partners co group partners (group improvements)	ersus hin-group seline (3 for empared to 4 studies);	Unclear

1 st author, year of publication	Type of intervention(s)	Outcome	n/N	Measures used	Synthesis approach (summary statistic)	Meta- analysi s results	95% CI	P value	Outcome calculated at
							Or summary arrative synt		-
			/ ,				ow-up compa (1 study).	red to	
	Interventions aimed at couples focussing on counselling therapy	Relationshi p functionin g	4/23	CARES, QMI, RDAS, 0-10 scale (undefined)	Narrative		mprovements ion partners c artners.		Immediately following intervention
			4/23	CARES, QMI, RDAS, 0-10 scale (undefined)	Narrative	intervent	mprovements ion partners c artners at the p point.	ompared to	Final follow- up (undefined)
Waldron, 2013 ²⁴	Psychosocial interventions based on cognitive behavioural approach	QoL	4/6 RCTs	Quality of life: CQoL-C; FACT scale (version 3); SF-36; Combined POMS-SF and CSI	Narrative	Conflicting findings - Effect sizes ranged from nil to small (0.048 to 0.271). Two studies showed no effects of the intervention and 2 showed a small effect. Studies with larger effect sizes resulted from interventions focused on problem solving and communication skills.		Unclear	
Carers of peo	ople with stroke		1		,				<u>'</u>
Cheng, 2012 ^{25, 26}	Counselling	Family functionin g	2/18	Various	Meta-analysis (SMD)	-0.12	-0.23 to -0.01	0.03	Immediately post-intervention (but

1 st author, year of publication	Type of intervention(s)	Outcome	n/N	Measures used	Synthesis approach (summary statistic)	Meta- analysi s results	95% CI	P value	Outcome calculated at
							Or summar		
		(4						differences in dose and duration noted)

Abbreviations: BAI = Beck Anxiety Inventory, BCTRI = Breast Cancer Treatment Response Inventory; BDI = Beck Depression Inventory; BSI = Brief Symptom Inventory; CARES = Cancer Rehabilitation Evaluation System; CES-D = Centre for Epidemiologic Studies Depression Scale; CI = confidence interval; CSI = Caregiver Strain Index; CQoL-C = Caregiver Quality of Life Index-Cancer; EPIC = Expanded Prostate Cancer Index Composite; FACT = Functional Assessment of Cancer Therapy; FACT-G = FACT-General; HAM-A = Hamilton Anxiety Rating Scale; HDRS = Hamilton Depression Rating Scale; MACL = Multiple Affect Adjective Checklist; MD = mean difference; n/N = number of studies reporting outcome/number of studies in review; NR = not reported; PAL-C = Physical symptoms subscale or psychological well-being subscale; POMS = Profile of Mood States; POMS-SF = POMS-Short Form; PSS= Perceived Stress Scale; QMI = Quality of Marriage Index; QoL = Quality of life; RCT = randomised controlled trial; RDAS = Revised Dyadic Adjustment Scale; RMBC = Revised Memory & Behaviour Problem Checklist; SCL-90 = Symptom Checklist 90; SF-36 = 36-item short form survey; SMD = standardised mean difference; SRHS = Self-Rated Health Subscale; STAI = State Trait Anxiety Inventory; WMD = weighted mean difference.

Figure 1: PRISMA diagram



Appendix 1

Search strategy

ASSIA

via Proquest http://www.proquest.com/

Inception to 2^{1st} January 2016

Searched on: 21st January 2016

Records retrieved: 1371

The search strategy below incorporates a section to restrict the search to reviews only. This part of the strategy was based on the Centre for Reviews and Dissemination search strategy for retrieving reviews from ASSIA.

((SU.EXACT("Informal care") OR SU.EXACT("Carers") OR SU.EXACT("Respite care") OR TI, AB(caregiv* OR care-giv* OR carer* OR "informal care" OR befriending OR caretak* OR "care taker" OR "care takers" OR "care taking" OR "children caring" OR "families caring" OR respite) OR TLAB(families NEAR/2 support)) AND ((TI,AB(metaanaly* OR meta-analy*) OR SU.EXACT("Literature reviews") OR SU.EXACT("Systematic reviews") OR TI,AB,IF("meta study" OR meta-synthes* OR metaevaluat*) OR TI,AB,IF(synthes* NEAR/3 literature*) OR TI,AB,IF(synthes* NEAR/3 research*) OR TI,AB,IF(synthes* NEAR/3 studies) OR TI,AB,IF(synthes* NEAR/3 data) OR TI,AB,IF(synthes* NEAR/3 trials) OR TI,AB,IF(synthes* NEAR/3 findings) OR TI, AB, IF (synthes* NEAR/3 evidence) OR TI, AB, IF (quantitative-synthes*) OR TI,AB,IF(pooled-analys*) OR TI,AB,IF((data NEAR/3 pool*) AND studies)) OR (TI,AB,IF(pooling NEAR/1 studies) OR TI,AB,IF(medline OR medlars OR embase OR cinahl OR cochrane OR scisearch OR psychinfo OR psychifo OR psychit OR psychit OR TI, AB, IF ((hand OR manual* OR database* OR computer* OR electronic*) NEAR/3 search*) OR TI,AB,IF((electronic* OR bibliographic*) NEAR/3 database*) OR TI,AB,IF(overview*) OR TI,AB,IF("evaluation review*") OR TI,AB,IF("what works") OR TI,AB,IF("evaluation synthes*") OR TI,AB,IF(review*)))) AND la.exact("English")

Additional limits - Date: From 01 January 2000 to 21 January 2016

Key:

SU.EXACT = subject heading

TI,AB = terms in the title or abstract fields

NEAR/2 = terms within two words of each other (any order)

* = truncation

"" = phrase search

la.exact = language limit

Cochrane Database of Systematic Reviews (CDSR)

via Wiley http://onlinelibrary.wiley.com/

Issue 1 of 12, January 2016

Searched on: 21st January 2016

Records retrieved: 408

- #1 MeSH descriptor: [Caregivers] this term only 1313
- #2 MeSH descriptor: [Respite Care] this term only 33
- #3 caregiv*:ti,ab,kw 4322
- #4 care next giv*:ti,ab,kw 351
- #5 carer*:ti,ab,kw 1060
- #6 "informal care":ti,ab,kw 72
- #7 befriending:ti,ab,kw 41
- #8 caretak*:ti,ab,kw 147
- #9 care next taker*:ti,ab,kw 10
- #10 care next taking:ti,ab,kw 10
- #11 children next caring:ti,ab,kw 2
- #12 families next caring:ti,ab,kw 10
- #13 families near/2 support:ti,ab,kw 48
- #14 respite:ti,ab,kw 74

- #15 (parent or parents or mother or mothers or father or fathers) near/2 care:ti,ab,kw 460
- #16 (parent or parents or mother or mothers or father or fathers) near/2 caring:ti,ab,kw 18
- #17 (parent or parents or mother or mothers or father or fathers) near/2 support:ti,ab,kw 252
- #18 (parent or parents or mother or mothers or father or fathers) near/2 supporting:ti,ab,kw 35
- #19 (sons or daughters or friends) near/2 care:ti,ab,kw 5
- #20 (sons or daughters or friends) near/2 caring:ti,ab,kw 0
- #21 (sons or daughters or friends) near/2 support:ti,ab,kw 43
- #22 (sons or daughters or friends) near/2 supporting:ti,ab,kw 0
- #23 (husband* or wives or wife or spouse* or grandparent* or grandchild* or neighbour* or neighbor* or relatives) near/2 care:ti,ab,kw 42
- #24 (husband* or wives or wife or spouse* or grandparent* or grandchild* or neighbour* or neighbor* or relatives) near/2 caring:ti,ab,kw 11
- #25 (husband* or wives or wife or spouse* or grandparent* or grandchild* or neighbour* or neighbor* or relatives) near/2 support:ti,ab,kw 125
- #26 (husband* or wives or wife or spouse* or grandparent* or grandchild* or neighbour* or neighbor* or relatives) near/2 supporting:ti,ab,kw 3
- #27 #1 or #2 or #3 or #4 or #5 or #6 or #7 or #8 or #9 or #10 or #11 or #12 or #13 or #14 or #15 or #16 or #17 or #18 or #19 or #20 or #21 or #23 or #24 or #25 or #26 6318

NB: Result at line #27 is the total for all of the databases within the Cochrane Library.

Key:

MeSH descriptor = indexing term (MeSH heading)

* = truncation

ti,ab,kw = terms in either title or abstract or keyword fields

near/2 = terms within two words of each other (any order)

next = terms are next to each other

" "= phrase search

Cumulative Index to Nursing & Allied Health (CINAHL Plus)

via EBSCO https://www.ebscohost.com/

Inception to 20th January 2016

Searched on: 21st January 2016

Records retrieved: 2262

The search strategy below incorporates a section to restrict the search to reviews only. This part of the strategy was based on the Centre for Reviews and Dissemination search strategy for retrieving reviews from CINAHL.³⁵

#	Query	Results
S45	S42 OR S44	2,262
S44	S40 AND S43	64
S43	(ZD "in process")	106,037
S42	S40 AND S41	2,198
S41	EM 2009-	2,529,422
	S15 AND S38 Limiters - Publication Year: 2000-2016; English	
S40	Language	3,785
S39	S15 AND S38	4,458
S38	S36 not S37	272,014
S37	PT book review	35,119
S36	S16 OR S17 OR S18 OR S19 OR S20 OR S21 OR S22 OR S23 OR S24 OR S25 OR S26 OR S27 OR S28 OR S29 OR S30 OR	283,972

S33 OR S34 OR S35

S35	AB systematic* N10 overview* or AB methodologic* N10 overview* or AB quantitative* N10 overview* or AB research* N10 overview* or AB literature* N10 overview* or AB studies N10 overview* or AB trial* N10 overview* or AB effective* N10 overview*	3,802
S34	AB systematic* N10 review* or AB methodologic* N10 review* or AB quantitative* N10 review* or AB research* N10 review* or AB literature* N10 review* or AB studies N10 review* or AB trial* N10 review* or AB effective* N10 review*	90,517
S33	S31 AND S32	54,536
S32	AB systematic* or AB methodologic* or AB quantitative* or AB research* or AB literature* or AB studies or AB trial* or AB effective*	960,291
S31	PT review	133,870
S30	TX electronic* N2 database* or TX electronic* N2 data base* or TX bibliographic* N2 database* or TX bibliographic* N2 database*	5,971
S29	(MH "Reference Databases+") or (MH "Reference Databases, Health+")	46,371
S28	TX hand N2 search* or TX manual N2 search* or TX database* N2 search* or TX computer* N2 search*	16,812
S27	TX pooled analy* or TX data N2 pool*	4,964
S26	TX medline or medlars or embase or scisearch or psycinfo or psychinfo or psychit or psyclit	49,214
S25	TX synthes* N3 literature* or TX synthes* N3 research or TX synthes* N3 studies or TX synthes* N3 data	6,052
S24	(MH "Literature Searching+") or (MH "Computerized Literature Searching+")	7,088
S23	MH "Literature Review+"	39,465

S22	TI review* or TI overview*	134,359
S21	PT systematic review	52,406
S20	PT nursing interventions	1,487
S19	AB cochrane or TI Cochrane	15,534
S18	TI meta-analy* or AB meta-analy*	26,870
S17	TI metaanaly* or AB metaanaly*	534
S16	(MH "Meta Analysis")	23,952
S15	S1 OR S2 OR S3 OR S4 OR S5 OR S6 OR S7 OR S8 OR S9 OR S10 OR S11 OR S12 OR S13 OR S14	52,385
S14	TI respite or AB respite	1,075
S13	TI families N2 support OR AB families N2 support	5,650
S12	TI "families caring" or AB "families caring"	200
S11	TI "children caring" or AB "children caring"	27
S10	TI "care taking" or AB "care taking"	131
S9	TI "care taker*" or AB "care taker*"	54
S8	TI caretak* or AB caretak*	1,106
S7	TI befriending or AB befriending	92
S6	TI "informal care" or AB "informal care"	606
S5	TI carer* or AB carer*	8,500
S4	TI "care giv*" or AB "care giv*"	2,470
S3	TI caregiv* or AB caregiv*	27,550

S2	MH "Respite Care"	1,153
S1	MH "Caregivers"	22,274

Key:

MH = indexing term (CINAHL heading)

* = truncation

TI = terms in the title

AB = terms in the abstract

" = phrase search

N2 = terms within two words of each other (any order)

PT = publication type

TX = all text - search of all the database's searchable fields

EM 2009- = limits search to records entered into the database from 2009 to present

ZD in process = searches for any records that are in process and do not yet have an entry date.

Database of Abstracts of Reviews of Effects (DARE) ... 1:heart wiley.com/

Issue 2 of 4, April 2015

Searched on: 21st January 2016

Records retrieved: 153

See above under Cochrane Database of Systematic Reviews for search strategy used.

Embase

via Ovid http://ovidsp.ovid.com/

1974 to 2016 January 20

Searched on: 21st January 2016

Records retrieved: 4869

The search strategy for EMBASE below incorporated the Hedges best optimization of sensitivity and specificity filter for retrieval of systematic reviews in EMBASE.³⁶

- Caregivers/ (28457)

- rs/ (28

 ver support/ (1812)

 .te Care/ (874)

 .giv\$.ti,ab. (54102)

 re giv\$.ti,ab. (6712)

 .arer\$.ti,ab. (13826)

 informal care.ti,ab. (1329)

 befriending.ti,ab. (136)

 * ti,ab. (4320)

 * (245) (families adj2 support).ti,ab. (1603)
- respite.ti,ab. (1705)
- or/1-15 (87059)
- meta-analys\$.mp. (160679)
- search\$.tw. (356113)
- review.pt. (2121136)
- 17 or 18 or 19 (2456581)
- 16 and 20 (12459)

- 22 limit 21 to yr="2000 Current" (10497)
- 23 limit 22 to english language (9443)
- 24 exp Animal/ (21018527)
- 25 exp animal-experiment/ (1902970)
- 26 nonhuman/ (4667343)
- 27 (rat or rats or mouse or mice or hamster or hamsters or animal or animals or dog or dogs or cat or cats or bovine or sheep).ti,ab,sh. (5214665)
- 28 24 or 25 or 26 or 27 (22616514)
- 29 exp human/ (16646006)
- 30 exp human-experiment/ (346372)
- 31 29 or 30 (16647452)
- 32 28 and 31 (16646482)
- 33 28 not 32 (5970032)
- 34 23 not 33 (9397)
- 35 (2009\$ or 2010\$ or 2011\$ or 2012\$ or 2013\$ or 2014\$ or 2015\$ or 2016\$).em. (9456931)
- 36 34 and 35 (4869)

/ = indexing term (Emtree heading)

exp = exploded indexing term (Emtree heading)

\$ = truncation

ti,ab = terms in either title or abstract fields

pt = publication type

sh = subject heading field

em = entry week

mp = multi-purpose – searches in title, original title, abstract, subject heading, name of substance, and registry word fields

tw = text word search in title or abstract fieldsadj2 = terms within two words of each other (any order)

Health Management Information Consortium (HMIC)

via Ovid http://ovidsp.ovid.com/

1979 to November 2015

Searched on: 21st January 2016

Records retrieved: 909

The search strategy for HMIC incorporated a strategy for finding reviews which was translated from the Centre for Reviews and Dissemination search strategy for retrieving reviews from ASSIA.

- 1 Carers/ (4005)
- 2 Informal Care/ (393)
- 3 exp Respite Care/ (448)
- 4 caregiv\$.ti,ab. (1161)
- 5 care giv\$.ti,ab. (743)
- 6 carer\$.ti,ab. (6824)
- 7 informal care.ti,ab. (424)
- 8 befriending.ti,ab. (82)
- 9 caretak\$.ti,ab. (66)
- 10 care taker\$.ti,ab. (1)
- 11 care taking.ti,ab. (28)
- 12 children caring.ti,ab. (14)
- families caring.ti,ab. (60)
- 14 (families adj2 support).ti,ab. (220)
- respite.ti,ab. (611)

```
16 or/1-15 (10299)
```

- 17 exp LITERATURE REVIEWS/ (5537)
- meta analysis/ (726)
- 19 (metaanaly\$).ti,ab. (1605)
- 20 (meta study or meta synthes\$ or meta evaluat\$).ti,ab. (40)
- 21 (synthes\$ adj3 (literature\$ or research\$ or studies or data or trials or findings or evidence)).ti. (104)
- 22 quantitative synthes\$.ti,ab. (22)
- pooled analys\$.ti,ab. (98)
- 24 ((data adj3 pool\$) and studies).ti,ab. (93)
- 25 (pooling adj2 studies).ti,ab. (3)
- 26 (medline or medlars or embase or cinahl or cochrane or scisearch or psychinfo or psychit or psychit, i,ab. (2342)
- 27 ((hand or manual\$ or database\$ or computer\$ or electronic\$) adj3 search\$).ti,ab. (1424)

7.04

- 28 ((electronic\$ or bibliographic\$) adj3 database\$).ti,ab. (972)
- 29 review\$.ti,ab. (35957)
- 30 overview\$.ti,ab. (4451)
- 31 evaluation synthes\$.ti,ab. (0)
- 32 evaluation review\$.ti,ab. (6)
- 33 what works.ti,ab. (274)
- 34 or/17-33 (41527)
- 35 16 and 34 (1523)
- 36 limit 35 to yr="2000 -Current" (909)

Key:

/ = indexing term

exp = exploded indexing term

\$ = truncation

ti,ab. = terms in either title or abstract fields

adj2 = terms within two words of each other (any order)

Health Technology Assessment database (HTA)

via Wiley http://onlinelibrary.wiley.com/

Issue 2 of 4, April 2015

Searched on: 21st January 2016

Records retrieved: 37

See above under Cochrane Database of Systematic Reviews for search strategy used.

MEDLINE

via Ovid http://ovidsp.ovid.com/

1946 to January Week 2 2016

Searched on: 21st January 2016

Records retrieved: 3109

The search strategy for MEDLINE below incorporated the Hedges optimised sensitivity and specificity balanced search filter for retrieval of systematic reviews in MEDLINE.³⁷

- 1 Caregivers/ (24035)
- 2 Respite Care/ (914)
- 3 caregiv\$.ti,ab. (35082)
- 4 care giv\$.ti,ab. (4089)
- 5 carer\$.ti,ab. (8206)
- 6 informal care.ti,ab. (930)
- 7 befriending.ti,ab. (93)

- 8 caretak\$.ti,ab. (3226)
- 9 care taker\$.ti,ab. (132)
- 10 care taking.ti,ab. (215)
- 11 children caring.ti,ab. (31)
- 12 families caring.ti,ab. (211)
- 13 (families adj2 support).ti,ab. (1061)
- 14 respite.ti,ab. (1196)
- 15 or/1-14 (57920)
- 16 meta-analysis.mp,pt. (86024)
- 17 review.pt. (1996933)
- 18 search\$.tw. (244702)
- 19 16 or 17 or 18 (2177630)
- 20 15 and 19 (8440)
- 21 exp animals/ not humans/ (4173052)
- 22 20 not 21 (8396)
- 23 (2009\$ or 2010\$ or 2011\$ or 2012\$ or 2013\$ or 2014\$ or 2015\$ or 2016\$).ed. (5415956)
- 24 22 and 23 (3442)
- 25 limit 24 to english language (3109)

/ = indexing term (MeSH heading)

exp = exploded indexing term (MeSH heading)

\$ = truncation

ti,ab = terms in either title or abstract fields

pt = publication type

ed = entry date

mp = multi-purpose – searches in title, original title, abstract, subject heading, name of substance, and registry word fields

tw = text word search in title or abstract fields

adj2 = terms within two words of each other (any order)

MEDLINE In-Process & Other Non-Indexed Citations

via Ovid http://ovidsp.ovid.com/

January 20, 2016

Searched on: 21st January 2016

Records retrieved: 401

The search strategy below incorporated a strategy for finding reviews which was translated from the Centre for Reviews and Dissemination search strategy for retrieving reviews from MEDLINE.³⁵

ROLINA

- 1 caregiv\$.ti,ab. (4875)
- 2 care giv\$.ti,ab. (439)
- 3 carer\$.ti,ab. (1055)
- 4 informal care.ti,ab. (137)
- 5 befriending.ti,ab. (22)
- 6 caretak\$.ti,ab. (283)
- 7 care taker\$.ti,ab. (26)
- 8 care taking.ti,ab. (32)
- 9 children caring.ti,ab. (5)
- 10 families caring.ti,ab. (15)
- 11 (families adj2 support).ti,ab. (141)
- respite.ti,ab. (95)
- 13 or/1-12 (6675)

- 14 systematic\$ review\$.ti,ab. (14947)
- meta-analytic\$.ti,ab. (564)
- meta-analysis.ti,ab. (12106)
- 17 metanalysis.ti,ab. (13)
- 18 metaanalysis.ti,ab. (101)
- meta analysis.ti,ab. (12106)
- 20 meta-synthesis.ti,ab. (90)
- 21 metasynthesis.ti,ab. (31)
- meta synthesis.ti,ab. (90)
- 23 meta-regression.ti,ab. (562)
- 24 metaregression.ti,ab. (44)
- 25 meta regression.ti,ab. (562)
- 26 (synthes\$ adj3 literature).ti,ab. (287)
- 27 (synthes\$ adj3 evidence).ti,ab. (736)
- 28 integrative review.ti,ab. (244)
- 29 data synthesis.ti,ab. (628)
- 30 (research synthesis or narrative synthesis).ti,ab. (252)
- 31 (systematic study or systematic studies).ti,ab. (1782)
- 32 (systematic comparison\$ or systematic overview\$).ti,ab. (384)
- 33 evidence based review.ti,ab. (243)
- 34 comprehensive review.ti,ab. (1391)
- 35 critical review.ti,ab. (1391)
- 36 quantitative review.ti,ab. (48)
- 37 structured review.ti,ab. (64)
- 38 realist review.ti,ab. (43)
- realist synthesis.ti,ab. (34)
- 40 or/14-39 (28503)

- 41 medline.ab. (9796)
- 42 pubmed.ab. (11032)
- 43 cochrane.ab. (7101)
- 44 embase.ab. (7697)
- 45 cinahl.ab. (2226)
- 46 psyc?lit.ab. (27)
- 47 psyc?info.ab. (2869)
- 48 (literature adj3 search\$).ab. (5471)
- 49 (database\$ adj3 search\$).ab. (5031)
- 50 (bibliographic adj3 search\$).ab. (196)
- 51 (electronic adj3 search\$).ab. (2097)
- 52 (electronic adj3 database\$).ab. (2731)
- 53 (computeri?ed adj3 search\$).ab. (232)
- 54 (internet adj3 search\$).ab. (310)
- 55 included studies.ab. (1997)
- 56 (inclusion adj3 studies).ab. (1444)
- 57 inclusion criteria.ab. (7790)
- 58 selection criteria.ab. (1962)
- 59 predefined criteria.ab. (146)
- 60 predetermined criteria.ab. (55)
- 61 (assess\$ adj3 (quality or validity)).ab. (6110)
- 62 (select\$ adj3 (study or studies)).ab. (5529)
- 63 (data adj3 extract\$).ab. (5037)
- 64 extracted data.ab. (965)
- 65 (data adj2 abstracted).ab. (311)
- 66 (data adj3 abstraction).ab. (161)
- 67 published intervention\$.ab. (13)

- 68 ((study or studies) adj2 evaluat\$).ab. (13837)
- 69 (intervention\$ adj2 evaluat\$).ab. (901)
- 70 confidence interval\$.ab. (25616)
- 71 heterogeneity.ab. (11555)
- 72 pooled.ab. (6160)
- 73 pooling.ab. (835)
- 74 odds ratio\$.ab. (17406)
- 75 (Jadad or coding).ab. (12700)
- 76 or/41-75 (104006)
- 77 review.ti. (40392)
- 78 77 and 76 (12082)
- 79 (review\$ adj4 (papers or trials or studies or evidence or intervention\$ or evaluation\$)).ti,ab. (16644)
- 80 40 or 78 or 79 (41167)
- 81 13 and 80 (413)
- 82 limit 81 to yr="2000 -Current" (410)
- 83 limit 82 to english language (401)

\$ = truncation

? = optional wildcard – stands for zero or one character

ti,ab = terms in either title or abstract fields

adj2 = terms within two words of each other (any order)

NHS Economic Evaluations Database (NHS EED)

via Wiley http://onlinelibrary.wiley.com/

Issue 2 of 4, April 2015

Searched on: 21st January 2016

Records retrieved: 67

See above under Cochrane Database of Systematic Reviews for search strategy used.

PsycINFO

via Ovid http://ovidsp.ovid.com/

1806 to January Week 2 2016

Searched on: 21st January 2016

Records retrieved: 2783

The search strategy below incorporated an adapted version of the Centre for Reviews and Dissemination search strategy for retrieving reviews from PsycINFO.³⁵

- 1 Caregivers/ (21578)
- 2 Respite Care/ (405)
- 3 caregiv\$.ti,ab. (38420)
- 4 care giv\$.ti,ab. (2332)
- 5 carer\$.ti,ab. (7251)
- 6 informal care.ti,ab. (734)
- 7 befriending.ti,ab. (192)
- 8 caretak\$.ti,ab. (4009)
- 9 care taker\$.ti,ab. (46)
- 10 care taking.ti,ab. (161)
- 11 children caring.ti,ab. (52)
- 12 families caring.ti,ab. (230)
- 13 (families adj2 support).ti,ab. (1351)

- 14 respite.ti,ab. (1288)
- 15 or/1-14 (54825)
- metaanaly*.ti,sh. (68)
- 17 meta-analy*.ti,sh. (13305)
- 18 cochrane*.ti. (155)
- 19 (review* or overview*).ti,ab. (481630)
- 20 meta analysis/ (3771)
- 21 meta analysis.md. (14073)
- 22 (review adj2 literature).ti. (3525)
- 23 "literature review".md. (116490)
- 24 "systematic review".md. (13184)
- 25 (synthes* adj3 (literature* or research or studies or data)).ti. (653)
- pooled analys*.ti,ab. (532)
- 27 ((data adj2 pool*) and studies).ti,ab. (747)
- 28 ((hand or manual* or database* or computer* or electronic*) adj2 search*).ti,ab. (6637)
- 29 ((electronic* or bibliographic*) adj2 (database* or data base*)).ti,ab. (3073)
- 30 or/16-29 (514573)
- 31 ("review software other" or "review media" or editorial or letter or "review book").dt. (169661)
- 32 (electronic collection or dissertation abstract or encyclopedia).pt. (450365)
- 33 (rat or rats or mouse or mice or hamster or hamsters or animal or animals or dog or dogs or cat or cats or bovine or sheep).ti,ab,sh. (282974)
- 34 31 or 32 or 33 (844164)
- 35 30 not 34 (350835)
- 36 15 and 35 (5976)
- 37 limit 36 to (english language and yr="2000 -Current") (4431)
- (2009\$ or 2010\$ or 2011\$ or 2012\$ or 2013\$ or 2014\$ or 2015\$ or 2016\$).up. (1393644)

39 37 and 38 (2783)

Key:

/ = subject heading

\$ = truncation

* = truncation

ti,ab = terms in either title or abstract fields

adj2 = terms within two words of each other (any order)

sh = subject heading field

md = methodology field

dt = document type

pt = publication type

up = update code - date the record was released into the database

PROSPERO

http://www.crd.york.ac.uk/PROSPERO/

Searched on: 16th February 2016

Records retrieved: 72

Searched in review title field for the following terms:

Carer or caregiver or caregivers or caregiving – 72 results

Care-giver or care-givers or care-giving – 0

Caretaker or caretakers or caretaking – 0

Care-taker or care-takers or care-taking – 0

Informal care or befriending or respite or family support -0

Social Care Online

http://www.scie-socialcareonline.org.uk/

Searched on: 22nd January 2016

Records retrieved: 1706

Seven searches in total were carried out to enable download of results (currently limited to 500 only).

Search 1

SubjectTerms:"carers" including this term only

OR SubjectTerms:"'young carers"' including this term only

OR SubjectTerms:"informal care" including this term only

OR SubjectTerms:"befriending schemes" including this term only

OR AllFields:'caregiver'

OR AllFields:'care-giver'

OR AllFields:'carer'

OR AllFields:"informal care"

OR AllFields:'befriending'

OR AllFields: 'caretaker'

OR AllFields:'care-taker'

OR AllFields:"care taking"

OR AllFields:"children caring"

OR AllFields:"families caring"

OR AllFields:'respite'

AND

ContentTypes:'systematic review'

140 results

Search 2

SubjectTerms:"'carers"' including this term only

OR SubjectTerms:"'young carers"' including this term only

OR SubjectTerms:"informal care" including this term only

OR SubjectTerms:"befriending schemes" including this term only

OR AllFields: 'caregiver'

OR AllFields:'care-giver'

OR AllFields:'carer'

OR AllFields:"informal care"

OR AllFields:'befriending'

OR AllFields:'caretaker'

OR AllFields:'care-taker'

OR AllFields:"care taking"

OR AllFields:"children caring"

OR AllFields:"families caring"

OR AllFields:'respite'

AND

ContentTypes:'research review'

418 results

Search 3

SubjectTerms:"'carers"' including this term only

OR SubjectTerms:"'young carers"' including this term only

OR SubjectTerms:"informal care" including this term only

OR SubjectTerms:"'befriending schemes"' including this term only

OR AllFields: 'caregiver'

OR AllFields:'care-giver'

OR AllFields:'carer'

OR AllFields:"informal care"

OR AllFields:'befriending'

OR AllFields:'caretaker'

OR AllFields:'care-taker'

OR AllFields:"care taking"

OR AllFields:"children caring"

OR AllFields:"'families caring"'

OR AllFields:'respite'

AND

SubjectTerms:"systematic reviews" including this term only

OR SubjectTerms:"'literature reviews"' including this term only

270 results

Search 4

SubjectTerms:"'carers"' including this term only

OR SubjectTerms:"young carers" including this term only

OR SubjectTerms:"informal care" including this term only

OR SubjectTerms:"befriending schemes" including this term only

OR AllFields: 'caregiver'

OR AllFields:'care-giver'

OR AllFields:'carer'

OR AllFields:"informal care"

OR AllFields:'befriending'

OR AllFields:'caretaker'

OR AllFields:'care-taker'

OR AllFields:"care taking"

OR AllFields:"'children caring"'

OR AllFields:"families caring"

OR AllFields:'respite'

AND

PublicationTitle:'review'

466 results

Search 5

SubjectTerms:"'carers"' including this term only

OR SubjectTerms:"'young carers"' including this term only

OR SubjectTerms:"informal care" including this term only

OR SubjectTerms:"'befriending schemes"' including this term only

OR AllFields:'caregiver'

OR AllFields:'care-giver'

OR AllFields:'carer'

OR AllFields:"informal care"

OR AllFields:'befriending'

OR AllFields:'caretaker'

OR AllFields:'care-taker'

OR AllFields:"care taking"

OR AllFields:"children caring"

OR AllFields:"families caring"

OR AllFields:'respite'

AND

PublicationTitle:'overview'

47 results

Search 6

SubjectTerms:"'carers"' including this term only

OR SubjectTerms:"'young carers"' including this term only

OR SubjectTerms:"informal care" including this term only

OR SubjectTerms:"'befriending schemes"' including this term only

OR AllFields: 'caregiver'

OR AllFields:'care-giver'

OR AllFields:'carer'

OR AllFields:"informal care"

OR AllFields:'befriending'

OR AllFields:'caretaker'

OR AllFields:'care-taker'

OR AllFields:"care taking"

OR AllFields:"children caring"

OR AllFields:"families caring"

OR AllFields:'respite'

AND

AllFields:'metaanalysis'

OR AllFields: 'meta-analysis'

OR AllFields:"meta study"

OR AllFields: 'meta-synthesis'

OR AllFields:'synthesis'

OR AllFields:"pooled analysis"

OR AllFields:"pooling studies"

OR AllFields:"what works"'

149 results

Search 7

SubjectTerms:"carers" including this term only

OR SubjectTerms:"'young carers"' including this term only

OR SubjectTerms:"informal care" including this term only

OR SubjectTerms:"befriending schemes" including this term only

OR AllFields: 'caregiver'

OR AllFields:'care-giver'

OR AllFields:'carer'

OR AllFields:"informal care"

OR AllFields:'befriending'

OR AllFields:'caretaker'

OR AllFields:'care-taker'

OR AllFields:"care taking"

OR AllFields:"children caring"

OR AllFields:"families caring"

OR AllFields:'respite'

AND

AllFields:'medline'

OR AllFields:'medlars'

OR AllFields:'embase'

POLICE.

OR AllFields:'cinahl'

OR PublicationTitle:'cochrane'

OR AbstractOmitNorms:'cochrane'

OR AllFields:'scisearch'

OR AllFields:'psychinfo'

OR AllFields:'psycinfo'

OR AllFields:'psychlit'

OR AllFields:'psyclit'

OR PublicationTitle:'search'

OR AbstractOmitNorms:'search'

216 results

Social Sciences Citation Index (SSCI)

via Web of Science – ISI Web of Knowledge http://www.isinet.com/

1900 to 20th January 2016

Searched on: 22nd January 2016

Records retrieved: 4970

The search strategy below incorporates a section to restrict the search to reviews only. This part of the strategy was based on the Centre for Reviews and Dissemination search strategy for retrieving reviews from the Social Science Citation Index.

28 4,970 (#27) *AND* **LANGUAGE:** (English)

Indexes=SSCI Timespan=2000-2016

27 5,555 (#26) *AND* **LANGUAGE:** (English)

Indexes=SSCI Timespan=1900-2016

# 26	5,762	#25 AND #13
		Indexes=SSCI Timespan=1900-2016
# 25	46,020	#24 OR #23 OR #22 OR #21 OR #20 OR #19 OR #18 OR #17 OR #16 OR #15 OR #14
		Indexes=SSCI Timespan=1900-2016
# 24	1,116	TS=("respite")
		Indexes=SSCI Timespan=1900-2016
# 23	1,795	TS=("families" NEAR/2 "support")
		Indexes=SSCI Timespan=1900-2016
# 22	176	TS=("families caring")
		Indexes=SSCI Timespan=1900-2016
# 21	48	TS=("children caring")
		Indexes=SSCI Timespan=1900-2016
# 20	48	TS=("care-taker*")
		Indexes=SSCI Timespan=1900-2016
# 19	1,946	TS=(caretak*)
		Indexes=SSCI Timespan=1900-2016
# 18	137	TS=("befriending")
		Indexes=SSCI Timespan=1900-2016
# 17	1,410	TS=("informal care")
		Indexes=SSCI Timespan=1900-2016
# 16	7,344	TS=(carer*)
		Indexes=SSCI Timespan=1900-2016
# 15	2,261	TS=(care-giv*)

```
Indexes=SSCI Timespan=1900-2016
# 14 34,552 TS=(caregiv*)
            Indexes=SSCI Timespan=1900-2016
# 13 328,533 #12 OR #11 OR #10 OR #9 OR #8 OR #7 OR #6 OR #5 OR #4 OR #3 OR #2
            OR #1
            Indexes=SSCI Timespan=1900-2016
# 12 1,458 TS=("evaluation synthes*") OR TS=("evaluation review*") OR TS=("what
            works")
            Indexes=SSCI Timespan=1900-2016
# 11 33,260 TS=(overview*)
            Indexes=SSCI Timespan=1900-2016
# 10 240,643 TS=(review*)
            Indexes=SSCI Timespan=1900-2016
     7,436 TS=(electronic* SAME database*) OR TS=(bibliographic* SAME database*)
            Indexes=SSCI Timespan=1900-2016
#8 22,111 TS=("hand" SAME search*) OR TS=(manual* SAME search*) OR
            TS=(database* SAME search*) OR TS=(computer* SAME search*) OR
           TS=(electronic* SAME search*)
            Indexes=SSCI Timespan=1900-2016
#7 16,945 TS=("medline" OR "medlars" OR "embase" OR "cinahl" OR "cochrane" OR
            "scisearch" OR "psychinfo" OR "psycinfo" OR "psychlit" OR "psyclit")
            Indexes=SSCI Timespan=1900-2016
    2,629 TS=("data" SAME pool*) AND TS="studies"
            Indexes=SSCI Timespan=1900-2016
# 5
      991
           TS=("quantitative synthes*" OR "pooled analys*" OR "pooling studies")
            Indexes=SSCI Timespan=1900-2016
```

```
# 4 18,329 TS=(synthes* SAME (literature* OR research* OR "studies" OR "data" OR "trials" OR "findings" OR "evidence"))

Indexes=SSCI Timespan=1900-2016

# 3 16,867 TS=("literature review*")

Indexes=SSCI Timespan=1900-2016

# 2 597 TS=(meta-study OR meta-synthes* OR meta-evaluat*)

Indexes=SSCI Timespan=1900-2016

# 1 52,989 TS=(metaanaly* OR meta-analy*)

Indexes=SSCI Timespan=1900-2016
```

TS= topic tag; searches terms in title, abstract, author keywords and keywords plus fields

* = truncation

" = phrase search

SAME = terms within same sentence

Social Services Abstracts

via Proquest http://www.proquest.com/

Inception to 22nd January 2016

Searched on: 22nd January 2016

Records retrieved: 673

The search strategy below incorporates a section to restrict the search to reviews only. This part of the strategy was based on the Centre for Reviews and Dissemination search strategy for retrieving reviews from ASSIA.

(SU.EXACT("Caregivers") OR SU.EXACT("Respite Care") OR TI,AB(caregiv* OR caregiv* OR caregiv* OR carer* OR "informal care" OR befriending OR caretak* OR "care taker" OR "care takers" OR "care taking" OR "children caring" OR "families caring" OR respite) OR

TI,AB(families NEAR/2 support)) AND (TI,AB(metaanaly* OR meta-analy*) OR SU.EXACT("Literature Reviews") OR TI,AB,IF("meta study" OR meta-synthes* OR meta-evaluat*) OR TI,AB,IF(synthes* NEAR/3 literature*) OR TI,AB,IF(synthes* NEAR/3 research*) OR TI,AB,IF(synthes* NEAR/3 studies) OR TI,AB,IF(synthes* NEAR/3 data) OR TI,AB,IF(synthes* NEAR/3 trials) OR TI,AB,IF(synthes* NEAR/3 findings) OR TI,AB,IF(synthes* NEAR/3 evidence) OR TI,AB,IF(quantitative-synthes*) OR TI,AB,IF(pooled-analys*) OR TI,AB,IF((data NEAR/3 pool*) AND studies) OR TI,AB,IF(pooling NEAR/1 studies) OR TI,AB,IF(medline OR medlars OR embase OR cinahl OR cochrane OR scisearch OR psychinfo OR psychifo OR psychlit OR psyclit) OR TI,AB,IF((hand OR manual* OR database* OR computer* OR electronic*) NEAR/3 search*) OR TI,AB,IF((electronic* OR bibliographic*) NEAR/3 database*) OR TI,AB,IF(verview*) OR TI,AB,IF("evaluation review*") OR TI,AB,IF("what works") OR TI,AB,IF("evaluation synthes*") OR TI,AB,IF(review*))

Additional limits - Date: From 01 January 2000 to 22 January 2016; Language: English

Key:

SU.EXACT = subject heading

TI,AB,IF = terms in the title or abstract or keyword fields

NEAR/2 = terms within two words of each other (any order)

* = truncation

"" = phrase search