Systematic review of respite care in the frail elderly


CRD summary
This review assessed the effectiveness of breaks in care in improving the well-being of carers of older people in the community. It concluded that there was some support for an effect of respite on carers, but the evidence was limited and weak. The review was limited by a lack of good-quality evidence, but the conclusion is likely to be reliable.

Authors' objectives
To assess the effectiveness and cost-effectiveness of breaks in care in improving the well-being of informal carers of frail and disabled older people living in the community. The review also addressed carer needs and barriers to the uptake of respite services.

Searching
MEDLINE, EMBASE, PsycINFO, AMED, ASSIA, IBSS, CINAHL, EconLit, Social Care Online, Sociological Abstracts, Web of Science, the Cochrane Library, DARE, PubMed Cancer Citations, Scopus, and databases of ongoing research (NRR, CRISP) were searched, without language restrictions. Search dates were from the earliest possible to December 2005, with an update to April 2008 in MEDLINE, CINAHL and PsycINFO and search terms were reported.

Study selection
Studies of any design were eligible for inclusion. The quantitative review included studies that: assessed, or included a subsample analysis of, a care recipient population of 65 years or over; assessed an intervention designed to provide the carer with a break from caring or assessed carer outcomes; and compared the respite intervention with no respite or another intervention. Studies were excluded from the quantitative review if they only assessed care recipient outcomes or if the intervention was designed to change the state of the care recipient (e.g. stroke rehabilitation).

The qualitative review included English-language studies that: assessed a care recipient population of 65 years or over; employed qualitative methods (face-to-face, semi-structured or in-depth interviews; focus groups; or open questions in questionnaires); and reported the views of carers, recipients, or both. The views of respite included: respite care service provision or satisfaction with services; impact of respite on the carer, care recipient, or both; unmet needs or perceived needs for respite care; and reasons for utilising or not utilising respite care. A variety of carer outcomes were assessed and included burden, depression, and anxiety. The majority of quantitative studies were undertaken in the USA and the UK.

Two reviewers independently selected studies for inclusion in the review.

Assessment of study quality
The quality of the quantitative studies was assessed using a checklist, which was created by the authors and contained 18 items. Scores across items were summed to create a quality score (as a percentage) and these scores were divided into tertiles of low, moderate, or high.

The quality of the qualitative studies was assessed using a checklist, which was created by the authors and was based on a checklist developed by Kmet, et al (2004, see Other Publications of Related Interest). The scores were summed to produce an overall quality rating.

The validity assessment was probably undertaken in duplicate, but this was not clear.

Data extraction
Data extraction was a two-stage process for both the quantitative and qualitative sections of the review. For the quantitative studies standardised effect sizes and 95% confidence intervals were calculated for carer outcomes.
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**Methods of synthesis**
For the quantitative studies effect sizes and 95% confidence intervals were pooled (using Cohen's method) for each carer outcome, both on follow-up data and change scores; where the standard deviation of change was missing, a 0.6 correlation between baseline and follow-up was assumed. Fixed-effect models were used when heterogeneity was absent and random-effects models when heterogeneity was present. Heterogeneity was assessed using $\chi^2$, $I^2$ and $T^2$ statistics. Meta-analysis was undertaken, for each carer outcome, and covariates were used where possible for length of follow-up; length of intervention; respite setting; and duration of follow-up. A narrative synthesis was undertaken for those studies that were not suitable for meta-analysis.

Thematic analysis explored the similarities and differences in the findings of qualitative studies. A coding system was developed to deconstruct the data, then an explanatory model of the barriers to uptake of respite services was developed by examining the relationships between the various codes.

Publication bias was assessed for the quantitative studies, using country of origin and year of publication; it was not possible to generate funnel plots.

**Results of the review**
A total of 104 studies were identified for inclusion in the quantitative synthesis and 16 of these were included in the meta-analysis (n=2,900); nine of these were RCTs or quasi-experimental studies and seven were longitudinal before-and-after studies. Six studies were of low quality, seven were moderate quality, and three were high quality.

There was a reduction in carer burden at two-to-six months’ follow-up in single-sample studies (four studies), but this was not reflected in RCTs and quasi-experimental studies (three studies). There was a reduction in carer depression in RCTs in the short term (five studies) and for home care (two studies), but not for day care (four studies). These effects were not significant in random-effects models. There was a trend for longer interventions to have more positive effects than shorter interventions. There was no effect of respite on anxiety (four studies), but it had positive effects on morale (two studies) and anger and hostility (two studies). Single-group studies suggested that quality of life was worse after respite use. Increased rates of institutionalisation were noted following respite use (three studies).

A qualitative synthesis and its full results were reported. This included 70 studies and found that respite care was influenced by a range of factors including carer attitudes, the care giving relationship, and knowledge and availability of services.

**Cost information**
The average total costs were greater for the day care intervention groups (five studies) and favourable cost-effectiveness results were reported (two studies).

**Authors' conclusions**
There was some evidence to support respite having a positive effect on carers, but the evidence was limited and weak. There was a lack of good-quality larger trials and respite interventions were varied, often with poor descriptions of the characteristics of the interventions and limited provision and uptake.

**CRD commentary**
The authors addressed a clear research question with appropriate inclusion criteria. An extensive search was undertaken, without language restrictions for quantitative studies. Qualitative studies were only those in English and language bias could not be ruled out. Publication bias was assessed. Data extraction and quality assessment appear to have been conducted by multiple reviewers and study selection was conducted in duplicate, which means that methods appear to have been employed to reduce error and bias. Appropriate criteria were used to assess the study quality and those studies used in the quantitative synthesis were mostly of low or moderate quality. The decisions made to combine the results in either a statistical or narrative synthesis seemed appropriate. Where pooled estimates were calculated,
these included a small number of trials. Potential sources of heterogeneity were appropriately explored.

The results were limited by a lack of good-quality evidence, as acknowledged by the authors, but the conclusion is likely to be reliable.

Implications of the review for practice and research

Practice: The authors stated that a range of services was likely to be most appropriate for providing flexibility of respite provision and responsiveness to carer and care recipient characteristics and needs, including the changes in those needs over time. The qualitative review identified a need for information, respite early in the care-giving career, better training of formal carers (particularly for dementia care), continuity of care, better transport services, and good-quality service provision that provided stimulation to care recipients.

Research: The authors stated that there was a need for high-quality trials and good-quality economic evaluations that considered short- and long-term outcomes, taking account of mortality, carer and care recipient characteristics, intervention characteristics, adequate provision of respite, uptake of respite, and use of other services. Further studies should address the optimum time point for respite to provide carer relief from burden and evaluate interventions to break down barriers to respite use. They should assess whether carer and care recipient outcome measures were appropriate. Studies should also consider ethnic minority groups and assess how their needs may differ. Qualitative research should explore the meaning of a “mental break” and the development of interventions to help carers achieve this. There was also a need for research into how to improve the communication of service availability to carers.

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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.