The "relative" efficacy of involving family in psychosocial interventions for chronic illness: are there added benefits to patients and family members?

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CRD summary
This review assessed the effectiveness of family psychosocial interventions for chronic illness. The author concluded that family psychosocial interventions generally appear promising, but more research is required. The poor reporting of review methods and study quality make it difficult to comment on the strength of the evidence underpinning the author's conclusions.

Authors' objectives
To assess the effectiveness of including a family member in psychosocial interventions for patients with chronic illness.

Searching
MEDLINE (1966 to 2003), PsycINFO (1967 to 2003), Cancerlit (1975 to 2003) and CINAHL (1982 to 2003) were searched for peer-reviewed studies reported in the English language; the search terms were reported. The reference lists of reviews and empirical articles were screened.

Study selection
Study designs of evaluations included in the review
Randomised controlled trials (RCTs) were eligible for inclusion. The included studies followed up patients for between 72 hours and 3 years.

Specific interventions included in the review
Studies were eligible if they compared family psychosocial, social or behavioural interventions with patient-orientated psychosocial interventions and enrolled complete patient-family dyads. Most of the included studies used cognitive-behavioural therapy/skills training or education plus support; other studies used education alone, blood-pressure monitoring in the home, and exercise and behavioural therapy. All but one of the interventions lasted between 5 weeks and 3 years; one intervention was conducted during transfer out of critical care.

Participants included in the review
Studies of patients with a physician-diagnosed medical illness and their family members were eligible for inclusion if the patients and family members were living independently in their home. The search focused on adults aged 18 years or older. Studies of at-risk populations were excluded. The included studies were in patients with heart disease or hypertension, chronic pain, rheumatoid- and osteo-arthritis and type 2 diabetes mellitus. Their mean age was 55.5 years. The majority of the studies (8 of the 12) included the spouse; other studies included a mix of family members.

Outcomes assessed in the review
Inclusion criteria were not specified in terms of the outcomes. The included studies assessed a variety of patient outcomes, such as pain, sickness impact, efficacy for managing condition, blood-pressure control, psychosocial adjustment, medical visits, stress, cardiovascular complications, quality of life, weight, measures of joint inflammation and physical disability. A few of the included studies also assessed the effects on family members: marital adjustment, caregiver stress, health behaviours, endocrine indicators, family functioning and psychological well-being.

How were decisions on the relevance of primary studies made?
The author did not state how the studies were selected for the review, or how many reviewers performed the selection.

Assessment of study quality
The author did not state that they assessed validity.

**Data extraction**
The author did not state how the data were extracted for the review, or how many reviewers performed the data extraction. For each study, the statistical significance of between treatment differences was extracted and effect sizes (Cohen's d) were calculated using published data; the methods used to estimate an effect size from reports of statistical significance were described. Effect sizes were classified as small (0.20), medium (0.50) or large (0.80) according to Cohen et al.

**Methods of synthesis**
How were the studies combined?
Studies reporting patient outcomes were grouped by results into the following three categories and combined in a narrative: positive findings for the family intervention; positive results for the patient-orientated intervention; mixed results. Studies reporting outcomes for family members were considered separately.

How were differences between studies investigated?
Some differences between the studies were discussed in the text, whilst others were apparent from inspection of the tables.

**Results of the review**

Twelve RCTs (1,055 patients) were included.

**Patient outcomes.**

Positive findings for the family intervention: 2 studies found statistically significant improvements with the family intervention compared with the control. One of these studies found that an exercise plus behavioural intervention in patients with chronic low back pain improved pain severity (small effect) and pain behaviour and sickness impact (both large effects); the other study found that an education plus support intervention for osteoarthritis improved efficacy for managing arthritis (large effect).

Positive results for the patient-orientated intervention: 3 studies found no differences between treatments but did find significant improvements over time with the family intervention. One study found greater blood-pressure control at 2 years with family involvement; a second study found improved pain severity, sickness impact, psychosocial adjustment and medical visits in patients with chronic pain who received the family intervention; the third study found reduced stress and cardiovascular complications in patients who received the family intervention following a myocardial infarction.

Mixed results: 4 studies reported mixed effects.

Outcomes for family members (4 studies). All of these studies focused on the spouse. One of the 4 studies found positive effects on the spouse for a family intervention: it found that spouses participating in the family intervention lost more weight and improved eating behaviour (large effect) compared with the control. The other 3 studies reported no significant differences between interventions or any improvements over time.

**Authors' conclusions**

Family psychosocial interventions appear promising but more research is required.

**CRD commentary**
This review addressed a clear question that was defined in terms of the participants, intervention and study design; inclusion criteria for the outcomes were not defined. Several relevant sources were searched but no attempts were made to minimise either publication or language bias. The methods used to select studies and extract the data were not
described, so it is not known whether any efforts were made to reduce reviewer errors and bias. Only RCTs were included but validity was not assessed, thus the results from these studies and any synthesis may not be reliable.

The characteristics of the included studies were reported in sufficient detail. Given the differences between the studies, a narrative synthesis was appropriate. Some potential reasons for differences in the results between studies were discussed. Lack of reporting of review methods and study quality make it difficult to comment on the strength of the evidence underpinning the author's conclusions. The recommendations for further research appear reasonable in view of the few identified studies.

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

Practice: The author did not state any implications for practice.

Research: The author stated the need for further, adequately powered studies that describe the conceptual model underlying the research design and intervention; document the level of participation of family members; give an equal amount of time to each intervention; and assess outcomes for both patients and family members.

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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.