Systematic review of the clinical effectiveness of self care support networks in health and social care

Centre for Reviews and Dissemination

CRD summary
This well-conducted review assessed the clinical effectiveness of self-care support networks in health and social care. The authors concluded that the overall evidence base is very weak, but that in certain settings (weight loss, carers of people with mental illness) self-care support networks may be beneficial, and further research is required. These conclusions are likely to be reliable.

Authors' objectives
To assess the clinical effectiveness of self-care support networks in health and social care.

Searching
MEDLINE, EMBASE, CINAHL, PsycINFO, HMIC, Social Sciences Citation Index, Sociological Abstracts, ASSIA, CareData, the Cochrane CENTRAL Register, Inside Conferences and Dissertation Abstracts were searched (inception to March/April/May 2005) using the reported search terms. Further studies were sought through searches of specific websites and by reviewing the bibliographies of included studies. There were no language restrictions apart from studies in Japanese or Chinese, which were excluded as translation was not available.

Study selection
Study designs of evaluations included in the review
Randomised controlled trials (RCTs), non-randomised controlled trial (CCTs) and longitudinal observational studies (either with a control group, or before-and-after studies) were eligible for inclusion. Studies were required to have a minimum of 10 participants in the self-care group (or if the study was of more than one self-care group, a minimum of 6 participants per group), and a minimum of three months follow-up.

Specific interventions included in the review
Studies of self-care support networks, defined as groups of peers who utilise their experiences to support and advise others whilst receiving support and advice themselves, were eligible for inclusion. Groups could be peer-led or have limited health care professional involvement, and were required to involve a significant degree of interaction and reciprocity between group members. Studies of interventions solely providing disease information, training and/or education, and those conducted primarily via email or the Internet were excluded. Any control intervention was eligible.

Participants included in the review
Studies of individuals attending self-care support networks within the field of health and social care were eligible for inclusion. However, studies of individuals with addictions or life events that might impact on mental health, or of congenitally or developmentally mentally disabled people or their family or carers, were not considered for the review, and studies of patients with cancer were excluded as a systematic review already existed. The included studies involved participants with acute illness or long-term medical conditions, carers or families of such individuals, or participants attempting to adopt a healthier lifestyle.

Outcomes assessed in the review
No inclusion criteria were specified for the outcomes. The outcomes reported by the included studies were measure of direct effect on condition (or carer), measure of effect on care-receiver, measure of direct effect on behaviour or knowledge relating to the condition, measure of effect on quality of life or general well-being, objective measure of use of health care or other resources, measure of satisfaction with intervention, and adverse events.

How were decisions on the relevance of primary studies made?
Two reviewers independently screened primary studies for inclusion. Any disagreements were resolved by consensus; a third reviewer was consulted where necessary.
Assessment of study quality

One reviewer assessed the quality of the studies and a second reviewer checked the assessment. A list of 25 quality assessment questions was developed for the review, based on standard RCT and cohort study quality checklists; it included factors considered to be of particular importance to the evaluation of self-care support networks. The studies were judged as excellent, good, satisfactory or poor for internal validity, and good, limited or poor for external validity.

Data extraction

One reviewer extracted the data and a second reviewer checked the extraction. Details of each study and quantitative data were extracted onto a predefined database. The existence of qualitative and economic data was noted.

Methods of synthesis

How were the studies combined?
The studies were combined in a narrative, and details of the studies were tabulated. The included studies were discussed as a whole, and then grouped by indication (prevention, minor illness, serious illness or long-term condition).

How were differences between studies investigated?
Differences between the studies were discussed in the text. The potential influences of indication, study quality, study design, duration of follow-up, peer or professional leadership, level of professional input, group process, and whether researchers set up the self-care group were considered within the narrative synthesis.

Results of the review

Forty-six studies (approximately 5,800 participants) were included in the review. There were 24 RCTs (including one cluster RCT), 9 CCTs, 4 controlled observational studies and 9 uncontrolled observational studies. The sample size ranged from 13 to 433 participants.

Of the 24 RCTs, one was judged to be of good methodological quality, six satisfactory, ten poor and seven very poor. Of the remaining studies, one was of satisfactory quality, six were poor and fifteen were very poor. Reasons for poor quality included small sample size, high drop-out rates, lack of intention-to-treat analysis, possible contamination of treatment groups, and lack of control for confounding.

Results across all indications.

Of the 26 comparisons with a no-treatment control, 19 reported at least one statistically significant difference. Of the 22 comparisons with baseline, 14 reported at least one statistically significant difference. When considering only higher quality studies (those rated good or satisfactory), all comparisons with a no-treatment control gave at least one statistically significant effect of the self-care support network. There were no clear patterns to suggest optimal features of self-care support networks when the results were explored by indication, study quality, study design, duration of follow-up, peer or professional leadership, level of professional input, group process, or whether researchers set up the self-care group.

Findings by indication.

Weight loss/obesity: 13 studies (7 RCTs, 1 CCT and 5 observational studies) were identified. Overall, the studies provided evidence that peer-led weight loss programmes can result in statistically significant but clinically modest weight loss, although most studies were of a poor quality.

Carers: 9 studies (7 RCTs, 1 CCT and 1 observational study) were identified. The better quality RCTs were of carers for people with mental health conditions in Hong Kong. They found improvements in patients’ psychosocial functioning, rehospitalisation, family functioning, family burden, carer distress and quality of life associated with self-care support networks.

Diabetes: 4 studies (2 RCTs and 2 CCTs) were identified. The studies suggested that self-care support networks can result in long-term improvements in several outcomes, including glucose tolerance and quality of life, although they were of poor methodological quality and may not be reliable.
Rheumatic disease/arthritis: 3 studies (2 RCTs and 1 CCT) were identified. One study suggested a beneficial effect of a self-care support network on self-efficacy and health care costs for osteoarthritis. Two studies found no clear benefits for rheumatic diseases.

HIV/AIDS: 3 studies (1 RCT and 2 observational studies) were identified. The RCT evaluated a very short programme which was not as effective as a professionally led intervention. There were methodological problems with the other 2 studies.

Eating disorders: 2 studies (1 RCT and 1 observational study) were identified. The RCT suggested that self-help groups may be of benefit to bulimics over time, but professionally led interventions can be more effective for some outcomes. The results from the observational study were considered to be unreliable.

Depression: 2 RCTs were identified. One RCT found that a self-care support network may be beneficial for women with postnatal depression, particularly if it involved physical activity. The other RCT found significant benefits of a number of group interventions, including one self-care support network.

Chronic pain: 2 studies (1 RCT and 1 observational study) were identified. The RCT found no clear indication of a beneficial effect of a self-care support network. The other study was very small.

Other indications (8 studies): 8 studies were identified. One study each was included for the following indications: cardiac recovery (1 observational study), epilepsy (1 observational study), healthy living (1 CCT), injury (1 CCT), general mental health (1 RCT), psoriasis (1 CCT), systemic lupus erythematosus (1 observational study) and tuberculosis (1 CCT). The only study considered to be of sufficient methodological quality found that self-help clubs can improve adherence for people with tuberculosis in Northern Ethiopia.

Cost information
Cost information was not reported in the review, but studies reporting objective use of health care resource data (some of which reported cost information) were tabulated in an appendix to the review.

Authors' conclusions
There is very weak evidence for a beneficial effect of self-care support networks as a generic intervention. Some better quality studies suggest that self-care support networks in certain settings (weight loss/obesity, carers of people with mental illness) can be beneficial. Further research is required.

CRD commentary
The review addressed a broad question with well-defined inclusion criteria, although exclusion criteria limit the scope of the review question to only certain areas of health and social care. The search for primary studies was extensive, although the authors acknowledged that there were some limitations within the search process which make it possible that relevant studies were missed. There were few language restrictions, and unpublished studies were sought, which reduces the risk of language and publication bias. Steps were taken to minimise the introduction of reviewer errors and bias in the study selection, quality assessment and data extraction processes. The methodological quality of the included studies was assessed, reported and considered in the review synthesis. The authors used a narrative synthesis, which was appropriate given the heterogeneous nature of the included studies. These differences between the studies were also investigated. Overall, this was a well-conducted review and the results are likely to be reliable. The conclusions reflect the limitations of the included studies, and the recommendations for further research appear justified.

Implications of the review for practice and research
Practice: The authors did not state any implications for practice.

Research: The authors stated the need for further research into the nature and functioning of self-care networks in specific indications and how to evaluate them. Well-designed studies to assess the effectiveness and adverse effects of self-care networks across all indications except weight loss/obesity are also required, as are studies conducted in the UK.
Bibliographic details

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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.