Group psychological therapies for depression in the community: systematic review and meta-analysis

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CRD summary
The review found that group-based cognitive behavioural therapy (CBT) was more effective than usual care for the treatment of depression, and individually-delivered therapy may be more effective than group-delivered immediately post-treatment. Small trial sizes, a lack of trials with long-term follow-up data and poor trial quality means that these findings may not be reliable.

Authors' objectives
To investigate the efficacy of group-based psychological therapies for depression in primary care and in the community.

Searching
MEDLINE, EMBASE, PsycINFO and The Cochrane Library were searched from inception to July 2010. References of selected studies were searched and authors of selected studies and relevant experts were contacted for additional studies.

Study selection
Only randomised, controlled trials (individual or cluster randomised) in a primary care or community setting were considered. Participants had to be adults with a primary diagnosis of depression, with at least half of participants classified as clinically depressed. Any group-based psychological therapy was eligible for inclusion. Trials had to report clinical improvement in depression using validated questionnaires or rating scales. Trials with inclusion criteria that required a specified physical illness or any other mental health problem were excluded, as were studies of less than one month duration.

Most included trials assessed group-based cognitive behavioural therapy (CBT), compared with either usual care or individually-delivered CBT. Most trials were conducted in the United States, none were from the UK. The administration and duration of CBT varied considerably across trials. Some studies assessed dialectical behaviour therapy, interpersonal therapy or self-control therapy. The mean age of patients ranged from 20 years to over 60. The proportion of women ranged from 48% to 100%.

Two reviewers screened potentially relevant abstracts and independently assessed eligibility. Disagreements were resolved by consensus or by involving a third reviewer.

Assessment of study quality
Quality was assessed using the Cochrane Collaboration risk of bias tool which examined quality of randomisation, allocation concealment, blinding, selective reporting, handling of incomplete data and other potential biases. The authors did not state how many reviewers performed the quality assessment.

Data extraction
Data were extracted on the clinical improvement in depression for each arm of each trial using the rating scale for depression or depression questionnaire reported in the trial. Clinician-rated scales (such as the Hamilton rating scale) were preferred, if available. Outcomes were categorised as immediately post-treatment, short-term (over one week to three months), or medium to long term (over three months).

One reviewer extracted data, which were checked by a second. Disagreements were resolved by consensus or by involving a third reviewer.

Methods of synthesis
As different rating scales were used across studies all comparisons from all trials were converted into standardised mean
differences (SMD) with 95% confidence intervals. Trials were combined in meta-analyses. Where heterogeneity (assumed to mean \( I^2 \)) was less than 50% a fixed-effect approach was used. For heterogeneity over 50% a random-effects method was used and heterogeneity explored using subgroup analyses (not specified). Separate analyses were performed for each time period, and for different treatment comparisons.

**Results of the review**

The review included 23 trials, sample sizes ranged from 16 to 337. Thirteen trials compared group-based CBT with usual care to usual care alone (1,247 participants), six compared group-based CBT to individually-delivered CBT (211 participants), four compared other therapies. There was evidence of risk of bias because no trials were blinded and randomisation procedures and allocation concealment were generally not reported.

Group-based CBT was found to have been more effective for treating depression than usual care alone immediately post-treatment (SMD -0.55, 95% CI -0.78 to -0.32, 14 trials) and in the medium to long-term (SMD -0.47, 95% CI -0.87 to -0.08, three trials), but was not quite statistically significant in the short-term (SMD -0.47, 95% CI: -1.06 to 0.12, three trials). Individually-delivered CBT was more effective than group-based CBT immediately post-treatment (SMD 0.38, 95% CI: 0.09 to 0.66, seven trials) but no difference was identified at longer follow-up times. For interventions other than CBT no conclusions were drawn because of the small number of studies and their methodological weaknesses.

There was generally substantial heterogeneity across trials, with five of the six meta-analyses performed with \( I^2 \) of 40% or more.

**Cost information**

Cost-effectiveness information was available from two studies and was reported but not synthesised. One study (in Chile) found that group-based CBT was more effective, but more expensive than usual care. The other concluded that group-based CBT was not cost-effective in Uganda.

**Authors’ conclusions**

Group-based CBT was more effective for individuals with depression than usual care alone, and this benefit appeared to be maintained over time, although follow-up data was limited. Individually-delivered CBT may be more effective than group-based CBT in the period immediately following treatment.

**CRD commentary**

This review was well conducted with a thorough search, suitable quality assessment and appropriate action taken to avoid reviewer bias. The authors identified several limitations of the review. There were few trials, particularly for longer follow-up times, and most trials were small. There were quality issues with most trials, particularly because they could not be blinded. The evidence that group-based CBT was more effective than usual care immediately post-treatment was probably reliable, but all other analyses lacked sufficient data to draw reliable conclusions.

Most participants were taking antidepressant medication, so the effect of group-based therapy could not be entirely separated from the effects of medication. The review was limited to adults with depression so the results may not apply to children or to other types of mental illness. Results could not be extrapolated to assess the long-term benefit of CBT.

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

**Practice:** The authors made no recommendations for clinical practice.

**Research:** The authors stated that high-quality trials and economic analyses of group-based psychological therapy were needed in the UK.

**Funding**

South West GP Trust.

**Bibliographic details**

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.