Is guided self-help as effective as face-to-face psychotherapy for depression and anxiety disorders? A systematic review and meta-analysis of comparative outcome studies

Cuijpers P, Donker T, van Straten A, Li J, Andersson G

CRD summary
This review concluded that guided self-help and face-to-face treatments could have comparable effects for the treatment of depression and anxiety disorders. In view of the limited quality of most included studies, these conclusions should be interpreted with caution.

Authors' objectives
To assess the effectiveness of guided self-help versus face-to-face psychotherapy for the treatment of depression and anxiety disorders.

Searching
The authors searched a database of psychological treatment of depression (evidencebasedpsychotherapies.org), which was developed through a comprehensive literature search (from 1966 to January 2009) in PubMed, PsycINFO, EMBASE and Cochrane Central Register of Controlled Trials (CENTRAL). Bibliographical databases were also searched. No language restrictions were applied. Search terms were reported. Reference lists of relevant publications were also screened for additional studies.

Study selection
Eligible randomised controlled trials (RCTs) evaluated guided self-help therapy versus face-to-face treatment in patients with depression or anxiety and reported outcomes on depression and/or anxiety. Guided self-help therapy was defined as a treatment where procedures were written down or presented in an audio or video document, through which patients had to work more or less independently with limited contact with therapists. Face-to-face therapy had to use the same format and content as the guided self-help therapy, but had to use individual or group treatment sessions to deliver the therapy. Studies where a diagnostic interview was used to establish the presence of depression or anxiety disorder were included. Studies of children and adolescents were excluded, as were studies that evaluated virtual reality treatments.

Most studies recruited adults in general, the remaining studies recruited students or a more specific population (such as older adults or adults with comorbid substance use). Most studies were of patients with depression or panic disorder and other studies were of patients with social phobia, specific phobias or phobias in general. Most face-to-face treatments used an individual treatment format. The number of sessions of face-to-face treatments ranged from four to 16. The guided self-help therapies used a self-help book, a stand-alone computer programme, an Internet-based intervention or an audio recording to deliver the treatment, with a self-help book being the most common. Included studies were conducted in USA, UK, Australia, Sweden and Canada.

The authors did not state how many reviewers assessed studies for inclusion.

Assessment of study quality
The quality of studies was assessed using the Cochrane risk of bias assessment tool. The criteria assessed were adequate generation of allocation sequence, concealment of allocation, prevention of knowledge of allocated intervention, and dealing with incomplete outcome data. The quality of the treatment implementation was assessed (see details in the paper).

The authors did not state how many reviewers performed quality assessment.

Data extraction
Data were extracted on mean and standard deviation to enable the calculation of effect size (Cohen's d) with 95% confidence intervals (CIs). When mean and standard deviation were not reported, procedures to calculate effect size using dichotomous outcomes were used.
Data extraction was performed by one reviewer and checked by another reviewer.

**Methods of synthesis**
The pooled mean effect size (Cohen's \( d \)) with 95% confidence intervals were calculated with a random-effects model. Statistical heterogeneity was assessed using Q test and \( I^2 \). Publication bias was assessed using a funnel plot and Duval & Tweedie's trim and fill method. Sensitivity analyses were conducted by excluding outlier studies. Meta regression analysis was performed to assess the impact of a number of factors (such as study quality, characteristics of populations and interventions) on the overall effect size. Subgroup analyses were performed on different length of follow-ups (one to three months, four to six months and 12 months).

**Results of the review**
Twenty-one RCTs were included in the review (810 participants). Only one trial met all four quality criteria, and four trials met three quality criteria. Sixteen trials did not report whether allocation sequence was generated adequately, and seventeen trials did not report whether allocation was adequately concealed. Only five trials appropriately handled incomplete outcome data by conducting an intention-to-treat analysis.

There was no significant difference in the overall effect size (Cohen's \( d = -0.02, 95\% \text{ CI } -0.20 \) to 0.15; 24 treatment comparisons) between guided self-help therapy and face-to-face therapy. No significant heterogeneity was observed in this outcome.

Sensitivity and subgroup analyses did not materially alter the results. Meta regression analyses did not reveal any significant predictors associated with the effect size. There was no significant publication bias.

**Authors' conclusions**
It seemed safe to conclude that guided self-help and face-to-face treatments could have comparable effects for the treatment of depression and anxiety disorders.

**CRD commentary**
The review question was clear, supported by appropriate inclusion criteria. Relevant databases were searched. No sufficient attempts were made to find unpublished studies which increased the potential for publication bias. Publication bias was assessed and little evidence of it was found. No language restrictions were applied to the search, which minimised the risk of language bias. Steps were made to minimise reviewers' errors and biases in the process of data extraction, but it was unclear whether study selection and quality assessment were also performed in duplicate.

Appropriate criteria were used to assess study quality. Statistical heterogeneity was assessed and appropriate methods were used to pool the results. However, the authors' conclusions should be interpreted with caution given the limited quality of most included studies.

**Implications of the review for practice and research**
**Practice:** The authors stated that there was no reason not to consider using guided self-help as a complement in clinical practice for the treatment of depression and anxiety disorders.

**Research:** The authors stated that further research was required to examine how guided self-help therapy could be used in clinical practice. Future research should also examine who would be willing to participate in guided self-help treatments.

**Funding**
None.

**Bibliographic details**

**PubMedID**
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.