Psychosocial interventions as adjunct therapy for patients with rheumatoid arthritis: a systematic review

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CRD summary
The authors concluded there was consistent supportive evidence for use of disclosure therapy and cognitive behavioural therapy with maintenance therapy as adjunct therapies in patients with rheumatoid arthritis. There were methodological limitations with the literature. The authors’ conclusions reflect the evidence presented, but potential for language and publication biases should be borne in mind.

Authors’ objectives
To assess the efficacy of psychological interventions in patients with rheumatoid arthritis.

Searching
MEDLINE, EMBASE and Cochrane Central Register of Controlled Trials (CENTRAL) were searched for articles published in English in peer-reviewed journals. Search terms were reported. Reference lists of identified papers were scanned for additional studies.

Study selection
Randomised controlled trials (RCTs) that assessed the use of psychological interventions in adult patients with rheumatoid arthritis were eligible for inclusion. Appropriate control groups included standard medical care, waiting list and attention control. Outcomes of interest were pain, biochemical and clinical markers of disease, disability, mood and cognition, behaviour and patient satisfaction.

More than half of the included studies used cognitive-behavioural therapy (CBT) with or without maintenance therapy; others used theoretical bases of biofeedback, relaxation training, disclosure, counselling, psychotherapy, meditation and mindfulness therapy. Most studies compared treatment with standard medical care or an active treatment; some studies compared treatment to those on a waiting list. Treatment duration ranged from one session to six months. Follow-up ranged from one month to five years. The included studies were published between 1981 and 2009. Outcomes varied widely between studies and used a wide variety of measurement instruments.

Two reviewers independently assessed studies for inclusion. Differences were resolved through consensus.

Assessment of study quality
Methodological quality was assessed by evaluation of selection bias, appropriate randomisation, performance bias, attrition bias and detection bias. One point was given for a positive response and zero for a negative or unknown response. The maximum score appeared to be 12 points.

Two reviewers independently assessed validity. Differences were resolved through reaching consensus.

Data extraction
Data for outcomes were extracted for post treatment and follow-up.

The authors did not state how many reviewers conducted the data extraction.

Methods of synthesis
A narrative synthesis was presented. Studies were grouped based on their theoretical base. Data were categorised (based on methods by Ostello et al.) as consistent findings (75% or more studies with statistically significant findings in the same direction), supportive evidence (several high-quality RCTs scored more than 6 with consistent findings), limited
evidence (one high-quality RCT or several low-quality RCTs showed supportive evidence) and conflicting evidence (inconsistent findings among multiple RCTs). No evidence meant no RCTs were available.

**Results of the review**

Thirty-one RCTs (n=2,795 participants, range 18 to 278; numbers in text and tables varied) were included in the review. Twenty-three RCTs scored more than 6 points for quality assessment. Only eight RCTs reported adequate allocation concealment. Thirteen RCTs reported adequate randomisation. Drop-outs ranged from zero to 44%. Thirteen RCTs reported blinding of outcome assessors. Eight studies performed an intention-to-treat analysis.

There was consistent supportive evidence for the efficacy of disclosure (four RCTs) and CBT with maintenance therapy (five RCTs). There was supportive evidence for improvement with CBT treatment for more than six weeks (five RCTs) for outcomes post treatment and conflicting evidence for long-term efficacy. Some evidence of improvement was found for biofeedback-based interventions (two RCTs). Conflicting evidence was found for the benefits of counselling (three RCTs), psychotherapy (two RCTs), mindfulness and medication (two RCTs) and CBT of less than six weeks treatment duration (six RCTs). Limited evidence was found relating to relaxation therapy (two RCTs).

**Authors' conclusions**

There was consistent supportive evidence for use of disclosure therapy and CBT with maintenance therapy as adjunct therapies in patients with rheumatoid arthritis. There were methodological limitations with the literature.

**CRD commentary**

The review question was clear with appropriate inclusion criteria. Some relevant sources were searched, although the limitation to studies in English published in peer-reviewed journals risked language and publication biases. Search dates were not reported and it was unclear how up-to-date the searches were; studies published up to 2009 were included in the review. Validity was assessed with appropriate criteria and some results were reported. Efforts were made to reduce reviewer error and bias during study selection and validity assessment; whether or not similar methods were used for data extraction was unclear. A narrative synthesis was appropriate given the differences between studies for interventions and outcomes. Some of the evidence was based on a small number of studies that had small sample sizes.

The authors' conclusions reflect the evidence presented, but potential for language and publication biases and the variable quality of the included studies should be borne in mind.

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

**Practice:** The authors did not state any implications for practice.

**Research:** The authors stated that future research should address methodological considerations (such as reporting of allocation concealment and randomisation methods) and recruit large populations to ensure sufficient power to detect differences between interventions. Future studies should conduct intention-to-treat analyses and blind outcome assessors where possible and particularly with relevance to disease severity. Future trials of CBT with maintenance needed to ensure that two groups (one with maintenance and one without) were included in addition to standard medical care or attention controls.

**Funding**

Not stated.

**Bibliographic details**


**PubMedID**

21199467
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.