"Flower remedies": a systematic review of the clinical evidence

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Authors' objectives
To critically appraise the available research on flower remedies.

Searching
A range of electronic databases were searched including two which specialise in the area of complementary medicine. The databases were searched from inception until January 2002 using a range of keywords, as detailed in the report. The manufacturers of flower remedies and experts in the field were contacted for additional published and unpublished trials. The bibliographies of all papers were searched for further studies. Several specialised journals were handsearched for further relevant articles. No language restrictions were applied.

Study selection

Study designs of evaluations included in the review
Controlled clinical trials (CCTs) were eligible for inclusion in this review. Case reports and case series were excluded.

Specific interventions included in the review
The interventions needed to be of flower remedies. The interventions included in the review were individualised flower remedies compared with 'usual care' or attention control, and 'Rescue Remedy' compared with placebo. The exact duration of treatment was unclear, but in all cases appeared to be of one month or less.

Participants included in the review
The included participants could be suffering from any medical condition. One trial was of pregnant women with overdue births, one of patients with moderate or major depression, and two were of healthy students sitting exams.

Outcomes assessed in the review
All outcomes were acceptable for inclusion in the review. The outcomes assessed included anxiety and depression. For the trial of pregnant women, time to birth, type of birth, use of medication during birth, anxiety during birth and well-being were all assessed.

How were decisions on the relevance of primary studies made?
Decisions on the relevance of primary studies appear to have been made by the review author alone.

Assessment of study quality
Methodological quality was assessed using a published scale that considers the potential bias of a study through flaws in randomisation, lack of blinding and study withdrawals. Decisions on study validity were made by the review author alone.

Data extraction
The data were extracted by the review author according to predefined criteria (not stated in the report). Where insufficient information was available, more detail was sought from the study authors and/or manufacturers.

Methods of synthesis
How were the studies combined?
The studies were combined in narrative form.

How were differences between studies investigated?
Clinical and statistical heterogeneity were investigated. No further details were given on the methods and results of statistical heterogeneity tests.

### Results of the review

Four CCTs with a total of 205 participants were included in the review.

Two studies scored maximum points (5 out of 5) on the quality scale used, one scored two points and one zero. The two lower scoring studies demonstrated positive results in pregnant women with overdue births and in patients with moderate or major depression. However, the two studies of higher quality that controlled for potential placebo effects and selection bias failed to demonstrate effects. Both of these studies were in healthy students using rescue remedy for exam anxiety.

### Authors' conclusions

The author concluded that the more rigorous research in this review did not support the use of flower remedies beyond a placebo response. However, the paucity of data in the review meant that further research may be necessary to draw a more conclusive picture.

### CRD commentary

The review addressed a clear, if very broad, question with stated inclusion criteria for the participants, interventions, study designs and outcomes. However, the inclusion in the review of healthy participants alongside pregnant women and patients with depression is questionable. Furthermore, the review included both individualised flower remedies and a standard remedy. The heterogeneity of the participants and intervention delivery makes it difficult to draw firm conclusions about the effects of flower remedies. The review search covered a range of databases and attempts were made to include unpublished and foreign language research. Study quality was assessed using a validated scale and results of the better quality studies were highlighted. Aspects of the review process, such as data extraction and validation, were carried out by one author; this may have introduced bias into the review process. The author's results appeared to support his conclusions. However, the author's assertion that flower remedies are not clinically different from placebos may not be warranted, and further high-quality placebo-controlled trials are needed to clarify the effect of flower remedies on a range of clinical areas.

### Implications of the review for practice and research

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

Research: The author stated that rigorous trials of flower remedies are feasible to conduct.

### Bibliographic details


PubMedID

12635462

### Indexing Status

Subject indexing assigned by NLM

**MeSH**

Adult; Anxiety /therapy; Complementary Therapies; Controlled Clinical Trials as Topic; Cross-Over Studies; Depression /therapy; Double-Blind Method; Educational Measurement; Female; Flowers; Humans; Labor, Obstetric /psychology; Male; Pilot Projects; Placebos; Pregnancy; Sample Size; Students; Time Factors
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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.