Eurythmy therapy in clinical studies: a systematic literature review
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CRD summary
This review found improvements in disease and symptom scores which could be ascribed to the effects of eurythmy therapy (EYT) as part of the multimodal treatment of anthroposophic medicine, although the evidence was heterogeneous. Potential language bias, methodological and reporting limitations of the review warrant cautious interpretation of these conclusions.

Authors' objectives
To evaluate the effectiveness of eurythmy therapy (EYT) on participant's capability to soul expression and strengthening of salutogenetic resources.

Searching
MEDLINE, EMBASE, the Cochrane Database of Systematic Reviews, DIMDI (Deutsches Institut für Medizinische Dokumentation und Information) and CAMBase were searched to October 2007. Journal databases of Karger, Kluwer, Springer, Thieme and the Merkurstab archive were searched for relevant articles. Reference lists of retrieved articles were scanned and experts in the field were contacted for additional articles. An Internet search using Google scholar was also conducted. Search terms were reported. Studies in English or German were eligible for inclusion.

Study selection
Cohort studies and controlled trials evaluating the effects of EYT in a clinical setting were eligible for inclusion. Studies of comments, opinions and theoretical considerations were excluded. EYT was defined as an active exercise therapy which involves cognitive, emotional and volitional elements which address a participant's capability to soul expression and strengthen salutogenetic resources. It is part of a system known as anthroposophic medicine (AM).

The majority of studies used EYT as an addition to other therapies including medication. The duration of EYT varied between included studies (duration of studies ranged from seven months to four years). Participants in the included studies had various mental, respiratory and musculoskeletal chronic diseases, anorexia nervosa, depression, chronic low back pain, attention deficit hyperactive disorder (ADHD) or had experienced a heart attack. Outcome measurements in the included studies were body mass index (BMI), quality of life (SF-36, KINDL and KITA), Center for Epidemiologic Studies Depression Scale (CES-D), and disease and symptom scores.

The authors did stated neither how papers were selected for the review nor how many reviewers performed the selection.

Assessment of study quality
Validity was assessed using a checklist that addressed: participant selection; equality of groups at baseline for controlled studies; adequate description of treatment and follow-up; and unbiased surveillance of adverse outcomes. The authors did not state how the validity assessment was performed.

Data extraction
Data were extracted and classified with respect to indication, treatment setting, research design, number of participants involved and the reported outcome measures and results. Data from individual studies were used to calculate effect sizes (ES) using either Cohen's d or Standardised Response Means (mean change divided by its standard deviation). ES were classified as large (>0.8) and moderate (0.5 to 0.8). The authors did not state how many reviewers performed the data extraction.

Methods of synthesis
A narrative synthesis was conducted. Data were reported in the text and presented in the tables.
Results of the review
Five studies (in eight publications) were included in the review (n=1,823): one uncontrolled prospective cohort (four publications), two uncontrolled pre-post studies, one prospective non-randomised comparison study and one descriptive study with a control group. Methodological quality ranged from poor to good.

The cohort study reported a number of results for changes in outcomes between 0 and 12 months. One paper where EYT was received by 94 per cent of patients for a median of 119 days reported significant improvement of disease scores (ES 1.70, 95% CI: 1.47, 1.99, large effect) and symptom scores (ES 1.27, 95% CI: 1.08, 1.50, large effect) and for quality of life scores (SF-36 and KITA, ES 0.41 to 0.67 respectively). Adverse reactions to EYT occurred in three per cent of participants, but none were severe enough to discontinue treatment. Two other publications from the same study reported significant improvements for disease scores (ES of 1.23 and 1.52) and symptom scores (ES 1.09 and 1.04) together with improvement in quality of life scores (data not reported) for EYT. The final article reported a significant improvement in scores for disease (ES 1.77), symptom scores (ES 0.91), quality of life (1.11) and depression (ES 1.20).

One uncontrolled pre-post study reported significant improvements in BMI in girls with anorexia nervosa aged 10 to 13 years (ES 1.02, 95% CI: 0.26, 2.45, large effect), 14 to 16 years (ES 0.99, 95% CI 0.31, 1.57, large effect), and 17 to 19 years (ES 0.22, 95% CI: -1.00, 1.32, small effect). The other with an uncontrolled pre-post study of five boys reported positive changes for various symptoms relating to ADHD.

One prospective non-randomised study reported a significant improvement from 0 to 12 months for symptom scores for chronic low back pain for both the EYT group (ES 1.00, 95% CI: 0.33, 1.67, large effect) and for conventional therapy group (ES 0.57, 95% CI: 0.02, 1.3, moderate effect). A second prospective controlled study reported no significant differences between EYT and control groups for psychological and psychomental reactions.

Authors’ conclusions
Although the evidence was heterogenous, results showed improvements of symptoms which could be ascribed to the effects of the multimodal treatment approaches of AM which involve EYT.

CRD commentary
Inclusion criteria were broadly defined for intervention and study design, but not in terms of participants or outcomes. Several relevant sources were searched and some attempts were made to reduce publication bias. By limiting included studies to those in English and German, the authors may have missed some relevant studies. Methods used to select studies, assess validity and extract data were not described, so it is not known whether efforts were made to reduce reviewer errors and bias. Validity was assessed, but results of the validity assessment were not reported. The intervention was conducted in conjunction with other treatments, including medication, and it was not possible to separate the effects of the intervention from the other treatments. A number of the included studies did not use control groups, so were subject to various potential biases. The reporting of the results was limited, making it difficult for readers to judge these for themselves. Results from these studies and any synthesis may not be reliable. Potential language bias, limitations in the review methods and reporting mean the authors’ conclusions should be treated with caution.

Implications of the review for practice and research
Practice: the authors stated that EYT could be seen as a potentially relevant addition in a complex therapeutic concept to support health and salutogenesis (well-being), but its specific relevance needed to be clarified.

Research: the authors stated that future well-conducted controlled trials were needed with defined indications and treatment regimens.

Funding
Raphael Medical Centre, Hildenborough, Kent UK; Software AG Stiftung, Darmstadt, Germany.

Bibliographic details


**Indexing Status**
Subject indexing assigned by NLM

**MeSH**
Adolescent; Adult; Anthroposophy; Child; Chronic Disease /therapy; Female; Humans; Male; Quality of Life; Research Design

**AccessionNumber**
12008103765

**Date bibliographic record published**
03/11/2008

**Date abstract record published**
07/04/2009

**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.