External qigong for pain conditions: a systematic review of randomized clinical trials

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CRD summary
This generally well-conducted systematic review assessed the effectiveness of external qigong for pain management. External qigong involves qigong practitioners directing their qi energy to relieve pain or other illness. The authors concluded that the evidence for the effectiveness of external qigong was encouraging, but not convincing. The cautious conclusion appears appropriate in view of the limited evidence available.

Authors' objectives
To assess the evidence from randomised controlled trials on the effectiveness of external qigong for pain management.

Searching
MEDLINE, AMED, British Nursing Index, CINAHL, EMBASE, PsycINFO, The Cochrane Library, Korean Medical Databases, Chinese Medical Databases and the Qigong and Energy Medicine Database were searched from inception to January 2007; search terms were reported. Reference lists of all located articles, relevant book chapters and departmental files were handsearched. Experts in the field were contacted for additional studies. No language restrictions were applied.

Study selection
Randomised controlled trials of external qigong (a process by which qigong practitioners direct their qi energy to relieve pain or other illness) for the treatment of pain of any origin compared with any type of control intervention were eligible for inclusion. Randomised controlled trials of internal qigong (a self-training method to achieve optimal health) were not eligible for inclusion. The authors stated that paper copies of all articles were obtained and read in full, but they reported neither how the papers were selected for the review nor how many reviewers performed the selection.

Participants in the included studies were elderly patients suffering from chronic pain (not otherwise defined) or women suffering from premenstrual syndrome. The duration of qigong treatment ranged from 10 minutes on one occasion to 20 minutes twice weekly for four weeks. Control groups received routine care, sham external qigong or remained on a waiting list. Pain was measured using a 5-point Likert scale, a 100 mm visual analogue scale or a 100 mm visual analogue scale and the number of pain points.

Assessment of study quality
Two reviewers independently assessed the quality of the included studies using a modified version of the Jadad scale (taking into account that qigong practitioners cannot be blinded to treatment group) and the 16-point Oxford Pain Validity Scale. The authors also assessed the adequacy of allocation concealment. Disagreements were resolved by consensus or referral to a third reviewer when necessary.

Data extraction
Data were extracted on the mean change in pain from baseline for treatment and control groups. Data extraction was performed independently by two reviewers. Disagreements were resolved by consensus or referral to a third reviewer when necessary.

Methods of synthesis
Weighted mean differences and 95% confidence intervals were calculated. Heterogeneity was assessed using the $\chi^2$ test and the $I^2$ test. In the absence of significant heterogeneity data were pooled using a random-effects model.

Results of the review
Five randomised controlled trials were included in the review (n=259). The trials scored between 1 and 5 points out of a possible maximum 5 points on the Jadad scale; three trials scored 3 or more. The trials scored between 7 and 13 out of a possible maximum 16 points on the Oxford Pain Validity Scale; four trials scored 8 or more. Allocation concealment
was adequate in two trials.

All five studies found a significant benefit of qigong therapy over control treatment in terms of pain scores, number of pain points or pain intensity. Two studies (n=80) compared qigong therapy with routine care for elderly patients suffering from chronic pain and used a 100 mm visual analogue scale to assess outcomes; these studies were pooled and the weighted mean difference was 36.3 mm (95% confidence interval: 22.8, 49.8). Heterogeneity was not significant.

Authors' conclusions
The evidence for the effectiveness of external qigong for the treatment of pain was encouraging, but not convincing; further trials were required.

CRD commentary
This review addressed a clear question with appropriate inclusion criteria. The authors searched a number of databases with no language restrictions and made attempts to identify unpublished research, thus reducing the potential for language and publication bias. Study quality was assessed using validated scales and the results of the quality assessment were presented. Data extraction and quality assessment processes were performed independently by two reviewers, reducing the potential for reviewer error and bias. But, the authors did not report the methods of study selection, so the potential for reviewer error bias could not be assessed for this part of the review process. Some details of the included studies were presented in a table, but these were vague in relation to participants, control treatments and results. Only two studies were homogeneous enough to be combined; appropriate methods were used to pool the studies and investigate statistical heterogeneity. Overall, this was a well-conducted systematic review and the authors' cautious conclusion appears appropriate in view of the limited evidence available. The authors acknowledged that all of the included studies were conducted in the department of one of the review authors.

Implications of the review for practice and research
Practice: The authors did not state any implications for practice.

Research: The authors stated that larger rigorous placebo controlled trials were required to test the effectiveness of external qigong for pain management, including a review of the safety of qigong therapy.

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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.