Perceived benefits of meditative movement in older adults

Rogers C, Keller C, Larkey LK

CRD summary
This review concluded that Tai Chi strategies in older adults improved perceived functional outcomes that ranged from attitudes towards exercise to quality of life outcomes including pain reduction and improved psychological well being. A lack of validity appraisal and poor reporting of review methods made it difficult to determine the reliability of the authors’ conclusions.

Authors’ objectives
To assess the perceived psychosocial benefits and health outcomes of meditative movement such as Tai Chi and Qigong for older adults.

Searching
CINAHL, PsycINFO, PubMed and The Cochrane library were searched for studies published between 1998 and 2008. Google Scholar search engine was used. Handsearches were reported, but no details were reported. Only studies published in a peer-reviewed journal were included.

Study selection
Studies of mind-body physical activity as the primary intervention were eligible for inclusion. Most participants needed to be more than 65 years old. Studies were required to report planned measurement of self-reported psychosocial outcomes. It appeared that only studies with a community-dwelling population were eligible.

Most included studies were conducted in community centers. Studies were carried out in North America, UK, Sweden, Australia, China (including Hong Kong), South Korea and Taiwan; by far the most were in USA. Most participants in the included studies were women. In studies that reported ethnicity, most participants were white. Outcomes reported were various quality of life measures and included Western Ontario and McMaster Universities osteoarthritis index (WOMAC), sickness impact scale and Minnesota living with heart failure scale.

The authors did not state how papers were selected for the review.

Assessment of study quality
The authors did not state that they assessed validity.

Data extraction
Three reviewers independently extracted data on perceived benefits of the interventions. Disagreements were resolved through discussion.

Methods of synthesis
The studies were combined in a narrative synthesis.

Results of the review
Thirty-seven studies (n=1,856 patients) were included in the review. Randomised controlled trials (RCTs), pre-post surveys, cross-sectional studies, exit surveys and individual interviews were included; some studies used more than one research design.

Qualitative and quantitative studies reported benefits of the interventions. Qualitative studies reported benefits of feeling relaxed or positive mood changes (four studies), improved memory and concentration (three studies), feelings of invigoration (two studies), increased fitness (seven studies), reduced pain, improved sleep (one study), increased social support (one study), greater efficacy than medication (one study) and global benefits (one study). Quantitative methods based on pre-post comparisons or post-intervention surveys reported improvements in all the same areas except memory and concentration.
Improvements were found on various measures of quality of life and included significant improvement on WOMAC (four studies) and Minnesota Living with Heart Failure scales (two studies). Improvements in mediators of effect, such as self-efficacy (19 studies), were reported by some studies.

**Authors’ conclusions**
The authors appeared to conclude that Tai Chi strategies improved perceived functional outcomes that ranged from attitudes towards exercise to quality of life outcomes including pain reduction and improved psychological well being.

**CRD commentary**
The inclusion criteria were broad, particularly for study designs, but the review question was clear. The authors searched several relevant databases and other sources. The decision to limit the review to published peer-reviewed studies may have led to the omission of some relevant studies and an increased risk of publication bias. The authors reported that they used methods to reduce reviewer bias and error during data extraction, but it was unclear whether this was the case for study selection. The authors did not report a validity assessment of the included studies, which made it difficult to determine the reliability of the evidence provided. Given the clinical and methodological heterogeneity between included studies, the decision to conduct a narrative synthesis appeared appropriate. The synthesis was supported by evidence tables, but there was a lack of numerical and statistical data.

A lack of validity appraisal and poor reporting of review methods made it difficult to determine the reliability of the authors’ conclusions.

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

**Funding**
National Institutes of Health/National Institute Nursing Research Grant Sign Chi Do Exercise for adaptation to Successful Aging Grant No. F31NR0852; John A. Hartford BAGNC 2008-2009 Scholarship.

**Bibliographic details**

**PubMedID**
20159352

**DOI**

**Original Paper URL**
http://dx.doi.org/10.1016/j.gerinurse.2009.10.002

**Indexing Status**
Subject indexing assigned by NLM

**MeSH**
Aged /physiology /psychology; Attitude to Health; Breathing Exercises; Chronic Disease /prevention & control /psychology; Female; Health Behavior; Health Promotion; Humans; Male; Motivation; Nursing Methodology Research; Research Design; Tai Ji /psychology; Treatment Outcome

**AccessionNumber**
12010003178

**Date bibliographic record published**
Date abstract record published
15/06/2011

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.