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Project title
Effect of Health Qigong in enhancement of functional ability for person with Chronic non-specific Low Back Pain (LBP): Preliminary Results

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Introduction
Chronic non-specific LBP is a significant problem in industrialized societies which is associated with various physical, emotional, and psychosocial dysfunctions that eventually cause deterioration in the quality of life. Health Qigong (HQG) follows the philosophy of “qi” regulation, which is described as harmonizing mind and body and activating self-healing capacities. The principles of slow body movement serves as an aerobic exercise and controlled breathing to achieve relaxation. Although HQG has been used for the prevention and the treatment of pain, few randomized controlled trials (RCT) have been conducted to investigate its efficacy especially in the musculoskeletal conditions.

Objectives
To assess the treatment efficacy of HQG in modulation of pain perception and enhancement of functional ability for person with chronic non-specific LBP

Methodology
A prospective single-blinded mixed-model 2 (group) x 2 (time) RCT was employed. Subjects were eligible for the study: (1) aged 20–65 years; (2) diagnosis of non-specific chronic LBP (onset > 3 months) according to the ICD-9. Participants were randomized to either Health Qigong (HQG) group or functional rehabilitation (FR) group using block randomization. All participants received 16 sessions of training over 2 months. Outcome measurements were assessed at the baseline and at the end of treatment. Primary outcome measures included Visual Analogue Scale (VAS); Pain Catastrophizing Scale (PCS); Pain Self-Efficacy Questionnaire (PSEQ); Hospital Anxiety and Depression Score (HADS); Oswestry Disability Index (ODI), and Sit and Reach Test. T-test and chi-square tests were used to compare baseline variables between groups.

Result
Since August 2014, 41 subjects were enrolled in the study. 9 subjects were excluded in the data analysis due to treatment non-adherence (attendance < 80%). Therefore 21 and 11 subjects who completed the HQG and FR groups were analyzed. Mean age was 47.7 ± 9.8 and the majority of participants were female (70%). In pre-post comparison, there were statistically significant differences in pain VAS, PSEQ and sit and reach (p< 0.05) in HQG group. Significant pain reduction was found in pain VAS which decreased from 5.1 (± 0.3 SD) to 4.1 (± 0.3 SD); also the trunk flexibility improved from 43.4cm (± 1.9 SD) to 47.1cm (± 2.0 SD).