Phy15

Regular Health Qigong Yi Jin Jing (HQGYJJ) Is Effective in Female Community Dwellers With Chronic Non-Specific Low Back Pain (CLBP): A Randomized Controlled Trial

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Background: CLBP is characterized by frequent pain, loss of spinal flexibility, reduction of muscle strength and frequent depression. Health Qigong promotes the circulation of Qi within the body through mental regulation, breathing regulation and postural regulation for pain relief. HQGYJJ characterizes with its full range of movement of the spine. Regular HQGYJJ was applied to measure its effectiveness in decreasing pain and improving related symptoms. Methods: Thirty-nine middle-aged females with CLBP from Regeneration Society were randomly assigned into two groups. An 8-week HQGYJJ standardized movement training protocol, including 3 weeks1 intensity training (4-hour programme split into two sessions per week) and 5 weeks daily self-practice (about 35 to 45 minutes including warm-up, two times the movements and cool-down) were given to HQGYJJ group verse no treatment were given in control group. Trunk flexibility by classical sit-and-reach test, pain intensity by numerous rating scales 11, depressive feeling by the Chinese Beck Depression Inventory-II, functional disability by 6-minute walk test and the Chinese version of the Oswestry Disability Index were served as outcome indicators. All subjects, who were tested twice at baseline and after the training programme, were blinded to volunteer occupational therapists. Results: Twenty subjects in HQGYJJ group significantly decreased within-group in median pain intensity and in median depressive features, significantly increased in median trunk flexibility. In compare with 19 subjects in control group in post-test, HQGYJJ group showed significant gain between-group in functional capacity. Conclusion: Regular HQGYJJ helps middle-aged female community dwellers with CLBP in improving functional capacity. It is an effective community home programme.

Phy16

Application of Task Oriented Training With Neuromuscular Activation (TONMA) for the Rehabilitation of Upper Limb Function in Patients With Stroke

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Background: Task related training was an effective element for the stroke rehabilitation but patients with severe impairment was difficult to perform the tasks (Knutson et al., 2007). Functional electrical stimulation (FES) was shown to be effective in our previous randomized control trial (RCT) study in 2008. This study investigated the effectiveness of TONMA by applying stimulation to the wrist and fingers extensors to facilitate the subjects performing task specific training. Methods: We recruited 20 sub-acute stroke patients. This was a single blinded RCT with pre/post assessments by the Functional Independence Measurement, Fugl-Meyer Assessment of motor function of the upper extremity and the ceiling score. Results: The participants utilized intensive visual and motor imagery during their practices. The imagery can be further divided into kinaesthetic and visual motor imagery. Cluster analysis further indicated that participants who have less experience (n=31; 1 to 3.78 years) tended to employ visual motor imagery whereas those who were with more experiences (n=29; 5 to 30 years) tended to use kinaesthetic imagery. A significant differences in between these two cluster groups and the year of practice (t(58) = 2.331, p < 0.05). Conclusion: The practice of Tai Chi appear to involve intensive visual and motor imagery. More importantly, the shift from visual motor to kinaesthetic imagery suggests possible increases in the involvement of the motor and frontal cortices when individuals learn practicing Tai Chi. The findings further strengthen the therapeutical values of employing Tai Chi in rehabilitation.

Phy17

The Role of Imagery in Practice of Tai Chi

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Background: Tai Chi, as a mind-and-body activity, has been revealed to benefit patients who suffered from different physical or mental disorder. This study aimed to investigate the extent to which motor imagery is involved in the process of Tai Chi practice. The results are useful for understanding the mental component of Tai Chi and hence shed light on its application in rehabilitation. Methods: The participants were individuals who claimed practicing Tai Chi ranging from beginner to master levels. They were required to complete the custom-designed Tai Chi Questionnaire (TCQ) and Tai Chi Movement Imagery Questionnaire (TMIQ). Besides, the demographic characteristics and information on their experience in Tai Chi were obtained. A total of 60 completed the questionnaires with 55% response rate. Results: The results suggested that the participants utilized intensive visual and motor imagery during their practices. The imagery can be further divided into kinaesthetic and visual motor imagery. Cluster analysis further indicated that participants with less experience (n=31; 1 to 3.78 years) tended to employ visual motor imagery whereas those who were with more experiences (n=29; 5 to 30 years) tended to use kinaesthetic imagery. A significant differences in between these two cluster groups and the year of practice (t(58) = 2.331, p < 0.05). Conclusion: The practice of Tai Chi appear to involve intensive visual and motor imagery. More importantly, the shift from visual motor to kinaesthetic imagery suggests possible increases in the involvement of the motor and frontal cortices when individuals learn practicing Tai Chi. The findings further strengthen the therapeutical values of employing Tai Chi in rehabilitation.