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Qigong could be a Promising Complimentary Exercise to Improve Balance of Stroke Survivor: A Preliminary Study

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Introduction

Stroke is one of the leading causes of death and the most common cause of disability worldwide. Balance is one of the keys to enhance effective physical functions. Hence balance restoration after stroke is crucial for minimizing the disabilities and regain functioning after stroke. Qigong has been used as an exercise to improve balance. However its effect on balance for stroke management is still uncertain.

Objectives

The aim of this study was to compare the effects of qigong practice with fitness exercise on balance, physical and psychological wellbeing of stroke survivors.

Methodology

An assessor-blinded prospective trial was conducted. Selected stroke survivors were randomly assigned to either experimental (Qigong) or control (fitness) groups. Participants allocated in the experimental group will receive qigong training while this qigong training will be replaced by a home fitness exercise in the control group. The experimental and control groups will be required to practice a total of 50 minutes of qigong and fitness training 3 times per week and for 16 weeks respectively. The balance ability, physical capacity and psychological wellbeing were assessed at baseline, week 8 and week 16.

Result

From late July of 2016 to early December of 2017, a total of 44 stroke subjects in outpatient physiotherapy department of Kowloon Hospital were recruited and 37 subjects (21 experimental and 16 control) completed all three required assessments in the study. Repeated measures analysis of variance found significant improvement in Mini-BESTest ($F=35.32$, $p=0.000$, $F=10.35$, $p<0.001$), Composite Equilibrium Score of the Sensory Organization Test ($F=10.75$, $p<0.001$ and $F=4.85$, $p=0.011$) and

Five-Times-Sit-to-Stand Test ($F=11.74$, $p<0.001$ and $F=6.45$, $p=0.003$) within-subjects over time and time*group interaction respectively. No significant difference was noted in Geriatric Depression Scale and Stroke Specific Quality of Life Scale. A custom-made patient questionnaire revealed that more than 90% of participants in the Qigong group agreed that this complimentary type of exercise is safe and easy to practice for improving their balance control. Qigong could be a promising complimentary exercise to improve balance of stroke survivors.