The Effectiveness of Water Tai Chi for Chronic Pain and Patient Empowerment

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Introduction

Hydrotherapy has been proven an effective treatment for chronic pain conditions, through its buoyancy which eliminate joint loading, its temperature for relaxation, and its resistance which allow muscle training. Water Tai Chi, adopted from Tai Chi can further enhance hydrotherapy training with group dynamics, aerobic capacity, and fun. A Water Tai Chi class was established in Physiotherapy Department of PYNEH in 2014 to engage chronic pain patients in hydrotherapy training.

Objectives

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1. To control patients symptoms and self-efficacy in managing their own symptoms.
2. To engage patients in hydrotherapy practice and empower patient to sustain in the community.

Methodology

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Patients with chronic pain were referred to Water Tai Chi Class after completing their physiotherapy treatment course or directly through triage, after contraindications checked. The class consisted of 6-sessions of Water Tai Chi practice in groups with 12 Tai Chi maneuvers. Information on community resources in hydrotherapy or Water Tai Chi were given to encourage self-practice. Pain scale and hydrotherapy practice frequency was collected at intake, discharge and at 1 year telephone follow-up. Questionnaire on Pain Self Efficacy (PSEQ), ability to cope with pain in functional activities, was assessed at pre-class and discharge. Patient’s overall improvement and satisfaction was collected upon 1-year follow-up.
Result

From Jan 2014-Jun 2016, 107 patients with mean age of 56 years completed the Water Tai Chi training. The major regions of pain were multiple (50%), back (39%), and knee (7%). 76 patients were able to be contacted for 1-year follow-up. The Pain scale (0-10) was significantly improved from intake of 7.5 to 4.95 at discharge (p<0.001), and sustained at 1 year at 4.93. At intake, 30% patients have regular hydrotherapy exs (≥1x/week) in community, 56% at discharge and 40% at 1-year. The proportion of frequent goers (>3x/week) increased from 10% at intake, 18% at discharge and 20% at 1-year. The Pain Self Efficacy scale was improved from intake of 31.9 to 36.7 at discharge (p=0.046). At 1-year, the mean overall improvement reported by patients was 31.4% which has reached a clinical important change in this group of population. The overall mean rating score of the program (0-10) was 7.99.

Conclusion

The Water Tai Chi Class was effective in improving pain and patients’ ability to cope with pain conditions; with overall improvement shown at 1-year follow-up. It formed a bridge to engage patients to start hydrotherapy in the community, some was able to be empowered to sustain. Community engagement strategies needed to be explored to encourage sustainability in the long term.