



Service Priorities and Programmes
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Incorporating Tai Chi in Pulmonary Rehabilitation Program for Chronic Obstructive Pulmonary Disease (COPD) Patients in Kwong Wah Hospital (KWH)

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Introduction

COPD is the fifth most fatal disease in Hong Kong and is a major health burden. COPD patients ranked third in the total days of hospital-beds utilization. Pulmonary rehabilitation (PR) is effective in improving quality of life, physical fitness, and self efficacy in disease management in COPD patients. Studies have shown that conventional PR coupled with Tai Chi practice offered additional benefit to them.

Objectives

By incorporating the Tai Chi in PR Program, the quality of life, physical fitness, and self efficacy in disease management in COPD patients could be enhanced.

Methodology

Inclusion criteria included i) COPD patients with recent acute exacerbations and ii) admitted to Kwong Wah Hospital. PR included patient education, psychosocial support, home assessment, supervised fitness training, breathing exercises, bronchial hygiene techniques and Tai Chi. Interval training, upper & lower extremity training, treadmill or cycling exercise were tailor-made according to individual patient' s condition. Four forms of Suen Style (孫式)Tai Chi included commencing form (太極起式), left and right single whip (左右單鞭), left and right wave hands like clouds (左右雲手), and moving as if shutting a door (如封似閉). Six minutes walk test (6 MWT) and St George' s Respiratory Disease Questionnaire (SGRQ) were used to compare the PR group (PR Group) and PR plus Tai chi group (Tai Chi Group).

Result

Subjects recruited with the mean age of 71.5 years old were randomly allocated into 2 groups, with 14 patients in PR group and 10 patients in Tai Chi group. After 8-week training, the mean 6MWT distance of Tai Chi group increased 64m more than PR group by 24m (Baseline: Tai Chi Group: 238m, PR Group: 241m; After 8-week training: Tai Chi Group: 302m, PR Group: 281m) and the mean total score of SGRQ of Tai Chi

group decreased more than PR group by 6% (Baseline: Tai Chi Group: 68%, PR Group: 65%; After 8-week training: Tai Chi Group: 60%, PR Group: 60%). The benefit persisted after 24 weeks. PR including Tai Chi as a form of self training is effective in improving functional capacity and health related quality of life. The adjuvant effect of incorporating Tai Chi in pulmonary rehabilitation showed a modest complementary benefit.