



**Service Priorities and Programmes**  
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**Effectiveness of Non-pharmacological Based Fatigue Management with Chinese Acupoints Stimulation for Patients with Advanced Chronic Illness**

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**Introduction**

Fatigue is a distressing and disabling symptom commonly encountered by patients with advanced chronic illness. The impact of fatigue is far-reaching. It affects patients' mobility, exhausts patients, reduces social interactions and induces depressed or anxiety mood. Chinese acupoints stimulation provides relaxation, stimulates balance of life energy, promotes health and improves circulation around the body to reduce fatigue.

**Objectives**

To evaluate the effectiveness of a non-pharmacological based fatigue management with Chinese acupoints stimulation developed by physiotherapists.

**Methodology**

All patients were referred from the Medical Palliative Medicine (MPM) clinic. Patients with advanced chronic illnesses including renal failure, heart failure, pulmonary diseases and motor neuron disease were recruited. Patients received mobility training, caregivers' empowerment and specific Chinese acupoints management with monochromatic infrared energy through infrared light emitting diodes. The radiation was a commonly used electrotherapy modality by physiotherapists for promoting circulation and relieving pain. Four pairs of electrical pads were placed on Chinese acupoints on limbs for 40 minutes. Patients were assessed on the level of tiredness using Edmonton Symptom Assessment System (ESAS) and the Palliative Performance Scale (PPS) before and after the fatigue management. In the ESAS, tiredness was assessed with scale from 0 (no fatigue) to 10 (maximal exhaust). Self-efficacy level, a rating for care givers' confidence on their capabilities to take care patients, was rated with 1(poor), 2(fair), 3(good) or 4(full confidence) by caregivers.

**Result**

Results From Jan 2012 to Dec 2013, twenty-eight patients including 13 male and 15 female were recruited. Mean age was  $74.0 \pm 13.0$  years old (ranged from 47 to 94).

Twenty-eight caregivers were also recruited. They received an average of 7 sessions of physiotherapy treatment. Tiredness level significantly improved from  $4.32 \pm 1$  to  $2.21 \pm 1$  ( $p < 0.001$ ). PPS significantly improved from  $41.4 \pm 7.05$  to  $53.3 \pm 15.8$  ( $p = 0.001$ ). Self-efficacy of caregivers' also significantly reduced from  $4.18 \pm 1.02$  to  $1.93 \pm 0.86$  ( $p < 0.001$ ). Discussion The non-pharmacological based fatigue management with Chinese acupoints stimulation using monochromatic infrared radiation for patients with advanced chronic illness is shown to improve mobility, the patients' quality of life and their self-control throughout the disease process. Patients and caregivers were more confident in coping with the illness.