Service improvement: a case report of the impact of home physiotherapy management of secondary lower limb lymphoedema on advanced cancer patients and their caregivers

SF Li (1), Robin Tsim (1), TMJ Chan (2), Charity hai (3)
(1) Physiotherapy Department, Our Lady of Maryknoll Hospital, (2) Department of Medicine & Geriatrics, Our Lady of Maryknoll Hospital, (3) Palliative Care Unit, Our Lady of Maryknoll Hospital

Introduction
Lymphoedema is a common symptom in palliative care. A recent systematic review showed that lower limb volume was reduced for lower limb lymphoedema using pneumatic compression devices, manual lymphatic drainage (MLD) and compression stockings. Patients with advanced stage of cancer usually suffer from pain, easy fatigue, weakness, anorexia, lack of energy, early satiety and dyspnea. Hence, patients might not be able to tolerate the transportation to the physiotherapy out-patient department for treatments, especially intensive sessions are required in managing lymphoedema. A pilot study was conducted to determine the impact of home physiotherapy management of secondary lower limb lymphoedema on advanced cancer patients and their caregivers.

Objectives
To improve advanced cancer patients' lower limb lymphoedema and their functional level via home physiotherapy services. To empower patients' and caregivers' knowledge on lymphoedema management so as to reduce carers' stress at home.

Methodology
The physiotherapist provided physiotherapy services at patients' home for 3 sessions. Physiotherapy treatment for lymphoedema include compression stockings, manual lymphatic drainage (MLD), mobilization, stretching and strengthening exercises, transfer and mobility training and both patients' and caregivers' education on lymphoedema management and self-MLD.

Result
The volume of the subject's left lower limb was reduced (16% reduction) after 3-session of home physiotherapy services, which included manual lymphatic drainage, compression therapy with prescription of tubigrip shaped support bandage, exercises, transfer skills, carer education on manual lymphatic drainage, advice on exercise
coaching and skin care. The result of the questionnaire survey on the impact of home physiotherapy management of secondary lower limb lymphoedema of the subject and her husband was as follows: According to the patient, the left lower limb lymphoedema strongly affected her activity of daily living and affected her walking ability. She was uncertain whether she could manage the lymphoedema herself. Her husband revealed that he was very stressful in taking care of his wife and he did not have any confidence in managing her wife's lower limb lymphoedema at home. However, after 3-session of home physiotherapy services, not only the left lower limb volume was reduced, but also the carer’s stress was partially relieved as carer was empowered with more knowledge to understand the nature of lymphoedema, as well as skill to perform manual lymphatic drainage, use of tubigrip shaped support bandage, assist patient to do exercise and mobilize safely at home.