



Service Priorities and Programmes
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Submitting author: Ms Kwai Ping, Pinkie CHEUNG

Post title: Occupational Therapist I, Tuen Mun Hospital, NTWC

Effectiveness of Occupational Therapy for Deconditioned Patients in Tuen Mun Geriatric Day Hospital

Cheung KPP (1) , Cheung TYJ(1)

(1) Department of Occupational Therapy, Tuen Mun Hospital

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Introduction

Amongst referrals to Tuen Mun Geriatric Day Hospital (TMGDH), ‘re-conditioning’ is the second highest referred reason (28.3%) following cerebral vascular accidents (CVA) rehabilitation (34%) in 4Q 2012. Occupational Therapy (OT) plays a significant role among the multidisciplinary team to assist this group of de-conditioned patient to improve their functional level in ADL and improve their strength and endurance for functional tasks. As grip strength is a good surrogate measure of other more complex measures of skeletal muscle strength in the lower extremities. Power grip, with reference to Modified Barthel Index (MBI), can be outcome indicators for effectiveness of our service.

Objectives

1. To evaluate the outcome of OT for de-conditioned patients in TMGDH. 2. To provide a baseline information for future studies in frailty.

Methodology

A retrospective analysis of pre-reconditioning training MBI + power grip and post-reconditioning MBI + power grip was performed for de-conditioned patients admitted to TMGDH from October to December 2012.

Result

102 subjects completed pre- and post- assessments. Their demographic data were listed as follows: Sex Male=50 (49%); Female=52 (51%) Age (Mean Years) 78.08 ± 8.9 Living Condition Home=80 (78.4%); Institution=22 (21.6%) Their power grips and ADL performance before and after reconditioning training are summarized as follows: Pre-Training Post-Training ADL (MBI) 71.18 ± 16.54 75.49 ± 18.28 p value<0.001 Power Grip (R) 12.0 kgf ± 7.05; 14.65 kgf ± 6.96 p value<0.001 Power Grip (L) 11.83 kgf ± 7.18; 13.75 kgf ± 6.69 p value<0.001 These 102 patients showed significant improvement in power grips and ADL performance. Their power grips are further

correlated to their ADL (MBI) and age. (Pearson) Correlation Coefficient Power Grip (Right) & ADL 0.404 (medium correlation) Power Grip (Left) & ADL 0.364 (medium correlation) Age & ADL -0.078 (minimum correlation) Age & Power Grip (Right) -0.236 (small correlation) Age & Power Grip (Left) -0.186 (small correlation) Conclusion The findings echo that grip strength is a good surrogate measure of other more complex measures of skeletal muscle strength and thus functional performance. As OT focuses on upper limb training and ADL training, the reconditioning program of OT in TMGDH is effective in improving patients' functional level in ADL as well as their strength and endurance for functional tasks. Further assessment of other outcomes to improve frailty will be the next step for our elderly health.