A New Extended Role of Physiotherapists as Case Managers: Enhancing Elderly Chronic Disease Management and Preventing Avoidable Hospital Readmission in Integrated Care and Discharge Support (ICDS) Program

Tse YL (1), Leung SM (2), Ma SL(3), Lau WK (4), Lai WK (5), Cheung KY (6), Tang WS (7), Lo KM (8), Leung HY (9), Wong WK (9), Hui E (10), Li PKT (11)
(1) Case Manager, COST, PWH / Physiotherapist I, SH (2) Case Manager, COST NDH / Physiotherapist I, NDH (3) Case Manager, COST AHNH / Physiotherapist I, AHNH (4) Cluster Coordinator (Physiotherapy), NTEC (5) Department Manager (Physiotherapy), SH (6) Seni

Keywords:
Case Manager
Community Outreach Service
Physiotherapist
Integrated Care and Discharge Support
Hospital Readmission

Introduction
ICDS Program has been operating since early 2012 to provide post-discharge support to elderly patients discharged from hospitals. It provides a platform for physiotherapists to play an extended role as case managers. Physiotherapists move beyond the traditional role of providing rehabilitation to implementing holistic patient-centered care e.g. drug compliance checking, wound care, and empowering patients’ chronic disease self-management skill. This was made possible through trans-disciplinary skill transfer and multi-disciplinary and NGOs collaboration.

Objectives
(1) To explore the effectiveness of physiotherapist case managers in reducing avoidable hospital readmission. (2) To analyze patients’ rehabilitation outcomes after physiotherapist case management service.

Methodology
Retrospective study design was used to analyse the outcomes after 8-week physiotherapist case management service. Elderlies aged 60 or above with concurrent medical, psycho-social and self-care needs and frequent hospital admissions were recruited. Wilcoxon Signed Ranks Test and Paired t-test were used for data analysis.

Result
From April to November 2012, 134 patients were recruited into ICDS program physiotherapist case management. Patients’ initial mean HARRPE score was 0.23, reflecting 23% hospital re-admission risk. Statistical significant improvements were
shown in physical mobility [Modified Functional Ambulatory Category (MFAC), (p<0.05), Modified Rivermead Mobility Index (MRMI), (p<0.05)]; walking endurance [6-Minute-Walk-Test (6MWT), (p<0.05)]; ADL functions [Barthel Index-20 (BI-20), (p<0.05)]; balance and functional mobility [Berg Balance Scale (BBS), (p<0.05), Time-Up-and-Go-Test (TUGT), (p<0.05)]; dyspnoea related to functional level [Modified Medical Research Council Dyspnoea Scale (MMRC), (p<0.05) and COPD Assessment Test (CAT), (p<0.05)]. Post case-management evaluation showed that unplanned re-admission rate within 28 days was 14.2%, as compared to the initial 23% risk. Conclusion Besides providing rehabilitation, physiotherapists could also fulfill the role of case managers. Positive results were shown not only in rehabilitation functional outcomes such as mobility, balance and dyspnea control, but also in reducing avoidable unplanned re-admission.