Effectiveness of Novel Physiotherapy Service in Emergency Medicine Ward of RHTSK A&E Department

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Introduction
Emergency Medicine Ward (EMW) of RHTSK A&E Department commenced service in August 2015, which aimed to reduce avoidable admissions and to improve the quality and efficiency of short stay patient care. Physiotherapy service in EMW was launched in phases, which initially targeted at patients with uncomplicated musculoskeletal disorders and mobility difficulties, to strengthen the gate-keeping function of A&E.

Objectives
1. To study the clinical profile of EMW patients who require physiotherapy service and conduct a need analysis for service planning.
2. To evaluate clinical outcomes of the newly developed physiotherapy service in EMW.

Methodology
EMW patients referred for in-patient physiotherapy from September to December 2015 were recruited. Cross-sectional analysis was conducted to examine patients’ demographics, diagnosis and physiotherapy intervention. Longitudinal study was carried out to evaluate the clinical outcomes, including EMW discharged destination, numeric global rate of change scale (NGRCS), improvement in modified functional ambulation classification (MFAC) and numeric pain rating scale (NPRS).

Result
Result & Outcome: 105 patients (mean age 63.9±17.8) were referred to the service. Majority (83.6%, n=97) had clinical diagnosis related to musculoskeletal problems. Most of them required pain control physiotherapy (83.8%, n= 88) and mobility training (61.9%, n=65). 101 patients (96%) were able to be discharged home with significant improvement in pain and function. The overall improvement (NGRCS) was 50.3±21.3%. 37.0% of patients (n=37) improved from MFAC V or below (ambulate with assistance) to MFAC VI or above (ambulate independently). The Pain Score (NPRS) reduced significantly from 5.3±2.3 to 3.0±1.5 (p<0.001).
Upon discharge, timely physiotherapy outpatient appointments, Geriatric Day Hospital and GOPC fall programs were arranged for indicated patients to facilitate seamless care. Conclusion: Provision of physiotherapy in EMW demonstrated a win-win situation for both patients and hospital. Patients are benefited from early intervention and patient-centered care, and on the other hand gate-keeping function of A&E can be further strengthened. With improved patient's clinical outcome and functional restoration, unnecessary admission can be prevented. As part of the EMW team, physiotherapists also contribute actively in discharge planning and arrangement of outpatient physiotherapy, day rehabilitation, and fall prevention program for continuation of care. Other than physiotherapy for musculoskeletal problems, there is increasing demand in physiotherapy for geriatric falls and benign paroxysmal positional vertigo in EMW. Therefore integrated care pathway shall be developed to address the service need in the near future.