Advancement in Mobility Devices - A Paradigm Shift in the Concept of Electrical Wheelchair Prescription. KCC Physiotherapy Department Experience

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Introduction
The recent advancement in mobility devices' technology allows an affordable and accessible electrical wheelchair (EWC) to patients. Not only can EWC be stored in a car attributable to its foldable and light-weighted features, but can also navigate stairs and break any barriers, enabling it to reach farer destination. EWC was no longer limited to severely impaired patients, but even to patients suffering from a large variety of medical conditions. Along with implementation of barrier-free access policy: installation of lifts in MTR stations, introduction of wheelchair accessible buses and taxi, etc, the public held more positive attitudes towards EWC and patients were more ready to re-integrate to the community to enjoy a higher degree of independence and better quality of life. Maneuvering an EWC, however, could be risky especially in a crowded city. Higher dependence on EWC could jeopardize patient's physical condition. Therefore, a comprehensive EWC training by physiotherapists would be essential to safeguard the patients against possible complications and simultaneously protect others on the pavement.

Objectives
In response to the rising need of EWC prescription that could incur possible dangers in case of improper use, KCC Physiotherapy (PT) Department has enhanced its EWC prescription services since January 2015.

Methodology
(1)EWC prescription services
Patients referred for EWC prescription were assigned to experienced physiotherapists for a comprehensive physical and psycho-social assessment. Home and workplace visits were provided to evaluate the impact on patients’ routines. Recommendation on home modification, re-housing and financial assistance followed according to a
comprehensive home visit report. Training on the maneuvering of EWC at patient’s community, safety advice and exercise to maintain physical condition were delivered to the patients and their carer to uphold the safety and as a holistic management. 

(2) Staff training and continued quality improvement
Regular work-based training for physiotherapists were rendered, thereby updating the skills in EWC prescription and maintenance. In-service training to share on the contemporary advancement in EWC technology was conducted periodically. A wheelchair prescription kit was designed and continuously renewed to ensure service quality.

**Result**
From January 2015 to December 2016, a total of 50 patients were referred for EWC prescription in KCC PT department with a total attendance of 238. Among the patients referred, majority of them suffered from musculoskeletal, followed by medical and neurological conditions. Sixty-five home visit(s) were carried out with 46 home modification, re-housing recommendation issued. The comprehensive EWC prescription service of KCC PT Department provided holistic management and accommodated patients’ changing needs.