The discharge destination predictors for patients with hip fracture in Kowloon Hospital

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Introduction
Patients with hip fracture may require long term institutional care upon discharge from hospital. If the predicting factors on the potential need of institutional care can be determined at the time of admission to the rehabilitation hospital, it enables the healthcare workers, the patients, and their family members to have early arrangement on the discharge destination.

Objectives
The objective of the current study was to investigate the predictors on the discharge destination of patients with hip fracture in Kowloon Hospital (KH).

Methodology
This was a retrospective cohort analysis. Information of the patients of hip fracture with the premorbid status of home care was collected. The data variables included demographic data, the Elderly Mobility Scale (EMS) score on admission to KH, and the discharge destination of home or old-aged home. Logistic regression was employed to determine the relationship between the admission EMS and various demographic data, with the discharge destination of either home or institutional care.

Result
The data of patients with hip fracture was collected from the July 2009 to September 2012. A total of 416 patients were of premorbid status of home-based (male=117, female=344, mean age=81.1) during that period. Logistic regression was conducted to determine the relationship between the discharge residence from age and admission EMS score in those patients with fracture hip whose premorbid residence was home-based. The key predictors of discharge to home was identified, that the adjusted odds ratio (OR) of admission EMS score was 1.125 (95% confidence interval (CI) = 1.016, 1.247) (*p=0.024); while the adjusted OR of age was 0.922 (95% CI = 0.891, 0.955) (*p<0.001). The result implied that the patient would have 12.5% higher chance to discharge back home with the admission EMS score of 1 unit higher; and would have 7.8% lower chance to discharge back home with an age greater by one.
With the early prediction of the potential destination of either home care or institutional care, the physiotherapists were able to work out the discharge plan with the patients and their family members, to carry out early intervention on carer education, to suggest the family members for early arrangement of the discharge destination, to increase the acceptance of the patients and their family members on the discharge prognosis, and to refer to community support services if necessary.