



## Service Priorities and Programmes Electronic Presentations

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### **Evaluation of the Physiotherapy Program for Patient with Hip Fracture in Kowloon Hospital**

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#### **Introduction**

Hip fracture is one of the major health issues due to an ever increasing ageing population in Hong Kong. About 6,000 in-patients discharges-and-deaths head count under Hospital Authority in 2015. Regaining functional mobility and independence are the primary goals of the patients after hip fracture.

#### **Objectives**

The study aimed to evaluate the benefits of hip fracture program in Kowloon Hospital

#### **Methodology**

Patients sustained a low impact osteoporotic fracture and surgically repaired of proximal femur and being transferred to Kowloon Hospital (KH) for rehabilitation, were recruited. All patients received tailor-made weekday physiotherapy program compatible to patient's needs with rehabilitation program ranging from slow stream to intensive programme. The sampling period was January 2013 to August 2015. The outcome measures including Numeric Pain Rating Scale (NPRS), functional mobility using Elderly Mobility Scale (EMS) and Modified Functional Ambulation Classification (MFAC) and the pre-fracture and discharge residence were all assessed by case physiotherapist. SPSS 23.0 was used to evaluate the outcomes measures of the program. To analyze training effects, paired samples t-test was used to determine the difference of NPRS and EMS from admission to discharge and Wilcoxon Signed Ranks test was used to determine the difference of MFAC from admission to discharge.

#### **Result**

Data from 336 patients with hip fracture aged  $82.8 \pm 7.9$  years were analyzed. Eighty percent is female and 89% patients could walk independently (MFAC VI-VII) in pre-morbid status and 16% pre-fracture residence was nursing homes. On KH admission, 23.7% remained as a lyer or sitter (MFAC I-II). After rehabilitation from KH,

93.1% subjects could walk with assistant or walk independently with or without using walking aids (MFAC III-VII). Sixty seven patients discharged home. The mean length of stay in KH was  $30.5 \pm 16.9$ . All outcomes improved significantly at discharged including NPRS ( $p < 0.01$ ), EMS ( $p < 0.01$ ), and MFAC ( $p < 0.01$ ). NPRS showed improvement with a mean reduction from  $4.2 \pm 2.7$  to  $1.3 \pm 1.0$ , EMS showed improvement with a mean progression from  $4.2 \pm 2.4$  to  $9.3 \pm 4.7$  and MFAC with a median of progression from category III to V from admission to hospital discharge. The results revealed that tailor-made hip fracture physiotherapy program were effective by-and-large in enhancing clinical outcomes even for patients with non-promising baseline ability. After rehabilitation, majority of patients can recover mobility and independence, and a high rate of return to pre-fracture residence.