



Service Priorities and Programmes
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Two years rehabilitation outcomes of the Intensive Bedside Mobilization (IBM) program in the Neurosurgical Unit.

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Introduction

Intensive Bedside Mobilization (IBM) program was first introduced to the Neurosurgical ward in June 2014 for continuity and enhancement of the Early Mobilization (EM) program commenced at February 2014 in High Dependency Unit (HDU). Initially, IBM program is designed to cater for weak patients transferred back to neurosurgical ward from the HDU, who are not suitable to attend exercise training in physiotherapy department. Later, the program also applies to patients not able to attend training in physiotherapy department with various reasons (e.g. infection control).

Objectives

Evidence had shown that early mobilization in the intensive care is essential in minimizing adverse consequence seen in the survivors of critical illness such as impaired exercise capacity, persistent weakness, suboptimal quality of life and high costs of health care utilization. Rehabilitation outcomes including: i) improve the functional capacity of patients; ii) shorten the length of stay (LOS) in HDU and Hospital; iii) enhance patients to direct home discharge were collected.

Methodology

Patients admitted to HDU of KWH referred for physiotherapy were enrolled into the program. Patients in HDU would be recruited into EM if indicated. When patients transferred out to neurosurgical ward, they were either continue with conventional rehabilitation program or IBM program as indicated. Outcome measures used were Barthel Index (BI), LOS in HDU and KWH and discharge destination of patients.

Result

From February 2014 to December 2015, a total of 405 patients were referred for

physiotherapy service in HDU. For these survivors, there was a significant improvement in the functional capacity in three groups (BI : 49.72, 52.87 and 50.3 for EM, IBM 14' and IBM 15' respectively; $P < 0.00$). Although there is a gain in BI after the implementation of IBM, there is no significant difference across three groups. Similarly, a decreasing trend is shown in LOS in HDU (EM, IBM 14' and IBM 15' are 8.19, 5.65 and 5.79 days) but no statistical difference across the groups. On the contrary, a significant shorter LOS in KWH between the EM and IBM (both 14' and 15') groups (total LOS in EM, IBM 14' and IBM 15' are 47.03, 25.11 and 21.78 days respectively; $p < 0.000$). The percentage of patients that could be discharged home directly in IBM 14' and IBM 15' than EM group (56%, 58.5% versus 43.8% respectively) is increased.

Conclusions

Both EM and IBM are effective in improving functional capacity in critical neurological patients. Implementation of the IBM had strengthen EM and provide patients with more intensive, better quality and continuity of rehabilitation. Thus, enhancing more patients to stay shorter in hospital and directly discharged home.