



Service Priorities and Programmes
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Service Improvement in stroke rehabilitation (physiotherapy)

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Introduction

Safe and effective treatment is of the most utmost importance in the administration of stroke rehabilitation (physiotherapy). Stroke rehabilitation is selected as “audit topic” as being considered both “clinical importance” since stroke rehabilitation is one of the major clinical specialties and service domain for patients and “high impact” as being a high volume service for physiotherapy. Meanwhile, the clinical practice of stroke rehabilitation might have some variations among different physiotherapists.

Objectives

- To standardize the clinical practice of stroke rehabilitation (physiotherapy) with an updated stroke physiotherapy guideline. - To improve functional ambulatory level of patients after stroke rehabilitation.

Methodology

Stroke rehabilitation (physiotherapy) guidelines were compiled and implemented in both in- and out-patient settings. A clinical audit was conducted to review the compliance rate among the physiotherapists. In addition, specialized physiotherapists were assigned to conduct stroke rehabilitation.

Result

Out of eight standards of practices, five with 100% compliance rate and three with more than 80% compliance rate were noted. Between February–September, 2017, 59 patients were recruited in this program. Pre- and post-Elderly Mobility Scale (EMS) and Modified Functional Ambulation Classification (MFAC) of stroke patients were measured and Wilcoxon signed ranks test was used to compare the scores before and after a course of stroke rehabilitation. There were statistically significant improvement after stroke rehabilitation in mean MFAC score from 3.61 to 4.27 ($Z = -4.467$, $p < 0.001$), and in mean EMS score from 9 to 10.51 ($Z = -4.394$, $p < 0.001$). A more apparent result was demonstrated in the sub-group of 35 patients with MFAC category from III to VI. There were statistically significant improvement after stroke rehabilitation in mean MFAC score from 4.43 to 5.37 ($Z = -4.092$, $p < 0.001$), and in mean EMS score from 11.74 to 14.09 ($Z = -4.069$, $p < 0.001$). Moreover, patients with baseline MFAC category I, II, VII were grouped together with total of 24 subjects, no

statistical significant differences were shown in both pre- and post-MFAC and pre- and post-EMS score. Subjects with MFAC category I and II were in lower rehabilitation potential as they were lyer or sitter. Those with MFAC category VII were in highest category and its improvement cannot be reflected due to ceiling effect of the scales. To conclude, regular clinical audit should be done to evaluate the quality of stroke rehabilitation service and ensure the treatment effectiveness. The results also prompt us to further study the appropriateness of treatment resources allocation to different categories of stroke patients.