

Factors Affected to Unplanned Transfer in Inpatient Rehabilitation Hospital

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Objective

Effective inpatient rehabilitation after acute phase treatment can minimize functional disability, enhance recovery toward independence, and optimize community participation. But in-hospital unplanned transfer generates high health care costs and contributes to patient morbidity and mortality. In addition, they are associated with increased acute care length of stay (LOS) and therefore to reduced access to hospital beds for other patients. Our Objective is to improve the efficiency of rehabilitation by early detection and prevention of patient unplanned transfer during inpatient rehabilitation treatment by evaluating the reason for transfer to other departments.

Methods

Medical records of 693 inpatient rehabilitation facility patients who had admitted to the department of rehabilitation from October 2017 to May 2018 were reviewed retrospectively. All patients were classified into six groups of brain injury, spinal cord injury, musculoskeletal injury, neuromuscular disease, cancer and cardiopulmonology rehabilitation which were investigated about other department transfers during the hospital stay. The outcome is all-cause, unplanned transfer rate from an inpatient rehabilitation facility to the other departments. In addition, we confirmed the transfer department and the cause of transfer to the other department.

Results

A total of 693 patients (age, 65.72±13.51 years; 58.1% male, 41.9% female) who had admitted in a tertiary hospital rehabilitation center from October 2017 to May 2018 were reviewed in this study. The number of patients who were transferred to the other department ward in brain injury group was 36 (10.71%), in spinal cord injury group was 19 (16.96%), in musculoskeletal injury group was 8 (4.35%), in neuromuscular disease group was 4 (21.05%), in cancer group was 5 (33.33%) and cardiopulmonology rehabilitation group was 7 (25.93%). The major cause of the transfer to the other departments in brain injury group was septic shock and hydrocephalus. The major cause of it spinal cord injury group was operation and pneumonia. In musculoskeletal injury group, neuromuscular disease group, cancer group and cardiopulmonology rehabilitation group, the major cause of it was pneumonia or septic shock.

Conclusions

The highest transfer rate was observed in the cancer group. As reported in other studies, patients with high severity and comorbidity had a high unplanned transfer rate. In the brain injury and spinal cord injury group, unplanned transfer due to intervention and

operation is considered to be a major factor and attention should be needed to this as well as complications. The early detection and prevention of the causes of unplanned transfer in this study may reduce the transfer to the other departments and improve the efficiency of rehabilitation.

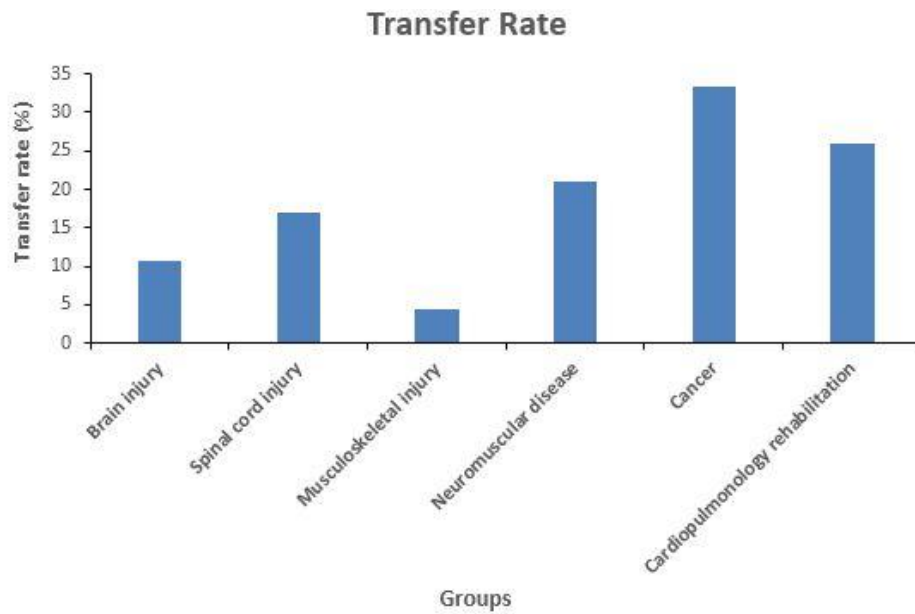


Fig 1. Unplanned transfer rate in each groups