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The Effect of Post-Acute Stroke Inpatient Rehabilitation under per Diem Payment: A Pilot Study

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Abstract: Taiwan National Health Insurance (NHI) was launched in 1995. It is an important social welfare policy in Taiwan. Regardless of the diversified social and economic status, universal coverage of NHI was assured. In order to regain better selfcare performance, stroke people received in-patient and out-patient rehabilitation. Though NHI limited the rehabilitation frequency to one per day, the cost of rehabilitation still increased rapidly. Through the intensive rehabilitation during the poststroke rehabilitation golden period, stroke patients might decrease their disability and shorten the rehabilitation period. Therefore, the aim of this study was to investigate the effect of intensive post-acute stroke rehabilitation in hospital under per diem payment. This study was started from 2014/03/01. The stroke patients who were admitted to our hospital or medical center were indicated to the study. The neurologists would check his modified Rankin Scale (mRS). Only patients with their mRS score between 2 and 4 were included to the study. Patients with unclear consciousness, unstable medical condition, unclear stroke onset date and no willing for 3 weeks in-patient intensive rehabilitation were excluded. After the physiatrist's systemic evaluation, the subjects received intensive rehabilitation programs. The frequency of rehabilitation was thrice per day. Physical therapy, occupational therapy and speech/swallowing therapy were included in the programs for the needs of the stroke patients. Activity daily life performance (Barthel Index) and functional balance ability (Berg Balance Scale) were used to measure the training effect. During 3/1 to 5/31, thirteen subjects (five male and eight female) were included. Seven subjects were aged below 60. Three subjects were aged over 70. Most of the subjects (seven subjects) received intensive post-stroke rehabilitation for three weeks. Three subjects drop out from the programs and went back home respectively after receiving only 7, 10, and 13 days rehabilitation. Among these 13 subjects, nine of them got improvement in activity daily life performance (Barthel Index score). Ten of them got improvement in functional balance ability (Berg Balance Scale). The intensive post-acute stroke rehabilitation did help stroke patients promote their health in our study. Not only their functional performance improved, but also their self-confidence improved. Furthermore, their family also got better health status. Stroke rehabilitation under per diem payment was noted in long-term care institution in developed countries. Over 95% populations in Taiwan were supported under the Taiwan's National Health Insurance system, but there was no national long-term care insurance system. Most of the stroke patients in Taiwan live with his family and continue their rehabilitation programs from out-patient department. This pilot study revealed the effect of intensive post-acute stroke rehabilitation in hospital under per diem payment. The number of the subjects and the study period were limited. Thus, further study will be needed.

Keywords: rehabilitation, post-acute stroke, per diem payment, NHI

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