Stroke patients' Quality of life before and after active rehabilitation treatment: A Prospective Study

Introduction

According to the statistics in 2015 from the World Health Organization (WHO) and in 2016 from Taiwan Ministry of Health and Welfare, Stroke is the second killers all over the world and in Taiwan. Moreover, stroke is also a leading cause of disabilities. Therefore, active rehabilitation treatment is critical for patients who occurred by stroke in order to enhance the overall functional status, reduce disabilities, return to independent living.

Methods

A total of 120 stroke patients were prospectively evaluated quality of life by using the Modified Rankin Scale (MRS), Barthel index (BI), Functional Oral Intake Scale (FOIS), EuroQol-5D (EQ-5D), Instrumental Activities of Daily Living (IADL), Berg Balance Scale (BBS), Mini-mental state examination (MMSE), Beck Anxiety Inventory (BAI) and Beck Depression Inventory (BDI) at the baseline, the 6th week and the 12th week after admission. The generalized estimation equation model was employed to analyze the changes and the predictors of quality of life.

Results

The average age was 70.89 (SD=12.56) years old. On the total, 62.5% were male and 95.8% were diagnosed with ischemic stroke. Before admission, 72.5% had hypertension and 27.5% had attacked by stroke. It also showed that pre-admission functional status was the best predictors of the 12th week quality of life after admission (the latest examination) (P<0.001). Additionally, it showed a dramatic improvement from the baseline to the 6th week and the 12th week throughout the study period (P<0.01).

Discussion

The study can further our understanding of stroke patients' quality of life at different follow-up time points. Patients' overall functional status had improved at both the 6^{th} week and the 12^{th} week after admission. We can realize that active rehabilitation treatment may influence patient's follow-up situation.

Keywords: stroke, active rehabilitation treatment, quality of life, predictors