

Abstract

Objective: This study aimed to develop and examine the effectiveness of individual home rehabilitation program for ischemic stroke patients.

Material and Method: This is a randomized controlled trial (RCT) in sixty patients with recent ischemic stroke. After hospital discharge for their acute stroke care, they were randomly assigned to receive either home rehabilitation programs (intervention group) or usual care (control group) for 3 month. We collected outcome data including the Barthel Index (BI), the Modified Rankin Scale (MRS) and health-related quality of life by utility index (EQ-5D) for function, disability, and health-related quality of life respectively every month for 3 months.

Results: At 3 months, the BI was significantly improved in the intervention group more than the control group: 50.66 (95% CI: 28.85 to 72.47), the absolute risk reduction (ARR) 93.33 % (95% CI, 84.41% to 102.26%). The results are similar regarding MRS: ARR 90 % (95% CI, 79.26% to 100.74%). It did show a benefit in reducing disability, with a NNT of 2 (95% CI, 1.0 to 1.2). The utility index: 0.18, (95% CI: -0.02 to 0.37) and all dimensions of EQ-5D in the intervention group were more significantly better for quality of life and generic health status than the control group. There was no significant interaction in baseline characteristics and treatment outcome.

Conclusions: Early home rehabilitation program in ischemic stroke patients in the first 3-month period provides significantly better outcome in improving function, reducing disability and increase quality of life than usual care.