ABSTRACT

Background

Stroke results severe and long term disability and mortality. Despite low evidence, guidelines from various countries recommend very early mobilisation to minimize complications associated with immobilization and to improve the independence in daily living activities, better quality of life and to decrease the depression, anxiety, and disability following acute stroke.

Objectives

The primary objectives of this study were to investigate the effects of Very early mobilisation (commenced within 48 hours of stroke) coupled with the routine care on the Potential adverse events, Activity of daily living, and the Level of disability following acute stroke.

The secondary objectives of this study were to investigate the effects of Very early mobilisation coupled with the routine care on the Quality of Life (OoL), and psychological wellbeing following acute stroke.

Study Design

Single blinded, parallel group, prospective randomized controlled trial.

Subjects

208 subjects with acute stroke aged 30-90 years, both males and females were randomized to the intervention group (n=103) and the routine care group (n=105).
Methods

All participants received forty five minutes of the routine care once a day for seven days. In addition, the intervention group performed very early mobilisation consisting repetitive upright activities including sitting, standing, and walking which started within forty eight hours of stroke onset for 5 to 30 minutes at least twice a day, for seven days.

Outcome measures

Number of serious and immobility related adverse events reported at third month follow-up were noted, activity of daily living was measured with Barthel Index, level of disability was measured with Modified Rankin Scale, Quality of Life was measured with SF-36 v2, psychological wellbeing was measured with Hospital Anxiety and Depression Scale. Measures were made on admission, at discharge and at three months follow-up.

Results

The intervention group reported significant improvement (p<0.05) in Barthel Index score, Modified Rankin Scale score, SF-36 v2 score, and Hospital Anxiety and Depression Scale Score across the discharge and three month follow-up measurements compared with the routine care group. The Intervention group showed a less number of adverse events, significant improvement (p<0.05) in median difference scores (discharge- admission, and three month follow up - admission) of Barthel Index Score, Modified Rankin Scale Score, SF-36 v2 Score, Hospital Anxiety and Depression Scale Score than the routine care group.
Conclusions

This study results suggests that very early mobilisation in addition to the routine care helpful in preventing immobility related adverse effects, improved the activity of daily living, reduced disability, promoted quality of life and psychological wellbeing following acute stroke.

Keywords

Acute cerebrovascular accident, very early and frequent mobilisation, Routine care, Adverse events, Activity of daily living, Disability, Quality of life, Psychological wellbeing.