“The Effect of Instrumental Activities of Daily Living and Depressive Symptoms on Discharge Destination Following Stroke Rehabilitation”

Purpose: Accurate prediction of discharge destination following stroke rehabilitation is important in facilitating optimal services, guiding discharge planning and minimizing costs associated with stroke rehabilitation. Therefore, the aims of this dissertation were to evaluate the predictive validity of the Lawton Instrumental Activities of Daily Living scale in predicting discharge destination after stroke rehabilitation and determine if depressive symptoms measured at admission and changes in depressive symptoms during rehabilitation have an impact on discharge destination for patients admitted to inpatient rehabilitation facilities.

Subjects: Of 364 subjects, 210 (58%) had complete data on discharge destination and were eligible for study inclusion. Twenty-three subjects were excluded because they were discharged back to acute hospital settings. Analysis was based on 187 subjects.

Methods: Retrospective data obtained from charts of persons who had been admitted to rehabilitation between 2004 and 2010 were analyzed. Variables collected at admission included patients’ demographic data, clinical characteristics and functional status, including our variables of interest (the Lawton scale and depressive symptoms). Discharge destination was dichotomized as discharge to the community versus an institutional setting.

Results: Univariate analyses showed that patients with a better functional status on admission in both basic and instrumental activities of daily living (ADL) were less likely to be discharged to institutional settings and that patients with possible depressive symptoms on admission were more often discharged to an institutional setting rather than to the community. Moreover, discharge to an institutional setting was associated with a longer rehabilitation stay, increased stroke severity and higher cognitive impairment at admission. However, neither the impairment of IADL functioning nor the presence of depressive symptoms at admission was significant in the multivariate model. Only basic ADL functioning and stroke severity were significantly associated with a higher risk of institutionalization.

Conclusion: Instrumental ADL functioning as measured by the Lawton scale and depressive symptoms assessed on admission to rehabilitation were predictive of discharge from rehabilitation to an institutional setting, but not after accounting for basic ADL functioning.