Factors influencing functional recovery in patients with acute ischemic stroke

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Summary
Aim: This study examined factors influencing functional recovery, including neurological and psychological function and activity of daily living (ADL), in individuals hospitalized with acute ischemic stroke.

Methods: A prospective observational study was undertaken in a sample of 141 hospitalized adults with acute ischemic stroke in three hospitals in metropolitan Bangkok and one in regional Thailand. Sociodemographic and clinical data were collected using a standardized questionnaire. Co-morbidity burden was assessed using the Charlson Co-morbidity Index-Modified-Thai version (CCI-T) and acute stroke care services usage using the Measurement of Acute Stroke Care Services Received form. Recovery of neurological function was measured by the National Institutes of Health Stroke Scale-Thai (NIHSS-T), and ADL function was measured by the Modified Barthel Index Measurement-Thai Version (BI-T). Psychological function was assessed using the Center for Epidemiologic Studies Depression Scale-Thai version (CES-D-T). Multivariate logistic regression was used to analyze the predictive ability of pre-specified variables.

Results: Receiving thrombolytic therapy was a significant predictor of functional recovery in terms of neurological (OR = 4.714; P = .004) and ADL functions on the day of discharge (OR = 5.040; P = .002). Accessing acute stroke care service was the only factor predicting improved psychological function on hospital discharge (OR = 1.312; P = .049).

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