

A New Assessment of Activities of Daily Living for Thai Stroke Patients

Sopida Apichai*, Pisak Chinchai, Jananya P. Dhipayom,
and Peeraya Munkhetvit

*Department of Occupational Therapy, Faculty of Associated Medical Sciences,
Chiang Mai University, Chiang Mai 50200, Thailand*

*Corresponding author. E-mail: sopida.apichai@cmu.ac.th
<https://doi.org/10.12982/CMUJNS.2020.0012>

Received: January 27, 2019

Revised: May 10, 2019

Accepted: June 17, 2019

ABSTRACT

This study aimed to develop the Activities of Daily Living Assessment Tool (ADL-AT) for Thai stroke patients and to examine its psychometric properties. 45 stroke patients and 45 normal subjects were selected by purposive sampling. Raters were occupational therapists experienced with stroke patients and received ADL-AT for Thai stroke patients training. To measure inter-rater reliability, stroke patients were assessed by two raters at the same time. To assess the test-retest reliability, stroke patients were retested at a time interval within 5 to 7 days. Intraclass correlation coefficients (ICC) model 3, k and 3, 1 were used to determine inter-rater and test-retest reliability, respectively. Internal consistency was evaluated using Cronbach's alpha which was conducted to study construct validity. The independent samples t-test was used to measure the test's ability to discriminate between stroke patients and normal subjects. The present study found that ADL-AT for Thai stroke patients had shown an excellent inter-rater and test-retest reliability (ICC = .98, .93, respectively). The analysis of Cronbach's alpha coefficient revealed high internal consistency ($\alpha = .88$). In addition, this tool displayed a positive correlation with Barthel index ($r = 0.9$; $P < 0.001$). In known-groups validity, stroke patients obtained lower ADL-AT for Thai stroke patients scores compared to normal subjects ($P < 0.001$). The results of this study suggest that the ADL-AT for Thai stroke patients is known to be reliable and valid and recommended to further the services system.

Keywords: Stroke, Activities of daily living, Reliability, Validity