Reliability and Validity Study of the Thai version of the Pain Assessment in Advanced Dementia

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Objective: This study aimed to assess the reliability and validity of the PAINAD in Thai version (PAINAD-Th) for measuring pain in people with dementia (PwD).

Materials and Methods: The cross-cultural translation including forward translation and back-translation of PAINAD-Th were performed, then the content validity was assessed by the expert committee. Enrolled participants were inpatients aged 60 years or over, and had dementia with Functional Assessment Staging Test (FAST) of at least 6 which represented moderately severe stage. A research assistant recorded 5-minute videos of the participants, the first video was during the activity that could provoke the pain and the second video was at rest. Two trained nurses independently rated the pain of the participants by observing the videos using the PAINAD-Th to examine the inter-rater reliability, and the concurrent validity of the test against the reference standard which was the numeric rating scale (NRS) rated by the expert committee. The same rating process was reproduced one week apart to explore the test-retest reliability.

Results: The content validity index of the PAINAD-Th was 1.00 and 0.93 (forward and back-translation, respectively). The inter-rater and test-retest reliability showed an excellent intra-class correlation coefficient of 0.92 and 0.96, respectively. The concurrent validity was significantly correlated with the reference standard with an excellent intra-class correlation coefficient of 0.95.

Conclusions: The PAINAD-Th is a promising tool for pain evaluation in PwD as it provides an excellent concurrent validity against the reference standard. Also, it has excellent content validity, inter-rater, and test-retest reliability.

Keywords: Pain; PAINAD; dementia; assessment; Thai; PwD