

**Paper Session A3: Methods and Measures in Nursing Research: Recent Innovative Advances**

***Certified Nursing Assistant Pain Assessment Tool (CPAT): Development, Psychometric Testing and Feasibility***

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**Purpose:** An effective way to recognize and evaluate pain in nonverbal adults with dementia is challenging. In skilled nursing facilities, nursing assistants provide the majority of direct patient care. The purpose of this study was to develop and psychometrically test an assessment tool appropriate for use by certified nursing assistants (CNA). A secondary aim was to compare the CPAT with existing tools.

**Framework:** The instrument critique guide developed by Herr and colleagues, based on measurement theory, was used to develop and test the CPAT. Criteria for behavioral pain tool evaluation included conceptualization, subjects, administration, scoring and feasibility and reliability and validity.

**Methods:** Phase 1 addressed tool content generation from literature review and expert opinion. Items were tested over two time periods in two skilled nursing facilities with 182 residents and 105 residents respectively. Phase 2 addressed psychometric and feasibility testing. Residents (N=145) with moderate to severe dementia from three long term care facilities participated in the evaluation. Inter-rater reliability, test-retest reliability, construct validity, and criterion validity of the CPAT was measured after initial CNA training. Internal consistency was calculated for all reliability measures. The clinical utility and feasibility of the CPAT was measured by means of a practicality survey developed for the study.

**Results:** Twelve items of the original 41 were retained during the CPAT development phase. Inter-rater reliability was high (ICC=0.71), test-retest reliability was acceptable (ICC=0.67), construct validity measured by t test (p=.043), and criterion validity measured by Spearman's rank correlation coefficient (p=.048). Internal consistency on discrete measures of inter-rater reliability, test-retest reliability, construct validity, criterion validity as well as a composite CPAT score were acceptable (0.72 -0.84). Usability and feasibility measures ranged from means of 1.61 to 3.75 (1-10) where lower scores indicate greater clinical utility.

**Conclusions and Implications:** The CPAT is a reliable and valid instrument to assess pain in skilled nursing facilities in residents with dementia. It is easy to use and clinically practical. Nurses caring for nonverbal older adults with dementia can use these findings to influence institutional choice and policy on rational decision making for instrument selection to assess pain in this population.