

The Pain Assessment for the Dementing Elderly (PADE) Brief

The Pain Assessment for the Dementing Elderly is an informant-based tool for assessment of pain in individuals with advanced dementia. It was developed to help caregivers assess patient behavior that may indicate pain. The tool has three parts with a total of 24 items (1) Physical components include observable facial expression, breathing pattern and posture, (2) Global assessment involves proxy evaluation of pain intensity and (3) Functional assessment includes (ADL): dressing, feeding oneself, transfers from wheelchair to bed.

Although the tool includes 5 categories of pain indicators noted in the AGS Persistent Pain Guidelines, operationalization is not clearly supported. The tool is based on the assumption that caregivers can reliably rate the intensity of elders' pain, an assumption that is not fully supported by current literature. *As with any informant-based tool, the wider number of observations included increases its sensitivity but limits its specificity in that it may identify behaviors that may be due to causes other than pain.*

Several issues have been identified related to construction, administration and scoring:

1. Three parts to the tool are described, yet 24 individual components are presented without clarity as to which part of the tool the individual items belong.
2. Relevance of some indicators to assessment of pain is lacking (eg. Neatness of grooming).
3. Caregiver judgment of pain severity as the gold standard has not been substantiated.
4. There is inconsistency in narrative description of the tool and the tool illustration in the appendix. The narrative documents Likert rating 1-4, but the tool illustrates a semi-VAS format. Different anchors are used for each item which may contribute to complexity of interpretation. Interpretation of overall tool score is unclear.
5. Items 15-24 related to functional ADL are assessed retrospectively from the resident's chart. However, all other items are rated based on the resident's current situation. Differences in timing of assessment components could be problematic.
6. The relationship of the ADL section in documenting pain is unclear. However, if the tool is used regularly and consistently, it may potentially show changes over time (eg. percent of time out of bed, percent of time awake, amount of meals eaten) that could be potential indicators of pain impact.
7. There is an expectation of finding data for some items in the patient chart. However, based on current documentation practice, accurate information may not be available.
8. A score of 0 is given if an item is marked as "Not Applicable". The impact of this on the overall result and underestimation of pain is not addressed.

In studies 2 and 3, the scoring for the PADE was altered due to the researcher's previous experience with the tool. Questions 15-24 regarding functional ADL's which are answered by reviewing chart documentation, were also omitted.

An instruction manual has been developed for the tool. Further explanation or clarification regarding administration and scoring of the tool may be documented. However, the instruction manual was not available for this review and its update.

It is suggested that tool administration takes 5-10 minutes. However, data to support this are not provided. Moreover, considering the complexity of the items, the variety of scaling approaches and the expectation of finding answers in the patient record,

this tool may take considerably longer to administer than the suggested 5-10 minutes. *Subsequent studies did not provide additional supporting evidence regarding clinical utility or decrease in time requirements.*

The raters in the initial research report are primarily nursing assistants. However, there is no discussion related to nursing assistants' scope of practice. *Follow up studies focus on research assistant administration, thus no further data regarding use by NAs is available.*

The PADE was evaluated in two studies. Study 1 was conducted in 4 LTC facilities involving 25 residents with advanced dementia. Study 2 was conducted in one long term care facility in a sample of 40 residents with advanced dementia. Sample sizes are small considering the number of items in the tool, which limits generalizability of findings. *Two follow-up studies were based on adequate sample size for tool evaluation.*

Reliability

- Internal consistency was evaluated in studies 1 and 2. Although part I demonstrated acceptable reliabilities, alphas for part III ranged from poor to moderate. Thus preliminary internal consistency of the tool is not well established for all components.
- Interrater reliability was evaluated in both studies 1 and 2 and found to be mostly good.
- Test-retest reliability was evaluated in both studies 1 and 2 and found to be good for parts I and III, but only poor to acceptable for part II.
- *Studies 3 and 4 do not contribute additional evidence for reliability measures.*

Validity

- Convergent validity. The PADE part I correlated significantly with the Cohen-Mansfield Agitation Inventory (CMAI), Verbal subscale. PADE part III correlated with all three CMAI subscales and PADE part II did not significantly correlate with any CMAI subscale.
- Criterion validity was evaluated in study 2:
 - (1) Using chart review there were no statistically significant differences between groups with or without painful conditions on the PADE subtests or the CMAI.
 - (2) Residents who were identified to have significant pain in clinical assessment scored significantly higher on the CMAI Verbal and PADE Parts I-III.
 - (3) Residents using psychoactive drugs continued to score significantly higher on the CMAI Verbal, CMAI Aggressive, PADE I, and PADE III This finding was used as evidence that the tools maintain criterion validity despite managing agitation and aggression.

Validity testing has not established the usefulness of the PADE in identifying those with and without pain conditions, suggesting relevant pain related behaviors may not be present. Moreover, although agitation and pain have been associated in elders with dementia, validation of this relationship should complement examination of other validity constructs. Usefulness of the PADE part II is not supported based on psychometric evaluation conducted to date.

Study 3 compared informant-based tools with self-report and observational measures: PADE, PAIN, and VDS were found to be the most sensitive to treatment effects and most useful in detecting pain. A decrease in levels of pain was evident with

informant rating scales. Additional evaluation of informant tools in general therefore supports the validity of the assessment tool in measuring pain in patients with and without dementia. The informant rating scales were most effective in detecting changes in pain levels.

Summary

The PADE was developed to provide a simple tool for assessing pain in individuals with advanced dementia. Issues related to tool construction, presentation, clarity in scoring and interpretation, and validity suggest the need for revision and further testing. *Further study of an adapted PADE with verbal descriptor rating scale and elimination of the ADL component provides support for its validity and sensitivity. Additional data on clinical utility is not provided. The tool may indicate level of pain severity in a given patient, however categorizing pain severity as mild, moderate, or severe based on tool score has not been justified.*

Source of evidence

Cohen-Mansfield, J. (2006). Pain assessment in noncommunicative elderly persons-PAINE. *Clinical Journal of Pain*, 22(6), 569-75.

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