

The Non-Communicating Patient's Pain Assessment Instrument (NOPPAIN)

Description: The NOPPAIN was developed as a pain screening tool for nursing assistants' (NA) to use with older adults with dementia. The tool requires NAs to observe and rate pain intensity in addition to documenting behaviors indicating the presence of pain. The tool is made up of four parts: 1) self-report (the older adult's report of pain), 2) NA observed pain-behavior response to daily activities using a 6-point Likert scale, 3) identification of the location of pain, and 4) completion of verbal descriptor scale/pain thermometer for proxy report of global pain intensity.

Psychometric testing: The NOPPAIN maintains moderately strong inter-rater reliability (range: $r=0.59-1.00$) across all studies. Test-retest reliability scores at 2 hours were reported as moderate ($r=0.68$). However, internal consistency was poor across two painful conditions: 1) vaccine and 2) movement-exacerbated pain. Validity findings have also been mixed. In a hospital-based population of severely cognitively impaired older adults with intact verbal skills, validity was strong when compared to self-report of presence/absence of pain, but moderate when compared to self-report of pain intensity. There are concerns over specificity and discriminant validity due to positive correlations to anger, depression, and anxiety constructs. In discriminating pain states verses baseline, Lints-Martindale and colleagues noted large effect sizes (Cohen's $d=1.27$ during movement related observation).

Languages and Settings: The tool has been tested in racially/ethnically diverse samples, including nursing homes (United States and Australia) and an acute care setting (Italy). NOPPAIN has been translated from English into both Italian and Brazilian Portuguese.

Feasibility/Clinical Utility: The tool appears to be clinically feasible given the ability of NAs to use with minimal training (1-hour video) and the limited time required for completion (less than 2 minutes scoring after 5 minute observation period). The use of diagrams and pictures make this tool simple to understand, however at 2 pages, documentation can become more complicated. Because of limits regarding scope of practice for NAs, this tool should not be considered to assess pain per se, but to collect data regarding observations about possible pain, allowing NAs to contribute their valuable observations to a comprehensive clinical assessment.

Scoring and Interpretation: Scoring and interpretation of the original tool was unclear. In a follow up study using ROC analysis, a cut off of 4.5 for pain/no pain was proposed.

Summary/Critique: Although this tool has received fairly recent evaluation indicating ongoing interest and use, a proxy report of pain intensity, even by NAs familiar with the older adult, is not sufficiently supported in the literature. Additionally, concern remains regarding the scope of NA practice not being extended to assessment skills, thus this tool remains most useful for screening, rather than assessment purposes.

Psychometric testing issues related to internal consistency and discriminant validity suggest the need for further refinement of this tool. Should these issues be addressed with future revisions, clinical utility of the tool could also be enhanced with scoring and interpretation guidelines.

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