

Rotterdam Elderly Pain Observation Scale (REPOS)

Description: The REPOS was developed to identify pain in nursing home residents with cognitive impairment aside from dementia. Thus, the tool has been used in other non-verbal older adults with intellectual disabilities. The REPOS is also recommended in Dutch national pain and palliative care guidelines for non-verbal patients. This tool supports the use of patient and/or proxy self-report in tandem with observation using the REPOS.

Psychometric testing: Validity was assessed through correlations and regression analyses and the initial 14 pain behaviors were reduced to 10 succinct pain behaviors. The initial 14 items included: tense face, grimace, fearful look, closing eyes, raising upper lip, moving body part, panicky, not cooperating, seeking comfort, aggression, crying, moaning/groaning, sounds/verbal, and holding breath. The final 10 behaviors excluded crying, aggression, seeking comfort, and not cooperating. Still the internal consistency of the total items was low (Kudar Richardson coefficient= 0.49), partly due to low occurrences of some behaviors. Behaviors were observed at rest and during activity. A later study reported internal consistency at alpha = 0.73 and individual item-total correlations from 0.18 – 0.69.

To determine concurrent validity, the REPOS and PAINAD were highly correlated ($r=0.61$ and 0.75), but comparisons to nurses' proxy report using NRS was low (-0.12 – 0.39). While other studies have found the NRS and the REPOS to have adequate concurrent validity ($r = .64$ – $.80$) Inter-rater agreement (ICC= 0.92) and intra-rate agreement (ICC= 0.96 and 0.90) were high. The cut-off score of 3 has been reported with good specificity (0.62 – 0.85) and sensitivity (0.81 – 0.83). Moderate interrater

agreement ($\kappa \geq 0.61$) has been achieved within a median of 8 weeks and after a median of 12 nurse observations.

Languages and Settings: Use and tested primarily in Dutch-speaking populations but has been translated to English although no studies of English version have been done. Research has been carried out in nursing homes and palliative care center.

Feasibility/Clinical Utility: The authors maintain the REPOS is feasible in daily clinical practice after training is provided. A decision-tree is also provided to assist nurses with interpretation of score and appropriate intervention.

Scoring and Interpretation: Ten items are dichotomously scored (present= 1, absent= 0) after a 2-minute observation period. Items cover facial expression, emotional status, physical behavior, and vocalizations. A characteristic definition for each behavior is provided for observers. Scores range from 0-10, and a score of 3 or higher in combination with a proxy NRS score of 4 or higher indicates a high likelihood for pain.

Summary/Critique: The REPOS is a practical tool that takes little time to use. A positive of the REPOS is the inclusion of a decision-making tree that provides nurses with interventions. Like most other observation tools, the REPOS does not score pain intensity. However, few studies have tested this tool, requiring additional research to validate this tool in other settings and older adult groups.

Contact information for tool developer:

We were unable to obtain permission to post the contact information.

References:

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