Doloshort

Description: The Doloshort was developed with the goal of providing a brief, clinically applicable tool for assessing pain in severe dementia. The Doloshort is made up of 5 items from the Doloplus-2, another observational pain scale. The 5 items used were those that were significantly associated with the visual analogue scale (VAS). The observational tool is developed for administration by the nurse in charge of the patient, intending to measure pain during usual care. The tool developer acknowledges the need for further information gathering from other care team providers.

Psychometric testing: Reliability of the Doloshort is reportedly strong, with both interrater and intra-rater coefficients ranging from 0.949 and 0.970. No test-retest data was found. Internal consistency of the tool was adequate, with a Cronbach's alpha of 0.73. Validity testing of the tool was initially based on that of the parent tool, the Doloplus-2, developed by a network of European geriatricians. As an independent tool, evaluations of validity of the tool indicates the Doloshort has strong convergent validity when compared to the VAS (Kendall's tau-b = 0.523). Discriminant validity has also been evaluated, suggesting established validity in comparison to measures of depression (0.248), anxiety (0.031) agitation (0.139) and appetite (0.207). Further testing indicates the tool maintains sensitivity to change, with a significant reduction in Doloshort scores before and after opioid intervention in patients with moderate to severe chronic pain. Initial testing indicated a score of ≥3 had a sensitivity of 81.5% and a specificity of 70.5% for the detection of pain, with an area under the ROC curve of 0.76. Tool developers report this cutoff score correctly classified 76 of 100 patients.

Languages and Settings: The tool was tested with French-speaking patients in acute setting (Switzerland).

Feasibility/Clinical Utility: The developer of the tool suggests the tool is simple to administer, requiring approximately 5 minutes, though this has not been formally evaluated. Training and instruction for use was not addressed in the two primary studies reviewed for this summary, although reference is made to the need for gathering observational data from other team members. Clinical feasibility information is limited to a preliminary cutoff score of ≥3. Guidelines for scoring or interpreting scores for decision making are not provided.

Scoring and Interpretation: Scoring and/or the interpretation of scores have not been directly addressed by the tool developer.

Summary/Critique: Psychometric testing of the Doloshort to this point is promising. The strong convergent and discriminant validity findings warrant further studies, as does the strong responsiveness to treatment. Studies in additional cultures, with more diverse patient and setting samples would be valuable. Should additional studies be conducted, training time, instruction needs, and scoring interpretations could also be included. Clinical usefulness would be enhanced with guidelines for administration and decision making and use.

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References:

DOLOPLUS-2. Behavioral pain assessment. Available at http://www.doloplus.fr/ and http://prc.coh.org/PainNOA/Doloplus%202_Tool.pdf

Likar, R., Pipam, W., Neuwersch, S., Köstenberger, M., Pinter, G., Gatternig, C., & Marksteiner, J. (2015). Pain measurement in cognitively impaired patients with the Doloshort scale. *Schmerz, 29*(4), 440-444.

Pautex, S. Herrmann, F.R., Michon, A., Giannakopoulos, P., & Gold, G. (2007). Psychometric properties of the Doloplus-2 observational pain assessment scale and comparison to self-assessment in hospitalized elderly. *Clinical Journal of Pain, 23*(9), 774-779.

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