

## **The Face, Legs, Activity, Cry and Consolability Pain Assessment Tool (the FLACC)**

The Face, Legs, Activity, Cry and Consolability Pain Assessment Tool (the FLACC) is a behavioral scale for measuring severity of postoperative pain in young children. Although this purpose does not align with the purpose of tools to assess pain in elders with dementia, the FLACC has nevertheless been evaluated for reliability and validity for clinical application with cognitively impaired elderly (Baiardi, Parzuchowski, Kosik, Ames, Courtney, Locklear, 2002). The tool includes five items Face, Legs, Activity, Cry and Consolability, each of which is leveled on a three point scale for severity by behavioral descriptors for a total score range from 0 to 10.

Although this tool has been suggested as a tool for older adults with dementia, the conceptual soundness of selected items for older adults is not established. In particular items such as leg kicking, arched or jerking activity, squirming, quivering chin have not been reported in the literature to be pain behaviors in dementia and do not seem appropriate in elders with dementia. Consolability is a tool item, although this would appear to be a response to an intervention rather than a pain behavior. The relationship between consolability and pain in persons with dementia has not been established, but may be an area for further study. Furthermore, the behavioral categories on the FLACC do not address three of the behavioral categories in the AGS Persistent Pain Guideline: changes in interpersonal interactions, changes in activity patterns or routines and mental status changes.

The method of administration used in the study on elders (see below) is not described. Information on the clinical usefulness of the tool in elders is unknown.

The FLACC has been tested in long-term care in a sample of 6 cognitively impaired elders with documented history of late-stage dementia and an identified source of pain (mean age  $83 \pm 11.0$  years, majority female) (Baiardi et al., 2002). This sample size severely limits generalizability of findings.

### Reliability

- Internal consistency reliability: no data are available.
- Interrater reliability was evaluated based on 69 valid FLACC observations rated by three trained research observers independently recording pain assessments. Kappa statistic was .404 or less (Baiardi et al., 2002). These researchers concluded that the FLACC is not a useful pain assessment tool for cognitively impaired elderly, however, small sample limits conclusions.
- Test-retest reliability: no data are available.

### Validity

- Construct validity in the sample described above. Based on 69 valid FLACC and 56 UAB (Modified University of Alabama Pain Assessment Tool) observations the FLACC and UAB were significantly correlated. However, Spearman's rho data are not reported. Moreover, the UAB has not been validated in elders with dementia and is questionable as an appropriate criterion measure.

The FLACC is a tool conceptually developed and tested for use in assessing pain in young children, not older persons with dementia. The tool items are not conceptually

established as appropriate for this population and are not consistent with AGS potential indicators of persistent pain in older adults. Preliminary testing with older persons with dementia suggests the tool is not reliable and valid. Without item revision and additional testing in appropriate samples this tool is not appropriate for use in elders with dementia.

#### **Sources of evidence**

Baiardi, J., Parzuchowski, J., Kosik, C., Ames, T., Courtney, N., Locklear, J. (2002, September). *Examination of the reliability of the FLACC Pain Assessment Tool with Cognitively Impaired Elderly*. Poster session presented at the Annual National Conference of Gerontological Nurse Practitioners, Chicago, Ill.

Merkel, S.I., Voepel-Lewis, T., Shayevitz, J.R., Malviya S., (1997). The FLACC: A behavioral scale for scoring postoperative pain in young children. *Pediatric Nursing*, 23(3) 293-297.

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