Validation of the Functional Pain Scale with Hospitalized Patients

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Background
An estimated 100 million Americans experience chronic pain (Institute of Medicine, 2011). An increasing number of hospitalized adults report suffering from chronic pain lasting more than 3 months. While pain intensity is one dimension of the pain experience, as a single measure it oversimplifies the multi-dimensional experience of chronic pain (Pasero, Quinlan-Colwell, Rae, Broglio, & Drew; Schiavenato & Craig, 2010). Persons suffering with chronic pain have difficulty assigning meaningful verbal and numeric descriptors to pain (Dijkers, 2010). The Centers for Disease Control and Prevention (CDC) guideline for prescribing opioids for chronic pain supports assessment of function and quality of life in addition to intensity (Dowell, Haegerich, & Chou, 2016). The Functional Pain Scale addresses function and aspects of quality of life but has not been validated in an acute care setting (Gloth, Scheve, Stober, Chow, & Prosser, 2001).

Purpose
The purpose of this study was to evaluate the psychometric properties of the FPS compared to other brief pain assessment tools used for hospitalized adults or persons with chronic pain.

Sample & Setting
- Adult patients (n = 51) with chronic pain on 2 medical/surgical units at a 167-bed Midwest tertiary care hospital participated in the study
- Ages ranged from 20 – 88 years
- See Table 1 for demographic data

Results
- Participant (n=51) means indicated moderate pain (NRS = 4.8; FPS = 4.0; PEG = 7.2)
- Convergent validity was not supported for the NRS and FPS (moderate correlation) or with the PEG and FPS (weak correlation) See Table 2.
- The FPS was able to discriminate between pain and pain-related anxiety, depression, fear, and helplessness on the APS-POQ-R
- There were no significant correlations between the FPS and the APS-POQ-R activity interference subscale.

Conclusions/Limitations
- This study was conducted as a parallel study to one at a large medical center in the eastern United States. Results from both studies have been published.
- Thirty-one participants expressed a scale preference, with 65% preferring the FPS (n = 20).
- Limitations include use of a convenience sample that was predominately Caucasian sample, small sample size, and inability to generalize to patients with acute pain.

Implications
- Growing numbers of hospitalized patients with chronic pain require a multidimensional assessment tool
- Using a multidimensional scale requires nurses to broaden their perspective about how an assessment tool guides pain management
- Further testing of the FPS with a larger sample is required to further establish validity and reliability

Select References

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Methods
Study Design
A cross-sectional design was used.

Data Analysis
- Descriptive statistics were calculated for all variables of interest
- Relationships between variables were described by correlation analysis