Validating the Brief Pain Inventory for Use With Surgical Patients With Cancer

Mary Beth Tittle, PhD, RN, Susan C. McMillan, PhD, ARNP, FAAN, and Susan Hagan, MS, ARNP

Purpose/Objectives: To examine the psychometric characteristics of the Brief Pain Inventory (BPI) for surgical patients with cancer and to compare the validity and reliability results between surgical and medical patients with cancer.

Design: Descriptive and correlational.

Setting: Inpatient units in two veterans hospitals.

Sample: 388 patients with cancer (medical n = 229, surgical n = 159).

Methods: The BPI was administered to patients once, and a pain visual analog scale (VAS) was administered to patients three times. The VAS was correlated with individual items of the BPI and with the Pain Interference Subscale of the BPI; correlations were conducted separately for medical and surgical patients as a study of validity. Reliability was assessed using Cronbach’s alpha for each group.

Main Research Variables: Pain at its worst and least, current pain intensity, average pain intensity, and pain relief.

Findings: Patients in both groups were predominantly male, older, and Caucasian. Means from both groups were similar for items on the BPI. Correlations between the Pain Interference Subscale and the other items on the BPI were similar for both groups. Correlations between the VAS and the Pain Interference Subscale of the BPI were equally high for the medical (r = 0.71, p < 0.01) and surgical (r = 0.73, p < 0.01) oncology groups. Reliability evaluated by the coefficient alpha was very high for the medical (r = 0.95) and surgical (r = 0.97) oncology groups.

Conclusions: The BPI is equally valid and reliable for medical and surgical male, Caucasian patients with cancer.

Implications for Nursing: Nurses working with patients with cancer can have confidence that the BPI will assist them in assessing and managing pain in both groups.

Key Points . . .

➤ Limited research has been conducted on the use of the Brief Pain Inventory (BPI) in surgical patients with cancer.
➤ The BPI is valid for use with surgical patients with cancer.
➤ The patterns of pain in surgical patients with cancer must be examined.

Postoperative patients continue to experience significant pain during their recovery period, including incisional pain (Melzack, Abbott, Zazon, Mulder, & Davis, 1987; Sriwantanakul et al., 1983; Tittle, Long, & McMillan, 1992).

Pain plays an important role in patients’ responses to illness and overall sense of well-being. Pain control may be problematic for a variety of reasons, including the difficulties of objective assessment of this subjective symptom. Although physicians order analgesics, the drugs often are ordered as needed, leaving nurses to decide on the dose and schedule. This decision is usually dependent on nurses’ perceptions of patients’ pain. To provide appropriate pain management, accurate pain assessment is necessary. Research indicates that improving nurses’ pain assessment will improve patients’ pain management (Dobratz, Wade, Herbst, & Ryndes, 1991; Fairies, Stephens, Goldsmith, Phillips, & Orr, 1991; McMillan, Williams, Chatfield, & Camp, 1988).

Nurses need reliable and valid instruments to use in pain assessment. These instruments must be easy to administer and easy for patients to understand, such as numeric and graphic rating scales. The Brief Pain Inventory (BPI) is a pain assessment instrument that has been used in a variety of populations; however, evidence of its validity and reliability specifically in postoperative patients continues to experience significant pain during their recovery period, including incisional pain (Melzack, Abbott, Zazon, Mulder, & Davis, 1987; Sriwantanakul et al., 1983; Tittle, Long, & McMillan, 1992).

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Mary Beth Tittle, PhD, RN, is a professor in the College of Nursing at St. Petersburg College in Florida; Susan C. McMillan, PhD, ARNP, FAAN, is a professor in the College of Nursing at the University of South Florida in Tampa; and Susan Hagan, MS, ARNP, is a pain nurse practitioner at James A. Haley Veterans Hospital in Tampa. This study was funded by Health Services Research and Development of the Department of Veterans Affairs Grant #89-042.1. (Submitted December 2001. Accepted for publication May 31, 2002.)

Digital Object Identifier: 10.1188/03.ONF.325-330