## Oncology Nursing Certification: Relation to Nurses' Knowledge and Attitudes About Pain, Patient-Reported Pain Care Quality, and Pain Outcomes

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Beck, Brant, Smith, Towsley, and Berry contributed to the conceptualization and design. Beck, Brant, Smith, Towsley, Berry, and Al-Qaaydeh completed the data collection. Pett, Donaldson, and Guo provided statistical support. Beck, Donohue, Guo, Pett, and Donaldson contributed to the analysis. All of the authors contributed to the manuscript preparation.

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**Purpose/Objectives:** To (a) compare pain knowledge and attitudes between nurses with oncology certified nurse (OCN®) status, non–OCN®-certified nurses, and nurses ineligible for certification and (b) examine the relationships among OCN® status, nurses' knowledge and attitudes about pain, patient-reported quality of nursing pain care, and pain outcomes.

Design: Prospective, correlational survey design. Patients were nested within nurses.

Setting: Six inpatient oncology units in three hospitals: St. Vincent Healthcare in Billings, Montana; Norris Cotton Cancer Center at the Dartmouth–Hitchcock Medical Center in Lebanon, New Hampshire; and Huntsman Cancer Hospital in Salt Lake City, Utah.

Sample: 91 nurses in three states (28 OCN<sup>®</sup>-certified nurses, 37 noncertified nurses, and 26 not eligible for certification). Certification status was validated for 105 nurses who were matched with a sample of 320 patients.

Methods: Nurses completed a survey, and matched adult patients who were experiencing pain rated their pain care quality and pain experience during the past shift.

**Main Research Variables:** Demographic characteristics, certification status, and responses to the Nurse Knowledge and Attitudes Survey Regarding Pain (NKASRP), Pain Care Quality Survey–Nursing, and modified Brief Pain Inventory (Short Form).

**Findings:** OCN<sup>®</sup>-certified nurses scored significantly higher on the NKASRP (82% correct) compared to non-OCN<sup>®</sup> eligible nurses (76%) and non-OCN<sup>®</sup> ineligible nurses (74%) (p < 0.001). Only 43% overall achieved a benchmark of 80% correct. No statistically significant relationships existed between (a) certification status and pain care quality or pain outcomes or (b) NKASRP and care quality or outcomes (p > 0.05).

**Conclusions:** OCN<sup>®</sup>-certified nurses' knowledge and attitudes related to pain management were superior to noncertified nurses. Neither knowledge and attitudes nor OCN<sup>®</sup> status were associated with pain care quality or pain outcomes.

**Implications for Nursing:** Knowledge is necessary but insufficient to improve patient outcomes; providing optimal pain care requires action. Sustained efforts to improve cancer pain management are indicated.

