Chemotherapy-Induced Peripheral Neuropathy: Assessment of Oncology Nurses’ Knowledge and Practice

Madelaine Binner, DNP, MBA, CRNP-BC, Diana Ross, MSN, RN, and Ilene Browner, MD

Objective: To explore oncology nurses’ practice behaviors and knowledge of chemotherapy-induced peripheral neuropathy (CIPN) in the assessment of patients with cancer.

Design: Cross-sectional, exploratory.

Setting: Two hospital-based outpatient chemotherapy clinics in Baltimore, MD.

Sample: Self-selected convenience sample of 39 oncology nurses.

Methods: Completion of the principal investigator–developed questionnaire consisting of 16 knowledge and 16 practice-behavior items, 8 instruction and perception items, and a 9-item demographic survey.

Main Research Variables: CIPN assessment practice behaviors and knowledge; tool reliability.

Findings: The mean CIPN knowledge score of 12.6 (SD = 1.7) demonstrated knowledge deficits (maximum score of 16). All respondents indicated CIPN assessment is essential in their oncology role, but 75% rated their CIPN assessment skills as fair to poor. Assessment practices did not routinely include neurologic physical assessment. In addition, 82% believed CIPN is a significant problem for patients. Cronbach alpha for the tool was 0.84.

Conclusions: Results indicated participants had knowledge deficits pertaining to CIPN and lacked training, proficiency, and confidence in neurologic physical assessment. Education and training programs are needed to improve knowledge and neurologic assessment skills.

Implications for Nursing: To date, CIPN nursing assessment guidelines do not exist. Practice guidelines for CIPN nursing assessment and management should be efficient and appropriate to the role of the chemotherapy infusion oncology nurse working in a busy setting where chair turnover time, accuracy, safety, and quality service are competing priorities.

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