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A Position Statement on the Impact of Neuroscience Nursing on Quality of Care and Health Outcomes

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Description

The Institute of Medicine (IOM) defines quality health care as “safe, effective, patient-centered, timely, efficient and equitable.” (IOM, 2001 pg. 6.) The Agency for Healthcare Research and Quality (AHRQ) defines quality as “doing the right thing for the right patient, at the right time, in the right way to achieve the best possible results.” In 2003, the American Nurses Association (ANA) asked the American Association of Neuroscience Nurses (AANN) to provide the nursing community with a position statement on the impact of neuroscience nurses on quality of care and health outcomes.

Position

Based on scientific and clinical findings, AANN takes the following position:

- We must continue to research the impact neuroscience nurses have on quality of care and health outcomes.
- We should communicate—directly and indirectly—about the impact of neuroscience nursing on quality of care and health outcomes through formal and informal, written and verbal channels.

Background

Neuroscience nursing, which specializes in the care of individuals across their lifespan who have biopsychosocial alterations due to nervous system dysfunction such as stroke, brain and spinal cord neoplasm and trauma, neurodegenerative disorders, and epilepsy, holds a unique area within the nursing discipline. The practice of neuroscience nursing encompasses multiple levels of care, including acute, subacute, rehabilitative, and chronic care in a variety of roles. These roles have an impact on care and are both direct and indirect in their action. Many factors positively influence the effect neuroscience nurses have on quality of care and health outcomes. Such factors include nursing processes, philosophy of patient-focused care, education, and multidisciplinary collaboration.

Neuroscience nurses independently and collaboratively provide direct patient care during all phases of neurological illness. Direct care is not a function of position (e.g., staff nurse) but that of role, such as educator, caregiver, or counselor. Neuroscience nurses directly prevent complications associated with neurological illness, and both patient and family needs are addressed throughout the course of the illness.



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Neuroscience nurses indirectly affect quality of care and health outcomes throughout multidisciplinary endeavors. Examples of these efforts include participation in environment of care remodeling/renovations and community programs. Neuroscience nurses are recognized authoritative speakers on such topics as stroke and hypertension. Members of AANN serve on advisory panels for other professional organizations and frequently communicate health information to the public.

Rationale

Neuroscience nurses have generated a plethora of knowledge through research that enhances our understanding of patient responses to disease states. Reviews of the literature yielded hundreds of publications on nursing interventions, care techniques, standards, patient management, care models, quality improvement initiatives, and nursing education, satisfaction, and retention. However, little evidence was found that directly assessed the impact of neuroscience nursing on patient outcomes, compared to other non-neuroscience nursing care. In 2011, Green, Kelloway, Davies-Schinkel, Hill, and Lindsay investigated nursing-sensitive patient outcomes findings from all nursing specialties. The publication reviewed studies that examined the effects of nursing skill and intervention on patient care quality and outcomes and also showed the lack of comparative data on neuroscience quality of care and patient outcomes. Despite the absence of neuroscience nursing comparative outcomes studies, the literature is replete with documentation of neuroscience nurse investigators actively applying the scientific process to patient care quality, outcomes, and professional development.

The premise of neuroscience nursing's unique impact is based on research documenting that specialty care yields better care quality and improved patient outcomes (Blegan, 2012; Bukur et al., 2015; Hickey Gauvreau, Curley, & Connor, 2013). The most well-researched neuroscience subspecialty field is cerebrovascular disease (CVD). The benefits of CVD specialty care are widely documented and recognized to the extent that hospital accrediting organizations offer additional certification to validate and promote stroke-ready and advanced-capability hospitals. Other research documenting specialty care benefits show that patients with brain injuries have better survival and improved outcomes when treated on a specialty unit (Harrison et al., 2013; Kramer & Zygun, 2014). Although it is difficult to stratify the impact of medical versus nursing interventions, the literature demonstrates that disease-specific knowledge benefits patient care quality and outcomes.

Methods

A literature search of the CINAHL, MEDLINE, and PUBMED databases was conducted using the keywords *nursing-sensitive outcomes, quality, quality of care, care quality, quality improvement, process improvement, CQI, healthcare quality unit designation, critical care unit, specialty care unit, neuroscience, neuroscience unit, neuroscience ICU, neuro unit, and neurocritical care*. A search period from 1985 to 2015 was used and language was limited to English.



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References

Blegan, M. A. (2012). Does certification of staff nurses improve patient outcomes? *Evidence Based Nursing, 15*(2), 54–55.

Bukur, M., Habib, F., Cantino, J., Parra, M., Farrington, R., Crawford, M., & Puente, I. (2015). Does unit designation matter? A dedicated trauma intensive care unit is associated with lower post injury complication rates and death after major complication. *Journal of Trauma and Acute Care Surgery, 78*(5), 920–929.

Committee on Quality of Health Care in America & Institute of Medicine. (2001). *Crossing the quality chasm: A new health system for the 21st century*. Washington, DC: National Academies Press.

Green T., Kelloway L., Davies-Schinkel C., Hill M., & Lindsay M. P. (2011). Nurses' accountability for stroke quality of care: Part one: Review of the literature on nursing-sensitive patient outcomes. *Canadian Journal of Neuroscience Nursing, 33*(3), 13–23.

Harrison, D. A., Prabhu, G., Grieve, R., Harvey, S. E., Sadique, M. Z., Gomes, M., . . . Rowan, K. M. (2013). Risk adjustment in neurocritical care (RAIN)—Prospective validation of risk prediction models for adult patients with acute traumatic brain injury to use to evaluate the optimum location and comparative costs of neurocritical care: A cohort study. *Health Technology Assessment, 7*(23), vii–viii, 1–350.

Hickey, P. A., Gauvreau, K., Curley, M. A., & Connor, J. A. (2013). The effect of critical care nursing and organizational characteristics on pediatric cardiac surgery mortality in the United States. *Journal of Nursing Administration, 43*(12), 637–644.

Kramer, A. H., & Zygun, D. A. (2014). Neurocritical care: Why does it make a difference? *Current Opinions in Critical Care, 20*(2), 174–181.

Quality and Patient Safety. August 2015. Agency for Healthcare Research and Quality, Rockville, MD. <http://www.ahrq.gov/professionals/quality-patient-safety/index.html>

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