The Future of Oncology Nursing Science: Who Will Generate the Knowledge?

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The current system for doctoral education in nursing does not have the capacity to prepare the number of graduates necessary to replace retiring faculty, nor does it have a sufficient number of nurse researchers to generate knowledge for the discipline (Potempa, Redman, & Anderson, 2008). According to the Robert Wood Johnson Foundation (2007), a large percentage of senior nursing faculty members will retire by 2012, and nearly half the current nursing faculty is likely to retire by 2016. Many senior faculty members are PhD-prepared faculty as well as funded researchers. Therefore, in the United States, the nursing profession is at an important crossroads that could determine the direction of doctoral nursing education. Given the projections, doctoral nursing education will need to be re-evaluated, even with the introduction of the doctor of nursing practice (DNP) degree. The practice and research contexts of the nursing discipline will have to be reconnected, and focus will have to be placed on nursing knowledge development (Benner, Sutphen, Leonard, & Day, 2009).

Many forces influence doctoral education and knowledge development: (a) the nursing faculty shortage; (b) the older age of individuals who complete their PhDs, many on a lengthy part-time basis; and (c) the creation of the nonresearch DNP degree, a professional practice doctorate. In reports by the American Association of Colleges of Nursing (AACN), student enrollment in DNP programs has increased 176% (N = 3,291), from 1,874 students in 2007 to 5,165 students in 2009 (Fang, Tracy, & Bednash, 2010; Raines, 2010). The extraordinary growth of DNP student enrollment is related to the surge of new DNP programs in that period, 53 in 2007 to 119 in 2009. However, PhD programs have remained stagnant, with an increase in student enrollment of only 5% (N = 204), from 3,973 students in 2007 to 4,177 in 2009 (AACN, 2009; Fang et al., 2010). In 2010, the number of DNP programs is predicted to surpass the number of PhD programs, which began in 1934 (Glasgow, Dreher, Cornelius, & Bhattacharya, 2009). Considering that the profession is poised to lose half of its faculty workforce by 2016 because of retirements and that the number of PhD graduates entering the faculty workforce is insufficient to replace retiring faculty or expand capacity, the question remains as to who will build the discipline through the conduct of nursing research in the future (Potempa et al., 2008). In addition, larger concerns for nursing education exist. First, with the current U.S. faculty shortage projections, will sufficient PhD-prepared doctoral-level nursing faculty be available? Second, what must be done to prepare enough nurse scientists to generate nursing knowledge and evidence needed by the nursing discipline? Third, in what way does the DNP degree compete for prospective PhD students? And finally, what impact will these forces have on oncology nursing science and practice?

Impact on Oncology Nursing Science and Practice

Advances in cancer care resulting from discoveries in chemoprevention, genetics, molecular biology, and supportive care, as well as changes in healthcare systems, demand new and vital contributions from nursing research (Given, 2009). Nurses need guidance on how care should be altered in light of new treatment modalities, as well as innovative ways to improve the quality and safety of cancer care. Research that guides oncology practice ultimately produces evidence-based nursing interventions, resulting in safer, more effective care (Given, 2009). The 2009–2013 Oncology Nursing Society (ONS) Research Agenda highlights the following priorities: (a) health promotion, (b) cancer symptoms and side effects, (c) late effects of cancer treatment and long-term survivorship issues, (d) end-of-life issues, (e) psychological and family issues, (f) nursing-sensitive patient outcomes, and (g) translational science. The current state of the science and gaps in oncology nursing evidence are emphasized to stimulate continued knowledge generation and to promote translation of evidence into oncology nursing practice (The 2009–2013 ONS Research Agenda Team, 2009). For example, only a few intervention studies have been conducted that included partners or other family caregivers, despite the documentation of the stressful effects of cancer on partners and family caregivers (Cochrane & Lewis, 2005; Kim & Given, 2008). The growing number of anticancer agents delivered orally and the shift of responsibility from inpatient to outpatient settings highlight the continuing importance of treatment adherence as an oncology nursing–sensitive patient outcome (Given, 2009). Without a critical mass of oncology nurse researchers, who will generate the evidence base for cancer care?

The next generation of oncology nursing knowledge, in particular, will be harmed if retiring nurse scientists are not replaced. If most future doctorally prepared nurses acquire a DNP degree rather than a PhD degree and do not engage in learning the basic tools of empirical clinical research, the evidence base for cancer nursing care will remain stagnant. The DNP in its current form, without any focus on empirical knowledge development, is detrimental for nursing science; therefore, a need exists to expand the capability of nurses to engage in clinical scholarship. Furthermore, the current system does not encourage young men and women to enter doctoral programs early in their careers or embrace the faculty role or the conduct of research (Potempa et al., 2008).