DOCTORATE IN NURSING PRACTICE: A SURVEY OF MASSACHUSETTS NURSES

ROSANNA F. DEMARCO, PhD, CNS-BC, ACRN,*
JOYCE PULCINI, PhD, APRN, BC, PNP, FAAN,*
LOIS A. HAGGERTY, PhD, RNC,* AND TRINH TANG, BS, RN†

Recently, the American Association of Colleges of Nursing (AACN) resolved that a new practice degree, the doctorate in nursing practice (DNP), is to become the terminal practice degree and minimum education standard for advanced practice nurses by the year 2015 (American Association of Colleges of Nursing. (2004). AACN position statement on the practice doctorate in nursing. Retrieved July 1, 2007, from http://www.aacn.nche.edu.html). The DNP will have a clinical-intensive focus. Advanced practice nurses potentially impacted by this resolution will include nurse practitioners, nurse anesthetists, nurse midwives, and clinical nurse specialists. A task force at the William F. Connell School of Nursing at Boston College conducted an electronic survey in 2006 in an attempt to understand nurses' thoughts about doctoral preparation and the interest of nurses in Massachusetts in pursuing doctoral study. A self-selected group of 376 nurses participated in the study. Nurses identified both positive and negative perceptions related to the degree's viability and practicality, with a majority (55%) preferring the DNP as an educational option. (Index words: Doctorate in nursing practice; Advanced practice nursing; Terminal degree in nursing; Clinical-intensive research) J Prof Nurs 25:75–80, 2009. © 2009 Elsevier Inc. All rights reserved.

The Social Policy Statement of the American Nurses Association noted that all professions must change to meet societal needs (American Nurses Association [ANA], 2003). As early as 1998, Chassin, Galvin, & National Roundtable on Healthcare Quality Committee noted that there was an urgent need to improve American health care quality and defined the problem as one of “overuse, misuse and underuse of health services” (p. 1002). Beginning in the new millennium, problems in the U.S. health care and health education systems (Committee of Healthcare Quality in America, Institute of Medicine [IOM], 2001; Greinier & Knebel, 2003) were explicitly articulated. Emphasizing the need for a more patient-responsive health care system, a scathing perspective on the quality of health services in the United States was openly shared with the public. In the report for the IOM of Greinier and Knebel (2003), descriptions of the need to improve patient care by requiring dramatic changes in the education of members of the health professions were offered explicitly. These recommendations focused on the need to ensure core competencies for all clinicians in the 21st century. These competencies included the ability to (a) deliver patient-centered care, (b) work as part of an interdisciplinary team, (c) practice evidence-based care, (d) continuously improve quality of care, and (e) incorporate informatics so as to comprehend and manage the data available to clinicians.

In response to the IOM reports and the increasing complexity of care, the American Association of Colleges of Nursing (AACN, 2004) resolved that changes were needed in advanced practice nursing (APN) education. The AACN believed that these changes should not be implemented by simply adding credits to already overloaded current master's programs. Thus, AACN developed a position statement on the practice doctorate, resolving that the doctorate in nursing practice (DNP) was to be the practice credential for advanced nursing practice by 2015. This position was supported by many

*Associate Professor, Boston College, William F. Connell School of Nursing, Chestnut Hill, MA 02467.
†Undergraduate Research Fellow, Boston College, William F. Connell School of Nursing, Chestnut Hill, MA 02467.
Address correspondence to DeMarco: Associate Professor, Boston College, William F. Connell School of Nursing, 140 Commonwealth Avenue, 334 H Cushing Hall, Chestnut Hill, MA 02467. E-mail: demarco@bc.edu
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nursing groups, including the National Organization of Nurse Practitioners which held a Web-based conference on the DNP with AACN in 2003.

The AACN identified several core competencies for APNs that were congruent with those articulated by the IOM as essential for all clinicians. These competencies focused on developing leaders in clinical practice rather than on developing researchers, as is the purview of doctor of philosophy (PhD) programs in nursing. Content in DNP programs was to focus on developing skills to meet the health care needs of populations through organizational and system leadership, health policy development and implementation, informatics, evidence-based practice, and interdisciplinary collaboration, as well as advanced practice specialty content. After developing an essentials document incorporating the earlier mentioned areas, AACN held multiple workshops across the United States to gather input regarding constituents’ opinions on the essential education content to be included in all DNP programs.

In the midst of these developments, many colleges and schools of nursing began to consider the feasibility of introducing the DNP into their institutions. Currently, the feasibility of the DNP as a practice doctorate has become recognized in its distinctive role as a nonresearch degree (Hinshaw, Donaldson, Heitkemper, Salmon, & Johns, 2005), with particular emphasis on educating clinically focused practitioners and nurse educators. As part of the fact-gathering process at the William F. Connell School of Nursing at Boston College, a DNP task force was organized, and the group developed various strategies designed to help analyze the impact of such an innovation at the school. One strategy was to develop a needs assessment that was designed to survey nurses in Massachusetts as to their perspectives on doctoral education in general and the DNP in particular.

Methods

Sample

Registered nurses in Massachusetts were invited to participate by completing an anonymous electronic survey through e-mail invitations facilitated through local Massachusetts professional nursing and advanced practice organizations, such as the Massachusetts Coalition of Nurse Practitioners and the Eastern Massachusetts National Association of Pediatric Nurse Practitioners; word of mouth; and an article describing the survey in a quarterly newsletter of the Massachusetts Association of Registered Nurses (the ANA’s official affiliate in Massachusetts) in 2006. Thus, a convenience sample approach was used congruent with nonprobability sampling in recruiting respondents who would select in this type of survey. This method was used primarily to gain valuable information from hard-to-reach groups of nurses (Schonlau, Fricker, & Elliot, 2002). Three hundred and seventy-six nurses participated in the survey during the 6-month period of data collection.

Measures

An anonymous electronic survey was created in Survey Monkey (2007; SurveyMonkey.com; Portland, Oregon), a Web-based survey tool. Along with demographic data that identified age, educational background, specialty of care areas, experience, and areas of expertise, 17 items were created by an expert panel of advanced practice nurses identifying questions that addressed the structure, process, and intended educational outcomes of doctoral degree programs as we know them currently and in the prospective DNP. The format of structure process and outcomes was used as a model from quality improvement literature according to Donabedian (1980, 1988) to create questions that included perceived knowledge about the underlying principles behind the DNP and PhD degree (structure), levels of interest in education programs that would include the DNP (structure), rationale for the offering of the DNP (structure), how these programs would be offered based on interest (process), and perception of usefulness of this degree in affecting quality care in the context of complexity (outcomes). Seven questions were posed in a Likert-scale format, measuring degree of agreement with a statement. The response format for the Likert scale items was (1) strongly disagree, (2) disagree, (3) neither agree nor disagree, (4) agree, (5) strongly agree, and (6) lacks sufficient knowledge to decide. Seven items included questions with checklists asking respondents to “select all that apply.” These items were included to gain information on (a) how the role of doctorally prepared nurses were understood to advance the profession of nursing (structure), (b) how nurses perceived the two degrees (structure), (c) how interested the respondents were in matriculating into a program (process), and (d) what factors nurses would consider in pursuing these degrees (process). Four items were forced multiple-choice items to determine interest in either a DNP or a PhD (outcome). One question asked about the degree to which the DNP was a substitute for the PhD to determine if the respondents understood the difference in the two degrees. In addition, participants were asked to write any comments that they would like to share with open-ended responses. Demographic data were also collected. The items were pretested online and then activated to be available for access and completion for 6 months from February to August 2006.

Analysis

Descriptive and correlational analyses were completed using SPSS Version 14 (SPSS Inc., Chicago, IL). Qualitative data in the form of comments at the end of the survey were analyzed using a content analysis with Ethnograph Version 5.0 (Qualis Research, Colorado Springs, CO) and a pattern coding method (Miles & Huberman, 1994; Qualis Research Associates, 1998). To enhance trustworthiness, the qualitative data were analyzed by two separate nurse researchers.

Findings

Demographic Characteristics

Most of the respondents were women out of a total sample size of 376. The mean and range of age were 48
years (SD = 9.17 years) and 27 to 73 years, respectively. Fifty-four percent (n = 202) identified their basic nursing education at the baccalaureate level, whereas 81% (n = 305) stated that their highest level of study was the master’s degree at the time of the survey. Fifty-two participants (14%) had a master’s degree in a nonnursing discipline, and 15 (4%) had a doctorate in a nonnursing area. Areas of practice included inpatient, critical care, anesthesia (certified registered nurse anesthetists), outpatient staff, and nurse practitioners (acute/primary care adult, anesthesia, family nurse practitioner, gerontology, pediatrics, psychiatric mental health, women’s health, and occupational health). Clinical nurse specialists were also represented in adult, community, maternal child, neonatal, oncology, operating room, psychiatric/mental health, school nursing, nurse administration, education, and research.

**Descriptive Data**

**Frequencies.** In a consistent pattern, many of the Likert-format items were answered with neutral responses, that is, responses indicated either agreement, disagreement, or lack of sufficient knowledge. Thirty-six percent (n = 136) indicated a neutral position on the statement, “The DNP provides comprehensive preparation for APNs than the current master’s in nursing.” However, in comparing collapsed levels of definite agreement or disagreement, 16% (n = 60) of the respondents agreed with the following statement: The DNP (a) is a substitute for a PhD in nursing, (b) will become an essential degree for APNs (35%, n = 133), (c) is a degree to which employers would give hiring preference (27%, n = 100), and (d) is a degree all schools of nursing should offer (25%, n = 94; see Tables 1 and 2).

The participants designated the DNP and PhD as different from a nursing role function perspective. They identified the PhD as a program of study that enhanced the creation of nursing knowledge; advanced teaching in academic settings; and fostered participation in interdisciplinary scholarship, publication, and presentation of research findings. In contrast, they identified the DNP as a program of study that enhanced teaching in clinical settings, promoted expert clinical practice, applied research findings in clinical settings, and promoted effective management of patients. Participant responses indicated that most of those surveyed disagreed with the statement that either of the degrees would help promote a nursing presence in interdisciplinary health teams (PhD, n = 272, 73%; DNP, n = 206, 55%).

When asked which degree they preferred as a general question, majority (55%, n = 206) indicated the DNP. Thirteen percent (n = 49) agreed or strongly agreed that they preferred the PhD in nursing. The rest of the sample did not indicate a definitive response (32%, n = 120). Factors that would influence applying for either degree were length of program, timing of classes, cost, reputation of the school, potential career advancement opportunities, and online courses.

**Relationships.** Correlations were analyzed comparing age, level of education, and experience by specialty with perceptions of role of the DNP or PhD degrees in advancing practice and research (see Table 3). Generally, there were statistically significant relationships shown ranging from .39 (P = .000) to .69 (P = .000) between

### Table 1. Frequencies and Percentages of Collapsed Strongly Agree/Agree, Neutral, and Strongly Disagree/Disagree Likert Scale and Categorical Questions (n = 376)

<table>
<thead>
<tr>
<th>Questions</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>DNP is a substitute for PhD</td>
<td>60 (16)</td>
<td>104 (28)</td>
<td>212 (56) *</td>
</tr>
<tr>
<td>DNP will become an APN essential degree</td>
<td>133 (35)</td>
<td>71 (19)</td>
<td>172 (46) *</td>
</tr>
<tr>
<td>Employers will give preference to DNP</td>
<td>100 (27)</td>
<td>110 (29)</td>
<td>166 (44) *</td>
</tr>
<tr>
<td>DNP will provide parity</td>
<td>147 (39)</td>
<td>83 (22)</td>
<td>146 (39) *</td>
</tr>
<tr>
<td>DNP provides comprehensive preparation</td>
<td>125 (33)</td>
<td>136 (36)</td>
<td>115 (31)</td>
</tr>
<tr>
<td>All schools of nursing should offer DNP</td>
<td>94 (25)</td>
<td>107 (28)</td>
<td>175 (47)</td>
</tr>
<tr>
<td>Prefer DNP rather than PhD</td>
<td>207 (55)</td>
<td>241 (65)</td>
<td>72 (19) *</td>
</tr>
<tr>
<td>Viable for future of nursing</td>
<td>178 (48)</td>
<td>n/a</td>
<td>197 (52) †</td>
</tr>
<tr>
<td>Viable to advance nurse educator role</td>
<td>128 (34)</td>
<td>n/a</td>
<td>247 (66) †</td>
</tr>
<tr>
<td>Beneficial for interdisciplinary work</td>
<td>169 (45)</td>
<td>n/a</td>
<td>206 (55) †</td>
</tr>
<tr>
<td>Promoting advancement of profession</td>
<td>184 (49)</td>
<td>n/a</td>
<td>190 (51) †</td>
</tr>
<tr>
<td>Good financial investment</td>
<td>46 (12)</td>
<td>n/a</td>
<td>329 (88) †</td>
</tr>
<tr>
<td>Too expensive for me</td>
<td>168 (45)</td>
<td>n/a</td>
<td>207 (55) †</td>
</tr>
</tbody>
</table>

Note: Values are presented as n (%).

* Likert-scale data (percentage not equal 100).
† Categorical data (yes/no).
greater age (50 to 69 years, n = 176) and agreement that the DNP was a comprehensive degree that would increase desirability in the workplace for hiring and achieve parity with other disciplines and should be offered to nurses as an educational option. Significantly, nurses of all ages (20 to 69 years) shared a perception that the DNP will provide comprehensive preparation for the APN role. Respondents older than 30 years were more apt than were younger respondents to agree that the DNP is a more comprehensive degree and supports parity with other professions and that all schools should offer the DNP. Correlations between advancing interdisciplinary scholarship, publication effort, and research by age were significant but had weaker correlations and were clustered in those nurses who were aged 40 years and older. For example, age-specific relationships with survey items demonstrate that younger cohorts of nurses in this sample (20–29 years) perceive the DNP as a more comprehensive program of study to prepare nurses for the advanced practice role. Those respondents aged 40–59 years expressed preference for the DNP rather than the PhD. These older nurses also expressed support for schools of nursing offering the DNP as a degree option. They agreed that parity with other professions and employment opportunities for DNP-prepared advanced practice nurses were apt to be benefits of this degree (see Table 3).

### Additional Comments

When asked at the end of the survey if respondents had additional comments, 195 respondents offered statements that tended to reflect concerns about the DNP. Key themes included concerns about (a) education clarity, (b) fiscal issues, (c) support for the DNP, (d) lack of support for the DNP, and (e) nonfiscal issues such as parity and workforce issues.

**Education Clarity.** Many participants indicated that adding more education to the current education trajectory for advanced practice was confusing and possibly detrimental to the profession and public understanding of the role of the advanced practice nurse. One person stated, “A doctorate for entry level to practice is nonsense. Why not go to medical school?” Another said, “I think we are hurting ourselves by making it [educational preparation] longer. Patients care about how much we care not what degree we have.”

**Fiscal Issues.** Concern was raised about the degree being a way to increase revenues to schools of nursing across the country. Others voiced concerns for students who will lose wages, time, and money in spending extended time in programs of study. For example, one individual stated, “There is no data that supports [that] a DNP will produce better qualified APNs. Is this just a financial incentive for the schools?” Another stated, “Costs in time and money will not be reimbursed by employers.” Also, wage issues were addressed: “Unless employers are willing to pay more, few would be interested.”

**Support of the DNP.** Advancing clinical practice as a way to support credibility and a move away from classroom study was strongly stated especially by nurse practitioner participants. “Any further schooling should be in clinical preparedness versus research and classroom work, that’s where I think programs are lacking,” one nurse practitioner stated. Another indicated, “I feel very strongly that NPs should have a clinical doctorate as entry to practice.” There was agreement that the DNP was preparation for advanced practice nurses in clinical practice rather than research-based work and that DNP education was a great opportunity for the profession. One participant stated, “The DNP brings credibility and consistency to our education.” Another characterized the DNP as “a great opportunity for the profession” and that “the DNP should be the terminal degree for APNs.”

**Lack of Support for the DNP.** Some raised concerns about the DNP graduate terminal degree as a way to eliminate APNs from the workplace: “I feel like I am

### Table 3. Correlations Between Age of Participants and Survey Statement (n = 376)

<table>
<thead>
<tr>
<th>Survey statement</th>
<th>Age in years</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>20–29 (n = 13)</td>
</tr>
<tr>
<td>DNP provides more comprehensive preparation for APN role than current PhD.</td>
<td>.691/.009</td>
</tr>
<tr>
<td>Employers will give preference to hiring APN with DNP rather than PhD.</td>
<td>.321/.013</td>
</tr>
<tr>
<td>DNP will credential nurses to achieve parity with other disciplines.</td>
<td>.472/.000</td>
</tr>
<tr>
<td>Feel that all schools of nursing should offer DNP.</td>
<td>.333/.010</td>
</tr>
<tr>
<td>Prefer PhD rather than DNP in nursing.</td>
<td></td>
</tr>
<tr>
<td>PhD advances nursing by participating in interdisciplinary scholarship.</td>
<td></td>
</tr>
<tr>
<td>PhD advances nursing by creating nursing knowledge through research program.</td>
<td></td>
</tr>
<tr>
<td>PhD advances nursing by publishing and presenting research findings.</td>
<td></td>
</tr>
</tbody>
</table>

Note: Values are presented as r correlation, P significance.
experiencing the 60s again and the ANA position statement of 1965. “If I had my BSN and had the option between a PA and DNP I would choose PA,” and “I think DNP is a mistake and will increase PA numbers.”

Nonfiscal Issues. These included degree parity with other professions and workforce issues. One respondent viewed, “The clinical doctorate in nursing is necessary [for nurses] to be viewed as valuable as an MD and DO.” Another stated, “Will MDs respect this [degree] or are [we] just hoping? Education does not always equal power.” Several raised concerns about whether employers will see value in this new degree and that perhaps increasing levels of education are only part of a need to address workplace issues for APNs, “You have to do something about the working conditions of NPs: long hours, salaries controlled by physicians…all big problems.”

Discussion

This article has presented a survey of nurses' perspectives on the DNP in the state of Massachusetts. The points of view of potential candidates for this degree were sought in February through August 2006. The viewpoints presented here are mixed as nurses, who will be potential candidates for doctoral degrees, consider their options. Clearly, the DNP is slightly preferred by this group when compared with the PhD, which is seen as having a greater research focus and may represent for some a divergence from clinical practice. Yet, realities of the implementation of this degree have not gone unnoticed. Potential barriers to taking on a new degree were articulated by many of the respondents who saw issues with cost, time, and family constraints, as well as disruption of one's career trajectory as impediments. Some respondents questioned the motivation for this change, whereas others noted the benefit of DNP education for advanced practice nurses who work in increasingly complex health care environments.

The support from older nurses of the DNP in light of the continued inability for the nursing community to estimate the acceptance and use of this new education program was an interesting finding. The level of support from this group may come from a position of wisdom in practice Perhaps older nurses see the need for this level of preparation as more essential than do younger nurses because of their understanding of the increasing complexity of health care.

The relatively low degree of support for the PhD, a program which has been a part of nursing education for more than 30 years, is of concern. The DNP may be a preferred choice for the many respondents who view the PhD as an elite degree for nurses who are mainly interested in research careers.

The limitations of this study include that, at the time this survey was begun, the concept of the DNP was still new. Over time, more information will be received on this new degree, and views may change based on new ways of perceiving the degree. In addition, the study used a nonprobability sampling method to solicit respondents through their professional associations.

Respondents may have chosen to complete the online survey because of specific negative or positive ideas about the DNP. Further, nurses who were not members of the organizations sampled or of any professional organizations did not have access to the survey. Results may be generalizable only to nurses similar to those who participated in this study: These nurses are members of professional organizations who are relatively highly educated and who live in states similar to Massachusetts—a state with a large number of schools of nursing, a significant proportion of highly educated and professionally oriented nurses, and a significant shortage of acute care nurses.

Efforts to compare these findings with those from other nursing schools locally and nationally were difficult for several reasons. First, in the local area of Boston, Massachusetts, schools of nursing contacted the researchers directly to obtain our findings rather than developing an inquiry of their own. Second, many state nursing associations across the United States published commentaries about the DNP to explain the idea to their constituencies, raise concerns, pose questions about employability through the eyes of administrators, and describe progress being made to operationalize program in academic institutions, but none published data acquired through a research or survey method (Douglas, 2005; Grant, 2006; Stanley, 2005; Steefel, 2005).

A search in the literature for published national reports of survey findings similar to this survey study yielded few comparisons. In Maine, focus groups and paper/pencil surveys were completed in 2005 (University of Southern Maine, 2005). Findings from a survey (5,500 surveys sent, 554 returned, 10% return rate) indicated similar trends found in this study relevant to nurses currently practicing in both northern and southern Maine. Those most interested in the DNP were those who had already completed traditional baccalaureate and master's degrees. Those who completed degrees in disciplines other than nursing demonstrated less interest in the DNP, which may be a function of cost and time already taken to redirect career trajectories. Those interested in the DNP wanted to be involved in advanced practice and a teaching role. Interested respondents stated that they wanted to begin the degree within 5 years. However, more respondents in the Maine survey were not in favor of the DNP as the terminal degree for APNs—204 respondents were not in favor, whereas 163 were in favor of the degree. Those who were in favor supported the use of minimal classroom contact combined with online work as the way to design a program that would be user friendly to their needs.

Implications

The DNP is an innovation that will change the landscape of nursing education in the United States. The nurses in this study offered only modest support for the DNP. Currently, more information is available regarding this program, and many schools of nursing have begun...
offering the degree. It is possible that these events will enhance the level of support that nurses have for the DNP program as it becomes a mainstream option in nursing education.

Hinshaw et al. (2005) have noted the benefits of the DNP for nursing education. These authors advocated for distinguishing “between the educational needs and goals of nursing as a practice profession that requires practitioners with clinical expertise from nursing as an academic discipline and science that requires independent researchers and scientists to build the body of knowledge” (p. 74). According to these authors, reengineering nursing education to include a nonresearch clinical doctorate similar to the doctorate in medicine and pharmacy would permit some of the profession’s doctorate programs to focus exclusively on producing scientists and researchers with the ultimate benefit of advancing the science of nursing.

Education models that are cost efficient, flexible, and responsive to the time constraints of busy nurses are needed to make the DNP a viable option. These models should include options for online courses, weekend institutes offered across entire academic year calendars not just semesters, virtual online conferencing to develop collegial knowledge and support, and ways to develop group work and study across the country or the world for international students.

References


