Why Rush Will Keep the DNSc

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Surveys of research-intensive doctoral programs in nursing reveal few differences between the doctor of nursing science (DNSc) and the doctor of philosophy (PhD) degrees in nursing. Yet the proportion of DNSc programs relative to PhD programs in nursing has declined progressively over the past 10 years. Recently, Rush University College of Nursing formed a task force to examine whether Rush should continue to offer the DNSc degree or change to a PhD in nursing program. Task force members interviewed 21 nurse leaders representing 18 universities granting doctoral degrees in nursing about their perceptions of the DNSc and PhD in nursing degrees, the focus of their doctoral programs, why their nursing school chose the degree it currently offers, and whether Rush should retain the DNSc degree. This article describes the results of those interviews, how their comments helped the task force re-evaluate its goals for doctoral education, and the rationale for ultimately choosing to retain the DNSc degree. (Index words: Doctoral education; Nursing; Research doctorate) J Prof Nurs 19:223-229, 2003. © 2003 Elsevier Inc. All rights reserved.

Although doctoral education for nurses dates back to the early 1900s, the first nurses to obtain doctoral degrees earned them in education or in the basic or social sciences. These programs provided a research-oriented focus but were devoid of nursing content (Meleis, 1988). In the 1960s, the number of nurses pursuing doctorates in basic science disciplines increased when the federal government began supporting Nurse Scientist programs at 10 universities (Gortner, 1991; Grace, 1989). These programs, modeled after programs in medicine, were designed to provide clinicians with research training in the basic sciences. A few programs had minors in nursing but most had no nursing content. It was not until the 1970s that several university-based nursing schools developed doctoral programs in nursing with the goals of building the discipline of nursing through research and generating knowledge to serve as the scientific base for clinical practice. It was in this era that Rush University College of Nursing developed the doctor of nursing science (DNSc) program in 1977 with the goal of applying research methods to the study of clinical phenomena. Many nurses who had obtained doctor of philosophy (PhD) and other doctoral degrees during this period were not involved in clinical practice, nor were they focusing their research on problems that were relevant to clinical nursing practice. Rush’s DNSc degree was intended jointly to emphasize science, scholarship, and clinical competence (Christman, 1977; Fishl, 1994).

Initially, the number of nursing programs offering PhD and DNSc (or doctor of nursing science or doctor of science in nursing) degrees was about equal. However, over time, PhD programs in nursing grew at a faster rate than DNSc programs and today, PhD programs represent 86 percent (n = 64) of all doctoral nursing programs (American Association of Colleges of Nursing, 2001). Three factors account for this trend: (1) many programs that originally offered the DNSc converted to the PhD degree; (2) programs that

granted both degrees dropped the DNSc; and (3) all but 3 of the 25 programs that have started since 1990 grant the PhD degree.

**Nursing PhD Versus DNSc Degree: Similar Strain or Different Species?**

In graduate education, clear distinctions are made between research (PhD) and professional research doctoral (i.e., DNSc) degrees. The PhD degree is awarded as “the mark of highest achievement in preparation for active scholarship and research” (Council of Graduate Schools, 1990, Preface). The central purpose of the PhD program is to prepare students for a lifetime of intellectual inquiry characterized by creative scholarship, research, and the extension of knowledge (Council of Graduate Schools in the United States, 1982). The PhD program is governed and administered by the university through a graduate school or council and is devoid of professional practice requirements and content (Council of Graduate Schools in the United States, 1990; Donaldson, 2001). In contrast, the professional doctorate is the highest degree awarded in recognition of preparation for professional practice, applied research, and the application of knowledge (Council of Graduate Schools in the United States, 1990). It is governed and administered by the relevant professional school and applicants are expected to have appropriate professional degrees and/or credentials (Donaldson, 2001).

Historically, the nursing profession has endorsed these theoretical distinctions (Edwardson, 2001). The PhD has been viewed as the research degree to generate new knowledge and to develop the clinical science underlying practice. The DNSc has been viewed as the professional doctoral degree intended to prepare individuals to integrate and apply knowledge and to engage in clinical investigations. However, in practice, these distinctions do not apply, and the DNSc has emerged as a professional research doctorate incorporating aspects of both the PhD and the professional doctorate. Similarly, some aspects of the nursing PhD are inconsistent with the traditional university PhD. For example, although the PhD should not have professional requirements for admission, a survey of 48 nursing doctoral programs (92 percent of which granted the PhD) found that 90 percent required a degree from an accredited nursing program, 81 percent required a current nursing license, and only 8.5 percent accepted nonnurse applicants (McEwen & Bechtel, 2000).

Recent surveys of nursing PhD and DNSc programs establish that there is little difference between the two programs in terms of research content and training. Both are research focused; are similar with respect to admission criteria, curricula, dissertation requirements, and the use of distance education; and have similar faculty credentials, preparation, and roles (Donaldson, 2001; McEwen & Bechtel, 2000; Minnick & Halstead, 2002; Ziemer et al., 1992). The only differences noted were that PhD programs were more likely to have a research practicum and more credit hours of research, whereas DNSc programs required more nonresearch clinical hours (McEwen & Bechtel, 2000).

Funding agencies, including the National Institutes of Health, do not distinguish between the PhD and DNSc degrees in terms of preparation and qualification of students for research careers; both are recognized as research scientist degrees. Likewise, the academic marketplace views the two degrees as equivalent in terms of preparation for leadership positions, faculty positions, and research mentoring of doctoral students. Indeed, the American Association of Colleges of Nursing (AACN) (2001) stated that although the content, course requirements, and research emphasis of PhD and DNSc programs may vary slightly, both programs are designed “to prepare students to pursue intellectual inquiry and conduct independent research for the purpose of extending knowledge” (p. 1). Consequently, the most recent recommendation of the AACN was to continue with a single set of quality indicators for research-focused doctoral nursing programs, regardless of whether the program grants a PhD or a DNSc degree.

**Rationale for Task Force to Examine the DNSc Degree at Rush**

Considering these findings and the significant decline in the proportion of DNSc programs compared with PhD programs, Rush University College of Nursing began a process to examine critically whether it should retain the DNSc degree or convert to a PhD degree. Of particular concern was the school’s ability to maintain the viability of the DNSc degree in view of the rapid decline in these programs nationwide. As noted by Donaldson (2001), “the PhD has emerged as the more prevalent degree primarily because of political influences” which may have led to the DNSc degree being “inappropriately devalued” (p. 32). Examination of these trends in doctoral nursing educa-
tion suggested that the DNSc degree may no longer have the same relevance as when it was established. The central question for the Task Force was: Without a critical mass of DNSc programs, did it make sense to continue to offer the degree, particularly when there were so few differences between the PhD and DNSc programs?

**Task Force Process**

To examine formally the most appropriate research doctorate for the College of Nursing, a task force was appointed by the Dean. Task force members included 5 current nursing faculty, 2 alumni of the DNSc program, the Associate Dean of the Medical College, and the Dean of the Graduate College and College of Health Sciences. Of the 9 task force members, 5 held DNSc degrees, 3 held PhD degrees, and 1 held an EdD degree. At the initial meeting, the Dean discussed the rationale for the task force and its charge and timeline. Pertinent background materials were reviewed and approaches to addressing the task force assignment were discussed. The task force concluded that the best approach was to interview external consultants, consisting of selected nursing leaders, as well as deans and faculty at colleges currently offering PhD and/or DNSc degrees.

At the next meeting, the task force identified potential external consultants who represented (1) programs that converted from the DNSc to the PhD, (2) programs that offer both degrees, (3) programs that have offered the PhD since its inception, and (4) programs that offered only the DNSc. The task force also identified consultants from diverse geographic locations representing a mix of newer and older programs. Additionally, potential consultants included nursing leaders with unique historic perspectives. To ensure consistency of information obtained from the consultants, the task force designed a set of standardized interview questions. Interview questions focused on (1) perceptions of differences and commonalities between the DNSc and PhD, (2) programs that converted from the DNSc to the PhD, (3) programs that offered only the DNSc, and (4) thoughts about whether Rush University College of Nursing should convert to the PhD. Before the interviews, the Dean contacted each of the potential consultants via e-mail to advise them of the task force and to ask them to participate in a phone interview. A copy of the interview questions was attached to the e-mail, as was the name of the task force member who would interview the consultant. All but 3 individuals responded to the request to be interviewed.

The final group of consultants who were interviewed included nursing leaders from (1) 5 nursing schools that had converted from the DNSc to the PhD, (2) 2 nursing schools that offered both the DNSc and PhD degrees, (3) 4 nursing schools that offered only the DNSc since its inception, and (6) schools of nursing that offered only the PhD to their students. Additionally, interviews were conducted with individuals who were no longer at the universities they represented, but they could provide historical perspective regarding the particular programs in which they had been involved. In all, 21 consultants representing 18 universities were interviewed. All interviews were completed during a 1-month time frame. At subsequent meetings, task force members summarized the interview findings and distributed copies of the detailed interview responses to other task force members. A subgroup of the task force was formed to consolidate the interview responses into 2 viewpoints: one that included statements that supported continuing the DNSc degree and one that included statements that supported converting the degree to the PhD.

From the task force’s inception through its recommendation phase, Rush University College of Nursing had been keeping track of all interviews and compiled a document that included all statements that supported retaining the DNSc degree. At the final meeting of the task force, these consolidated recommendations were reviewed and formed the basis for the recommendations made to the Executive Committee of the College of Nursing.

**Findings**

Regardless of the degree offered at the institution, the consultants disagreed about the differences between the PhD and the DNSc. The responses to the question regarding differences between the 2 degrees tended to fall into 1 of 4 categories: (1) the purpose of the degree, (2) the focus of the program, (3) the methodologies used, and (4) the duration of the program.

DIFFERENCES BETWEEN THE PhD AND DNSc

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course work, (3) clarity of the degree, and (4) governance of the program.

**PURPOSE OF THE DEGREE**

Of the 16 consultants who indicated there were differences between PhD and DNSc programs, 14 of the comments centered on the recognition of the PhD as a research doctorate. In general, the consultants asserted that the purpose of the PhD is to build knowledge and the scientific foundation of nursing practice by developing and testing theory. That is, those who graduated from PhD programs would be conducting basic research that would build the body of nursing science.

One of the consultants stated that the PhD program prepares the graduate to be a scientist. Another consultant thought that the research conducted by someone with a PhD was always guided by theoretical or conceptual phenomenon, whereas the research conducted by someone with a DNSc might not necessarily be theory driven (e.g., evaluation research or quality-improvement studies).

There was less agreement regarding the purpose of the DNSc programs. Twelve of the consultants' comments centered on the DNSc as being a "clinical research, applied research, professional, or practice" degree. As such, graduates of DNSc programs would be prepared to conduct applied research or test theory in the real world but would not be expected to invent the science of nursing. Six of the consultants indicated that graduates of DNSc programs would most likely focus on clinical research such as application research, intervention research, research to solve problems in the clinical arena, or research in collaboration with other disciplines.

In addition to the role of researcher, the expectation of graduates of PhD programs is that they will become faculty within colleges of nursing. In contrast, graduates of DNSc programs might become faculty members but might also be senior clinicians or work in administrative roles in clinical settings.

**FOCUS OF THE PROGRAM**

Twelve consultants differentiated the 2 degrees by the course work required of students. Five consultants felt that the PhD programs were more research focused or research intensive than the DNSc programs. Two consultants reported that PhD programs required more theory and/or philosophy of science. There was less agreement among the consultants regarding DNSc programs. One consultant indicated that DNSc students take more courses related to interventions or health care delivery while another indicated that DNSc programs emphasize clinical and related basic science content. Five other consultants felt that DNSc programs focus more on applied research and/or program evaluation.

Interestingly, 2 consultants discussed the PhD as a degree that should not be discipline specific. These consultants asserted that that as a philosophy of science degree, the PhD curriculum should not include courses that require students to be nurses. Given that the course work in the PhD program should not be discipline related, nonnurses could be admitted as students into these programs.

**CLARITY OF DEGREE AND GOVERNANCE**

Two consultants thought that the major difference between the 2 programs was the recognition of the degree itself. That is, the PhD was more recognizable and better understood as a research doctorate by those outside of nursing. In contrast, the DNSc was not well understood as a research doctorate and required explanation. Indeed, some consultants maintained that there is not universal agreement within nursing that the DNSc is a research degree.

When differentiating the 2 degrees, 2 of the consultants cited the governance of the degrees. This distinction became more apparent when the consultants were asked specifically about the governance of the doctoral program. That is, in response to questions about the relationship between the doctoral program and the university, the consultants indicated that the graduate college universally administered the PhD program. Despite the need to comply with policies set by the graduate college, the consultants indicated that the faculty in the schools of nursing made decisions regarding admissions, curriculum design, and curriculum implementation. Faculty who taught in the graduate programs also needed to be appointed to the graduate college.

On the other hand, the DNSc programs were governed within the various schools of nursing. That is, the schools of nursing determined policies and procedures related to the development and implementation of the program and also granted the DNSc degree to the students.

**COMMONALITY BETWEEN THE PhD AND DNSc**

Fifteen consultants indicated areas of commonality between the PhD and DNSc. Ten consultants agreed that both degrees (1) were research degrees, (2) prepared their graduates to be investigators, (3) were equal
in rigor, or (4) were the outcome of curricula that emphasized theory, research, and philosophy of science. One consultant indicated that any differences between the 2 degrees were in the ideal world, but in reality there was little difference between the 2 types of programs. Another consultant mentioned that the difference in the curricula was one of emphasis, but not actual content. In other words, both curricula contained courses in theory, research, and statistics, but PhD programs might contain more courses. Three consultants asserted that the 2 programs have become more similar since the inception of doctoral programs in nursing. And, finally, 2 of the consultants mentioned that the National Institutes of Health and the National Institute of Nursing Research recognize both degrees as research degrees. These consultants went on to state that faculty are hired based on scholarly productivity, rather than the type of degree held.

**RATIONALE FOR CONVERTING OR NOT CONVERTING**

Of the 5 programs that had converted their degree from the DNSc to the PhD, 3 explicitly indicated that they would have preferred to offer the PhD at the outset, but at the time the PhD would not have been approved by the university governing body. Over time, as the faculty at these universities obtained external funding and increased their scholarly productivity, the political climate and attitude toward the PhD in nursing within the university changed. Two of the consultants perceived that as DNSc programs, they lost qualified students to other nursing PhD programs. All of the consultants affiliated with programs that converted from the DNSc to the PhD stated that the move to convert to the PhD represented what was being taught in their program and brought the nursing doctoral program in line with other doctoral programs within their universities. Other than 1 or 2 additional research courses or seminars, few changes were made in the curricula as these programs converted from DNSc to PhD programs.

Of the 6 programs that currently offer the DNSc, 3 consultants indicated that they have not considered converting. One consultant felt that the DNSc gave the school a competitive advantage, believing that the DNSc attracts students who want a clinical research focus. Three consultants stated that they have considered converting, but for various reasons have not made the move. For instance, one consultant indicated that the university had placed a moratorium on new PhD programs so the faculty had recommitted themselves to the DNSc.

**SHOULD RUSH CONVERT TO THE PhD?**

Five consultants felt that Rush should convert to the PhD. These consultants indicated that this move would bring Rush in line with the majority of other doctoral programs. They also felt that greater recognition of the PhD in the larger academic community would reduce confusion about doctoral degrees within and outside the discipline. Despite this perspective, these consultants also indicated disadvantages to the move. They expressed concern that alumni would be upset by the change and that Rush would lose its current marketing edge of being the strongest clinically focused program.

However, 10 consultants felt that Rush should not convert to the PhD. Interestingly, all of these consultants represented universities that offered either both degrees or only the DNSc. Two of the consultants cautioned us to consider carefully the reasons for converting. These consultants pointed out that if Rush’s program already was attracting students and its graduates were conducting research, then why fix something that was not broken. If the school was not attracting the kind of students and faculty it would like, converting the program degree to a PhD would not necessarily solve that problem. In the end, they warned not to convert from the DNSc to the PhD degree simply to conform with other doctoral programs or perceived ease of marketing.

Seven consultants cited Rush’s strong clinical reputation and history of practice-oriented research as the major reason to retain the DNSc degree. Two consultants referred to the clinical relationships and the unification model as indications of the unique position Rush University holds within the Medical Center. One consultant saw Rush as a leader and trendsetter. This same consultant expressed concern that Rush’s conversion to a PhD program could signal the end of the clinical doctorate. Another consultant cautioned to stray not too far from the school’s history and core mission. One consultant suggested that the school examine the fit between its doctoral degree and the institution’s Carnegie classification (The Carnegie Foundation for the Advancement of Teaching, 1994). Specifically, “Research I” universities offer a full range of baccalaureate and graduate programs with courses that complement nursing programs of study. In contrast, Rush University College of Nursing is classified as a “Specialized Institution.” It offers relatively few baccalaureate and graduate programs and most of the degrees it awards are in specialized health care fields. Finally, one consultant suggested that Rush consider
offering both the DNSc and PhD degrees. The Carnegie Foundation revised its classification system in 2000 (The Carnegie Foundation for the Advancement of Teaching, 2000). Research I and II institutions are now combined under a new classification “Doctorate-granting Institutions.” However, Rush University remains classified as a “Specialized Institution.”

Discussion

When the Dean of the Rush University College of Nursing convened this task force, she asked it to keep an open mind about the most appropriate doctoral degree to award. After several months of interviews, reading, and discussion, the task force weighed the many ideas and recommendations of 21 nursing leaders. Although many of the consultants’ responses reflected disagreements long debated in the literature (Bellack, 2002; Donaldson, 2001; Downs, 1989; Grace, 1989), the task force was nonetheless able to find common threads that helped answer the question: should Rush offer the DNSc or PhD degree in nursing?

There was agreement among most consultants that the DNSc and PhD degrees were both research degrees although there was disagreement as to the differences between them. The task force agreed with the consultants who defined the purposes of DNSc programs as those that focused on applied or clinical research, a purpose recently supported by the American Association of Colleges of Nursing (2001). This definition fits well with the central focus of Rush’s DNSc program to educate clinical nurse scientists and is consistent with priorities set by funding agencies that place emphasis on research directly affecting the health of society.

However, the responses to the question about the differences between PhD and DNSc programs reflected some confusion. Although some consultants believed that PhD programs focused more on theory and that PhD program graduates could be expected to invent the science of nursing, these differences were obscured by the fact that few if any curricular changes were made when DNSc programs converted to PhD programs. Moreover, DNSc dissertations at Rush require that all students conduct original, clinically relevant research guided by a strong theoretical base. Contrary to one consultant’s observations, quality improvement studies would not be considered acceptable dissertation topics at Rush. This led the task force to concur with those consultants who described differences between the 2 degree programs as more theoretical than real, a perspective supported by numerous surveys comparing the 2 types of programs (McEwen & Bechtel, 2000; Minnick & Halstead, 2002; Snyder-Halpern, 1986).

Some consultants raised the concern that the PhD might be a more marketable degree than the DNSc degree. In fact, some consultants perceived that qualified applicants had been lost when their programs offered the DNSc degree. Interestingly, some consultants pointed out that PhD programs prepared graduates solely for the role of faculty whereas DNSc programs prepared graduates to function in a variety of roles including faculty, senior clinician, and health care administrator. Thus, it would appear that the DNSc degree actually would be more marketable to students than the PhD degree because its recipients would be prepared to work in more diverse roles.

The concern about marketability may not be about whether graduates can find jobs and lead productive careers but about name recognition. Although the PhD is understood universally as a research doctorate, the DNSc requires more explanation. This distinction about the clarity of the degree’s name was identified consistently by the consultants as a problem. It is understandable that having to explain the DNSc degree would make some nurses uneasy, particularly in a discipline that historically has been marginalized in academic and scientific circles. However, it also could be argued that the DNSc will require less explanation as more graduates of these programs produce thoughtful and important work. Given that the National Institutes of Health and the American Association of Colleges of Nursing recognize both doctorates as research doctorates and that the consultants voiced equal preference for hiring faculty with either degree, opportunities for producing thoughtful and important work should abound. However, it is essential that those within the discipline accept the degree and are clear about its nature and integrity. Based on the responses from the consultants, herein lies the true marketing challenge.

Two consultants pointed out that an important distinction between the PhD and the DNSc lies in its potential applicants. DNSc programs are governed by the school of nursing and focus on the applied science of nursing, PhD programs are governed by the universities (not the discipline) and educate students about the knowledge and science related to the discipline. However, as Donaldson (2001) pointed out, PhD programs “should be devoid of professional practice requirements and content” (p. 4). As such, these consultants maintained that PhD programs in nursing should be open to qualified applicants who are not nurses.
contrast, DNSc programs should require that students enter with knowledge that is specific to the discipline, and therefore, require registered nurse licensure for admission. These comments led the task force to re-examine the Rush curriculum and whether a student who was not a nurse could be successful in the DNSc program. The task force concluded that nonnurses would not be successful because the DNSc coursework required an understanding of clinical practice issues and methods to achieve course objectives. Clearly, Rush was offering a research doctorate that was specific to the discipline of nursing.

**Summary**

The comments culled from the interviews with 21 consultants about the PhD and DNSc degrees and the deliberations within the task force after these interviews led to the conclusion that the most appropriate doctoral research degree for Rush University College of Nursing was the DNSc. Rush’s doctoral program educates nurses to be clinical scientists, prepared to conduct independent research on clinically relevant phenomena. The task force noted the concerns raised by some consultants about offering a degree that may not be familiar to those outside of nursing and that may engender skepticism from those within nursing. But we concluded that the best way to address these concerns is to ensure that DNSc programs are rigorous ones that prepare competent nurse researchers. Weak DNSc programs do as much harm to the nursing profession as weak PhD programs. To that end, Rush University College of Nursing has reaffirmed its commitment to a high-quality, research-intensive, clinically relevant program that leads to the DNSc degree.

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**References**


