DIFFERENCES BETWEEN DOCTORAL LEVEL NURSE PRACTITIONER

PROGRAMS AND MASTER LEVEL NURSE PRACTITIONER PROGRAMS AS

REFLECTED IN THE TERMINAL OBJECTIVES AND CURRICULAR PATTERNS

by

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ABSTRACT

This study examined differences between doctoral level nurse practitioner programs and master's level prepared nurse practitioner programs as reflected in the terminal objectives and curricular patterns. The American Association of Colleges of Nursing's (AACN) decision in October 2004 led to adoption of the goal to have preparation in advanced nursing occur at the doctorate level (Doctorate of Nursing Practice or DNP). Other forces driving the DNP are increasing acuity of health problems, an aging population, increasing uninsured individuals and shortage of nursing faculty. Nursing educators must be proactive in meeting these challenges by preparing advanced practice providers with the necessary education and skills.

The design of this study was a cross-sectional survey conducted between January 16 and February 10, 2008. Twenty DNP programs and thirty masters programs were randomly selected. The survey was developed in a Snap9$^{®}$ program and was sent by e-mail to be completed on line.

Survey results indicated higher numbers of required clinical hours correlated with higher pass rates in the board examinations. Additional credit hours were also found to result in higher pass rates. The study also indicated differences in the terminal objectives in master's programs compared to doctoral programs utilizing the Cognitive domain in Bloom's taxonomy.

The findings from this study are limited and should be interpreted with care as the sample size was small.

CHAPTER 1

INTRODUCTION TO THE STUDY

Introduction

In today's world, increasing health problems, an aging population, and ever growing numbers of uninsured people are demanding changes in the health care delivery system. Nursing must be proactive in meeting these challenges by preparing advanced practice providers with the necessary education and skills consistent with the demands of the profession. Evidence has shown that nurse practitioners with graduate degrees provide high-quality, cost-effective, and safe care (National Association of Clinical Nurse Specialists [NACNS], 2005). A cost analysis comparing the costs of services provided by a facility for homeless patients managed by a nurse practitioner with other community services available showed that interventions occurred earlier and at lower cost (Hunter et al., 1999). A more recent study of 26 primary care practices with approximately two million visits by 206 providers, determined that the care provided by nurse practitioners cost less than service provided at facilities where nurse practitioners were not utilized (Roblin et al., 2004).

The purpose of this study is to examine the differences between doctoral and master's degree nurse practitioner programs as reflected in terminal objectives and curricular patterns.

Background

Little is known about the differences between master's and doctoral programs that prepare nurse practitioners. One organization that has done some research on this matter is the American Association of Colleges of Nursing (AACN), a national organization that represents both baccalaureate and graduate schools of nursing and collaborates with different professions and disciplines to examine current issues in health care. One of the most difficult issues facing developers of higher education programs for nurse practitioners is whether all programs should adopt a standardized purpose and a set of expected competencies. Most stakeholders acknowledge standardization would limit confusion among students, employers, and the public. However, there is some disagreement about the form standardization should take. Some have argued the practice-focused doctorate should be limited to those involved in direct patient care. Others have expanded the definition to include both direct clinical practice and areas that support clinical practice (AACN, October, 2004).

Another organization that has addressed this issue is the National Organization of Nurse Practitioner Faculties (NONPF) which has worked on formulating the doctorate of nursing practice (DNP) since 2001. This organization concentrates on key health care issues and the need for reshaping educational programs. It has supported research to guide nurse practitioner educators that resulted in the creation of a Web-based resource center (NONPF, 2006).

"The Doctor of Nursing Practice (DNP) is the recommended degree title for the practice doctorate in nursing. NONPF supports the notion of a common degree title to

represent consistency across programs and universities. Current documents now and in the immediate future will continue to use the broader term of the practice doctorate rather than the specific degree title to indicate that some academic institutions offer or are developing practice doctorate programs that may award other degree titles; however, NONPF recommends that emerging programs follow the national recommendation of the DNP as the degree title" (NONPF, 2006, para.2).

Concerns Regarding the DNP Proposal

The AACN proposal represents a major paradigm shift in nursing practice and education. This change has the potential to change a profession that has a long history of professional inconsistency. There is currently no consensus as to how the DNP will improve the nursing profession, and there have been no studies showing that nurse practitioners who earn a doctoral degree will provide better patient care than those who earn master's degrees.

The educational competencies and outcomes for nurse practitioners studying for a doctor of nursing practice degree have not been fully developed. It is unclear what additional requirements will need to be incorporated into the doctoral curricula that are not in the master's degree curricula. There is also a lack of clarity in proposed educational pathways and the preparation of educators who will teach the proposed programs of study. Some critics have objected to adding more responsibilities to the workloads of faculty who are already burdened by limited resources and time.

Current evidence demonstrates that advanced-practice nurses who have master's degrees provide high-quality, cost-effective, and safe nursing care. According to the American Nurses Association Malpractice Data Bank, harm associated with advanced-practice nurses with master's degrees is negligible (National Association of Clinical Nurse Specialists, 2005). It is unclear whether the DNP would contribute to increased patient safety because no studies have been undertaken to find out; nor have any studies been done on the cost-effectiveness and affordability of shifting from master level programs to prepare nurse practitioners to doctoral level programs. In addition, it is not known whether the salaries of nurse practitioners with doctoral degrees will be high enough to offset the increased costs of their education. Finally, it is not known whether prospective employers and third-party payers can afford nurse practitioners with doctoral degrees.

Doctoral Education in Nursing

There are two types of doctoral programs for those in nursing and other practice disciplines: research-focused and practice-focused. In this paper the term "practice" refers to any form of nursing intervention that influences health care outcomes for individuals or populations, including the direct care of individual patients, management of care for individuals and populations, administration of nursing and health care organizations, and the development and implementation of health policy. The AACN (2004) stated, "Preparation at the practice doctorate level includes advanced preparation

in nursing, based on nursing science, and is at the highest level of nursing practice"
(para.9).

The two types of doctoral programs can exist together. Most research-focused
programs in nursing offer the academic doctorate (PhD). However, there are some
programs that offer professional doctorates such as the doctorate of nursing science (DNS
or DNSc). The American Association of Colleges of Nursing (AACN) Task Force on
Quality Doctoral Education found few differences between the PhD and DNS programs
and recommended they be classified as research-focused doctoral programs (AACN,
October, 2004). Some examples of practice-focused programs in other professions are the
Doctorate of Physical Therapy (DPT), the Doctor of Pharmacy (Pharm. D), the Doctor of
Medicine (MD), the Doctor of Psychology (PsyD), and the Doctor of Dental Surgery
(DDS). In nursing, practice-focused and advanced practice doctoral degrees currently
offered include a Doctor of Nursing (ND) and the Doctor of Nursing Practice (DNP)
(AACN, October, 2004).

In this study, a master's level nurse practitioner program is a program offered by
an academic institution that prepares graduate nurses for practice as a family nurse
practitioner and awards a master's degree upon completion. It is intended to build upon
scholarly, clinical, and leadership skills that the student already has acquired.

A doctoral level nurse practitioner program prepares nurse graduates similar to
other health professional doctoral programs and awards a doctor of nursing practice upon
completion. The focus of this level program is to prepare the clinician on leadership in
evidence-based practice, health policy, and management.

Summary

Little is known about the differences between master's and doctoral programs that prepare nurse practitioners. Increasing health problems, an aging population, and ever growing numbers of uninsured people are demanding changes in the health care delivery system. Nursing must be proactive in meeting these challenges by preparing advanced practice providers with the necessary education and skills consistent with the demands of the profession. Evidence has shown that nurse practitioners with graduate degrees provide high-quality, cost-effective, and safe care.

CHAPTER 2

REVIEW OF THE LITERATURE

Introduction

This study reviews the literature on the Doctorate of Nursing Practice. The history of doctoral level nursing programs and trends were discussed. The purpose of the Doctorate of Nursing Practice was reviewed along with comparisons between research-focused and practice-focused doctoral education. Next, extra-professional and intra-professional perceptions of the Doctorate of Nursing Practice was studied; followed by a review of the theoretical framework utilized in this research.

History

Advances in science and technology allow for more preventive and diagnostic treatments, so clinical treatment has moved away from the hospital (Columbia School of Nursing, 2006, p.1). The Institute of Medicine (IOM) recognized a need to restructure the educational preparation of health care providers in order to meet the new demands placed on them. In 1996, IOM defined primary care as "the provision of integrated, accessible health care services by clinicians who are accountable for addressing a large majority of personal health care needs, developing a sustained partnership with patients and practicing in the context of family and community" (Columbia School of Nursing, 2006, p.1). Columbia University School of Nursing created a clinical doctoral program that

embodied the necessary education and clinical skills identified in the IOM's definition of

primary care.

> "Columbia School of Nursing's clinical doctorate program was formulated on outcomes of empirical studies provided by physicians and nurse practitioners (Brown & Grimes, 1995; Carroll & Fay, 1997; Jones & Clark, 1997; Kleinpell-Nowell & Weiner, 1999; Safriet, 1992; Spitzer et al., 1974; U.S. Office of Technology, 1986). These culminated in a randomized clinical trial study demonstrating that primary care physicians and nurse practitioners provide the same quality of care, the same patient satisfaction, and are just as cost effective (Mundinger et al., 2000)" (Columbia School of Nursing, 2006, p.1).

The scope of practice of the faculty at the Columbia School of Nursing was reviewed to

examine the skills and knowledge of these nurse practitioners, and they were found to be

consistent with the IOM's guidelines. Utilizing the model of the nurse practitioner

program at Columbia School of Nursing, curriculum and competencies for the graduate

program were developed (Columbia School of Nursing, January 2006, p.1).

In 2000, the National Organization of Nurse Practitioner Faculties (NONPF)

recognized the existing nursing doctorate (ND) programs lacked consistency and a

unified approach and recommended parallel credentialing for all practicing professionals.

This led to the formation in 2001 of the NONPF Practice Doctorate Task Force (PDTF),

also known as the Clinical Doctorate Task Force (CDTF). This task force was designed

to develop a conceptual framework to guide its members in the formation of a practice

doctorate (Marion et al., 2003).

In June of 2002, NONPF collaborated with the American Association of Colleges

of Nursing's (AACN) clinical doctorate task force, and then NONPF's board approved an

initiative on the practice doctorate in July of that same year. In the fall, NONPF

sponsored a "teleweb" on the Internet, "The Clinical Doctorate in Nursing: Future or

Fringe?" hosted by the President of NONPF, Diane Viens. This teleweb was made into a

Web-based resource center for clinicians and faculty and has been visited by nurse

practitioners and faculty from all over the United States (Marion et al., 2003).

In 2003, NONPF solicited feedback from its members and guests to help set up

the practice doctorate. In June of that year, the NONPF board approved the

recommendations of its practice doctorate task force (PDTF) and developed its first set of

core competencies for all types of nurse practitioners. These competencies were

evidence-based and patient-centered and aimed at helping families return to and maintain

a healthy status. These competencies have since been revised as a result of increasing

knowledge in all aspects of health care.

Other scientific and professional developments have caused a shift in paradigms

for graduate education in nursing. "A major impetus for this change was the American

Association of Colleges of Nursing's (AACN) decision in October 2004 to adopt the goal

that preparation for the specialization in nursing should occur at the doctorate level by

2015" (AACN, 2006. p.3).

Currently, master's degree programs require a credit load close to that of a

doctoral program in many other heath professions. Other factors promoting this change

include the development of the program to prepare a Clinical Nurse Leader (CNL), a

more generalist based advanced nursing role that is delivered in a shorter graduate

program, which requires approximately 30 credits or 18 months of full-time course work.

Trends

Different health care preparation programs, such as physical therapy and pharmacy, have developed practice doctoral programs and have successfully implemented them in their academic curricula. In the United States, 70% of the master's degree programs in the study of physical therapy have now implemented clinical doctoral programs (Department of Physical Therapy, Texas State University, 2007). The Doctorate in Physical Therapy Degree is an option for students who already possess a bachelor degree and plan to pursue an advanced professional degree in physical therapy. This degree usually takes one year longer to complete than the Master's degree in Physical Therapy. It gives the student the title of DPT or Doctorate of Physical Therapy (Inverarity, 2005).

The Pharm. D. program is designed to deliver a pharmacist who can apply his or her education in a manner that provides optimal delivery of pharmaceutical care to patients. The students are provided opportunities to gain clinical experiences working with health practitioners and patients. It requires at least two years of pre-professional coursework followed by three years of professional study (American Association of Colleges of Pharmacy [AACP], (n.d.)). The Pharm. D. is neither an undergraduate degree nor a graduate degree. The doctor of pharmacy is a professional degree similar to the doctor of medicine (MD) for physicians or a doctor of dental surgery (DDS) for dentists (Elizabeth City State University [ECSU], (n.d.)).

The medical doctor (MD) degree, in contrast, is a terminal degree and is the entry into the profession of medicine. A medical doctor is a person who maintains or restores

human health. This is accomplished through the study of diseases and injury and the application or art of the practice of medicine.

Purpose of the Doctorate of Nursing Practice Degree

The National Organization of Nurse Practitioner Faculties (NONPF) and the American Association of Colleges of Nursing (AACN) have been the major forces behind the Doctor of Nursing Practice (DNP) degree since 2002. Many reasons have been offered for developing the doctorate of nursing practice. Essential influences for this movement, according to NONPF, include: the current faculty shortage, development of the credentials that correspond with credit hour requirements, parity with other healthcare disciplines, and the increasing complexity of health care (Marion et al., 2005).

The AACN believes the DNP could help to alleviate the current faculty shortage. The AACN suggests that the practice doctorate will attract future faculty to nursing schools. Substantial cuts in reimbursements and available revenues have caused teaching hospitals to reduce residency staffs. Many believe such a void could be filled by nurse practitioners at a decreased cost in salaries and malpractice insurance (Columbia University, (n.d.), b, para 9). However, this implies that nurse practitioners are willing to work for less than are medical residents. There is no data available to suggest that salaries earned by advanced practice nurses with a DNP would offset their costs for additional education (National Association of Clinical Nurse Specialists [NACNS], 2005).

According to both the AACN and NONPF, nurse practitioner programs have exceeded the number of credits required for most master's degrees. As nurse practitioners

have entered careers in prevention and disease management of both the acute and chronic populations in primary care, credits have been added to the academic curriculum (Sperhac & Clinton, 2004). This led NONPF to explore establishing a practice doctorate program suitable to prepare clinical providers to handle the care of complex needs of patients with whom they would be dealing (NONPF, 2002). In June 2003, NONPF accepted the following recommendations: the nursing practice doctorate will expertly prepare the student in one of three areas: 1) programs that consist of health care, leadership, or teaching; 2) programs that prepare expert clinicians in different settings in both chronic and acute situations; and 3) programs that prepare the expert teacher of clinical learning or the clinical leader to improve clinical care and delivery of health services (NONPF, 2003).

Other disciplines such as physical therapy, pharmacy, medicine, and dentistry have established practice doctoral programs. This leaves graduate programs for nurse practitioners lagging "behind." This disparity creates a perceived inequality of status in education levels as compared to those of other healthcare professionals (Marion et al., 2005).

The advancements in technology and information have led to a knowledge revolution. These technological advancements have created dramatic improvements in healthcare procedures and medicines that have increased life expectancies. As the baby boomers age, the demand for high quality, cost-effective management of long-term chronic diseases as well as co-morbid conditions will increase (Marion et al., 2003). In addition, ethical issues that have not been previously encountered will now have to be

addressed due to the increases in genetic-based discoveries (Marion et al., 2003). All of these issues will change the meaning of safe and satisfactory care. Consumers increasingly question their health care providers. As a result, consumers and their families will need individualized care and culturally sensitive support across the health care spectrum (Marion et al., 2003).

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Comparison between Research-focused and
Practice-focused Doctoral Education

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The AACN proposed that the practice doctorate would differ from the doctor of philosophy in the following ways: less emphasis on theory, less research methodology content, varying dissertation requirements, clinical practicum or residency requirements and an emphasis on scholarly practice, practice improvement, innovation and testing of different models of care, and evaluation of health care outcomes (AACN, 2004; Marion et al., 2003).

Opponents have claimed that some proponents of the DNP suggest that other disciplines in health sciences will support such a terminal degree because they believe there is no such thing as a science of nursing, making a PhD in nursing inappropriate (Meleis & Dracup, 2005). Other opponents believe the DNP will create further confusion for those in the profession of nursing and that the issue distracts professionals from dealing with current issues regarding the delivery of quality, safe care.

Extra-professional and Intra-professional Perceptions

There are no guidelines stating what the DNP's official title would be at the

bedside. Unless someone is addressing a medical doctor, the title of doctor is usually

reserved for use in the academic setting. Opponents as well as others believe that calling

the DNP "doctor" at the bedside would give the patient a false and confusing perception.

Like other health care providers with doctoral degrees, DNPs would be expected to

display their credentials and ensure that their patients were informed about their

preparation as a nursing provider (AANC, 2004b).

Other compelling reasons offered to support the argument that the DNP is not the

right terminal degree in nursing include: history, timing, substance, and marginalization.

According to Melesis and Dracup (2006), the discipline of nursing has a long history of

developing different doctoral programs that have evolved into more mature doctoral

programs such as the doctorate of nursing science (DNS). The DNS was originally

designed as a practice doctorate but it proved to have criteria equal to a PhD. Nursing has

been driven by developing equal terminal degrees that are respected by all other

professions. In medicine, the MD is a terminal degree; however, it also provides entrance

to the profession of medicine. A PhD is sought by some physicians to advance their

research skills in clinical science.

The timing of the development of a new degree is also a sticking point for some

opponents. They argue that creating a new degree is very ill-timed due to the current

critical shortage of nurses. According to Melesis and Dracup, nurses have a history of

focusing on their own professional development rather than considering how their

profession influences the quality of care. The focus on the development of the DNP, they contend, appears to those outside of the profession to be a self serving means of obtaining parity with other professions.

In the argument concerning substance, opponents of the DNP state that there is not only a shortage of nurse clinicians but a shortage of nurse scientists as well. Melesis and Dracup (2006) made the case that nurse scientists advance the knowledge base utilized by advanced-practice nurses. Then they raised the question, "Why would we want to add to the shortage of nurse scientists by extending the education of nurses in advanced practice, thus extending the educational level of a new nurse scientist (Melesis & Dracup, 2006, (n.p.))?"

Melesis and Dracup also maintained that nurses have been marginalized for a long time. In the past, diploma graduates in nursing were followed by baccalaureate of science (BS) nurse graduates. The doors were closed to diploma nurses until bridge programs were developed that allowed them to complete their baccalaureate degrees. Opponents state the DNP has the potential of creating another set of marginalizing credentials. Both opponents and proponents of the DNP agree that there will be a need for faculty who hold similar advanced degrees so that they can provide the necessary mentorship critical to professional education. Opponents argue that if the DNP is the only option for nurses who want to enter advanced practice and professors with DNP's should constitute the majority of the faculty body, this will exacerbate the faculty shortage.

If, as proponents of the DNP claim, there is a need for a more advanced or complex knowledge base for nurse practitioners and that this complexity requires

doctoral preparation with a focus on clinical practice, there should be differentiation in outcome expectations. However, if the move to the DNP is largely cosmetic, (to gain professional parity and to match the degree credential with the credit hour requirement), then few differences in outcomes would be expected.

Research Question

The research question guiding this study was: "What are the differences between nurse practitioner programs at the doctoral and master's degree level as reflected in the terminal objectives and curricular patterns?"

Theoretical Framework

In 1956, Benjamin Bloom led a group of educational psychologists in developing a classification of different levels of intellectual behavior in learning. Three domains of learning were identified: the Cognitive (Knowledge), the Affective (Attitude), and the Psychomotor (Skills) (Huitt, 2004). These domains can be referred to as categories or goals. In other words, after a training session, the learner should have acquired new knowledge and skills. These three domains are further subdivided into smaller classifications or hierarchies starting from the simplest behavior and moving to the most complex.

Bloom identified six smaller classifications or hierarchies in the cognitive domain of learning. These levels ranged from the lowest level, which is simple recall or recognition of facts, through a series of more complex abstract processes until the

highest level, which is called evaluation, is obtained (Bloom et al., 1956). Bloom

discovered when students were given an exam; they used the lowest level of

intellectual behavior in their thought process over 95% of the time. It would be

consistent with Bloom's taxonomy to expect higher degree levels would articulate

higher levels of objectives in the cognitive domain.

Cognitive

The cognitive domain involves the development of intellectual skills and

knowledge. This includes the recall or recognition of specific facts, procedural

patterns, and concepts that serve in the development of intellectual abilities and skills.

There are six major categories advancing from the simplest behavior to the most

complex. The categories can be thought of in terms of degree of difficulty. That is, the

first one must be mastered before the next one can take place.

The verbs used to describe the various levels of intellectual cognitive behavior are

listed below:

1. *Knowledge*: arrange, define, duplicate, label, list, memorize, name, order,

   recognize, relate, recall, repeat, and reproduce state.

2. *Comprehension*: classify, describe, discuss, explain, express, identify,

   indicate, locate, recognize report, restate, review, select, and translate.

3. *Application*: apply, choose, demonstrate, dramatize, employ, illustrate,

   interpret, operate, practice, schedule, sketch, solve, use, and write.

4. *Analysis*: analyze, appraise, calculate, categorize, compare, contrast, criticize, differentiate, discriminate, distinguish, examine, experiment, question, and test.

5. *Synthesis*: arrange, assemble, collect, compose, construct, create, design, develop, formulate, manage, organize, plan, prepare, propose, set up, and write.

6. *Evaluation*: appraise, argue, assess, attach, choose, compare, defend, estimate, judge, predict, rate, core, select, support, value, and evaluate (Bloom et al., 1956, (n. p.)).

Affective

The next level is the affective domain which involves how matters are dealt with emotionally. This includes feelings, values, and attitudes. The five major categories are listed below, with the simplest behavior first and the most complex last.

The verbs used to describe the various levels of the affective domain are as follows:

1. *Receiving Phenomena*: asks, chooses, describes, follows, gives, holds, identifies, locates, names, points to, selects, sits, erects, replies, and uses.

2. *Responding to Phenomena*: answers, assists, aids, complies, conforms, discusses, greets, helps, labels, performs, practices, presents, reads, recites, reports, selects, tells, and writes.

3. *Valuing*: completes, demonstrates, differentiates, explains, follows, forms, initiates, invites, joins, justifies, proposes, reads, reports, selects, shares, studies, and works.

4. *Organization*: adheres, alters, arranges, combines, compares, completes, defends, explains, formulates, generalizes, identifies, integrates, modifies, orders, organizes, prepares, relates, and synthesizes.

5. *Internalizing values*: acts, discriminates, displays, influences, listens, modifies, performs, practices, proposes, qualifies, questions, revises, serves, solves, and verifies (Bloom et al., 1956, (n. p.)).

Psychomotor

The psychomotor domain involves the use and coordination of motor skills. The development of these skills requires practice and is measured according to how the learner utilizes speed, accuracy, distance, and the execution of different skills. The seven major categories are listed below with the simplest behavior first and the most complex last.

The verbs used to describe the various levels of the psychomotor domain are as follows:

1. *Perception*: chooses, describes, detects, differentiates, distinguishes, identifies, isolates, relates, and selects.

2. *Set*: chooses, describes, detects, differentiates, distinguishes, identifies isolates, relates, and selects.

3. *Guided Response*: copies, traces, follows, react, reproduce, and responds.

4. *Mechanism*: assembles, calibrates constructs, dismantles displays, fastens, fixes, grinds, heats, manipulates measures, mends, mixes, organizes, and sketches.

5. *Complex Overt Response*: assembles, builds, calibrates, constructs, dismantles, displays, fastens, fixes, grinds, heats, manipulates, measures, mends, mixes, organizes, sketches. NOTE: The Key Words are the same as those in the Mechanism category, but adverbs or adjectives are attached to each to indicate that the performance is quicker, better, more accurate, etc.

6. *Adaptation*: adapts, alters, changes, rearranges, reorganizes, revises, and varies.

7. *Origination*: arranges, builds, combines, composes, constructs, creates designs, initiate, makes, and originates (Bloom et al., 1956, (n. p.)).

<u>Summary</u>

The Doctorate of Nursing Practice is of great interest to many universities in the United States at this time. Many universities are in the process of developing or implementing their programs in order to meet the challenges and recommendations of the AACN by the year 2015.

This study focuses on the cognitive domain in Bloom's taxonomy. An important issue in the cognitive domain is the formation of particular concepts or rules. These concepts or rules define how smaller events or ideas are organized from a lower level of thinking into higher levels of thinking. The skills developed through this progression

revolve around knowledge, comprehension, and thinking about a particular topic. The six

levels (knowledge, comprehension, application, analysis, synthesis, and evaluation) in the

cognitive domain become useful as critical thinking skills are acquired. Critical thinking

requires logical reasoning and skills such as comparison, classification, sequencing,

hypothesizing, and critiquing. In this study, the cognitive domain of Bloom's taxonomy

is used to analyze the differences, if any, between nurse practitioners prepared in master's

degree programs and those who attend doctoral level programs as reflected in the

terminal objectives and curricular patterns listed by each of the programs.

CHAPTER 3

METHODOLOGY

Introduction

An overview of the design and data collection procedures used in this study is outlined below. The formulation of the tool utilized is described. The final portion of the chapter discusses the data analysis techniques.

Design

A cross-sectional survey was employed to compare the characteristics of existing DNP programs and existing master's degree programs for training nurse practitioners in the United States. The data was collected between January and February, 2008.

Data

The heads of nursing programs offering the DNP were contacted by e-mail. They were asked to provide the following data: number of credits required; number of clinical hours required; whether a dual track (DNP and PhD) was offered; entry level into the curriculum, including post baccalaureate degrees, post master's degrees, and non-nursing degrees; program accreditation status; types of research required, including thesis, project, or capstone; figures on the pass rate on the national certification exams; and whether a distance learning option was available. Each program was also asked to indicate whether the following elements were included in the courses offered: policy,

organization, and financing of health care; ethics; professional role development; theoretical foundations of nursing practice; human diversity and social issues; and health promotion and disease prevention.

Sample

A list of all the DNP programs as well as existing FNP programs was obtained from the AACN Web page. Twenty DNP programs and 30 master's programs from across the United States were randomly selected by drawing the names from a hat until the desired numbers were obtained. The names of the program directors of the 20 universities accepting applicants to DNP programs were obtained from the institutional Web sites. The directors were invited to participate in the study, and a link to the survey was attached to the invitation. The same procedure was completed for the 30 universities currently accepting applicants to master level FNP programs. The survey was developed in a Snap 9® for on-line completion. Since none of the universities was allowed to view the names of the other selected universities in the blind e-mailing, anonymity and confidentiality were maintained. Three mailings were sent to all the selected participants. Due to the anonymity of the respondents, the second and third mailings asked the participants to disregard the e-mail if they had previously responded. There was an interval of approximately two weeks between each of the three mailings. Consent to participate in the survey was assumed by the completion and submission of the survey provided by the Snap 9® program.

Data Analysis

The data was combined on a graph to allow for a visual comparison. The data were then further categorized by: the mean, mode, and standard deviation comparing the lowest number of credits required to the highest number of required credits; programs offering the lowest number of clinical hours to programs requiring the highest number; total clock hours required; number of programs offering dual track options; entry level into the curriculum; and the number of institutions that were accredited. The terminal objectives being compared included policy, organization, and financing of healthcare; ethics; professional role development; theoretical foundations of nursing practice; human diversity and social issues, and health promotion and disease prevention. Finally, Pearson correlations were calculated to determine if there was a relationship between pass rates on certificate examinations, number of clinical hours required for graduation and the number of credits required for graduation.

In order to obtain a large enough sample to compare the terminal objectives for both the doctoral level and master's level programs, the investigator went on-line to the web sites of the 20 selected doctoral programs and the 30 selected master's level programs and searched for the terminal objectives. Out of the selected doctoral programs, the terminal objectives were located for 14 (70%). Out of the selected master's level programs, the terminal objectives were located for 20 (67%).

CHAPTER 4

RESULTS

<u>Introduction</u>

The purpose of this study was to examine the differences between doctoral and master's degree nurse practitioner programs as reflected in terminal objectives and curricular patterns. This was accomplished by a cross-sectional survey to compare the characteristics of existing DNP programs and existing master's degree programs for training nurse practitioners in the United States. This chapter provides the results of this study. The frequencies and percentages of the curricular patterns for the nurse practitioner programs are listed in tables. Frequencies and standard deviations were calculated for both the master's level programs and the doctoral level programs for the following characteristics: number of required credits; required clinical hours; total clock hours required; whether there was a dual track option; entry level into the curriculum; and accreditation status. Programs were asked if content in the following areas was offered as separate courses or integrated throughout the curriculum: health care policy, organization, and financing; ethics; professional role development; theoretical foundations of nursing practice; human diversity and social issues, and health promotion and disease prevention. Lastly, the terminal objectives of the doctoral level programs and the master's level programs were examined. Chi-square tests of independence were conducted to determine if there was a relationship between program type (doctoral vs. master's) and the programs' level on Bloom's taxonomy.

Entry Requirements

Table 1 compares the frequencies and percents of the entry requirements for the

master's and doctoral programs studied. There were (n = 13) master's programs that

responded to this question. Sixty one and one-half percent of the master's programs

required a bachelor's of nursing degree for entry, 7.7% accepted a non-nursing bachelor's

degree, and 30.8% of the master's programs accepted post master's students.

There were (n = 2) doctoral programs that responded to this question. All of the

doctoral programs studied required master's degrees for entry.

Table 1. Entry Requirements.

Frequencies and Percents for the Masters and Doctoral Nursing Programs				
	Master's		Doctorate	
	n	%	n	%
Entry Requirement				
Bachelor's Nursing	8	61.5		
Bachelor's Non-Nursing	1	7.7		
Post Masters Degree	4	30.8	2	100

Accreditation

Table 2 shows the accreditation status of both the master's programs and the

doctoral programs that responded to this item. The results showed 100% of the master's

programs studied were accredited. However, only 50% of the doctoral programs studied

were accredited.

Table 2. Accreditation.

	Master's n	%	Doctorate n	%
Frequencies and Percents for the Masters and Doctoral Nursing Programs				
Program Accredited				
Yes	13	100	1	50.0
No	0	0.0	1	50.0

Terminal Paper Requirement

Table 3 shows the type of terminal paper required by the programs. The results show that 66.7% of the master's programs required a project, 8.3% a thesis, and 25% a capstone project. In comparing this to the doctoral programs that responded, 50% stated they required a thesis and 50% required a capstone project.

Table 3. Terminal Paper Requirement.

	Master's		Doctorate	
Frequencies and Percents for the Masters and Doctoral Nursing Programs				
	n	%	n	%
Terminal Paper Requirement				
Project	8	66.7		
Thesis	1	8.3	1	50.0
Capstone Project	3	25.0	1	50.0

Delivery Method

Table 4 indicates mode of delivery for the programs that responded to the item requesting the delivery method of the courses. Fifteen and four tenths percent of the master's programs were on-campus programs, 30.8% offered a distance delivery method, and 53.8% offered both on-campus and distance delivery methods. One hundred percent

(100%) of the doctoral programs that responded offered both on-campus and distance

delivery methods.

Table 4. Delivery Method.

Frequencies and Percents for the Masters and Doctoral Nursing Programs				
	Master's		Doctorate	
	n	%	n	%
Delivery Method of Courses				
At the Campus	2	15.4		
Distance	4	30.8		
Both	7	53.8	2	100

Course Delivery

Table 5 shows the frequencies and percents of both the master's programs and the

doctoral programs that responded to determine if required content was integrated in

courses or presented separately. The results of this study indicated in the master's

programs, most of the courses are presented separately. However, ethics, evidence based

practice, health promotion and disease prevention, and information systems/technology

were frequently integrated.

The results of this study indicated that 50% of the doctoral programs studied had

separate courses for ethics; evidence based practice; human diversity/social issues; and

information systems/technology. The results also indicated 100% of the respondents of

the doctoral programs provided health promotion/disease prevention; policy,

organization, and financing of healthcare; professional role development; and theoretical

foundations of nursing as separate courses.

Table 5. Course Delivery.

	Master's		Doctorate	
Frequencies and Percents for the Masters and Doctoral Nursing Programs				
	n	%	n	%
Ethics Course Delivery				
Separate Course	2	14.3	1	50.0
Integrated	12	85.7	1	50.0
Evidence Based Practice Delivery				
Separate Course	5	35.7	1	50.0
Integrated	9	64.3	1	50.0
Health Promotion/Disease Prevention Delivery				
Separate Course	8	57.1	2	100
Integrated	6	42.9		
Human Diversity/Social Issues Delivery				
Separate Course	1	7.1	1	50.0
Integrated	13	92.9	1	50.0
Information Systems/Technology				
Separate Course	3	21.4	1	50.0
Integrated	11	78.6	1	50.0
Policy, Organization, and Financing of Healthcare				
Separate Course	9	64.3	2	100
Integrated	5	35.7		
Professional Role Development				
Separate Course	9	64.3	2	100
Integrated	5	35.7		
Theoretical Foundations of Nursing				
Separate Course	11	78.6	2	100
Integrated	3	21.4		

Minimum Qualifications of Faculty

Table 6 illustrates the frequencies and percents of both the master's programs and the doctoral programs in response to the question of what were the minimum qualifications of the faculty. The results indicated that 71.4% of the faculty in the master's programs was master's prepared and 28.6% was PhD prepared. In the doctoral programs studied, 50% of the faculty was master's prepared and 50% was PhD prepared.

Table 6. Minimum Qualifications of Faculty.

Frequencies and Percents for the Masters and Doctoral Nursing Programs				
	Master's		Doctorate	
	n	%	n	%
Minimum Qualifications of Faculty				
Masters in Nursing	10	71.4	1	50.0
PhD	4	28.6	1	50.0

Dual Track Option

Table 7 was directed specifically to the doctoral programs studied. It was used to determine if any of the doctoral programs offered both a DNP and a PhD program. None of the programs offered this option.

Table 7. Dual Track Option.

Frequencies and Percents for the Doctoral Nursing Programs		
Doctorate	n	%
Dual Track Program		
No	2	100

Years in Existence, Clinical Hours, and Number of Credits

The master's level nurse practitioner programs were compared to the doctoral level nurse practitioner programs on the following characteristics: 1) number of years the program has been in existence, 2) number of clinical hours required for graduation, and 3) number of credits required for graduation for both the master's level programs and doctoral programs (see Table 8).

Table 8. Years in Existence, Clinical Hours, and Number of Credits.

Means and Standard Deviations for the Master's Programs and Doctoral Programs										
			*M*aster's					*Doctoral*		
Variable	N	Min.	Max.	M	SD	N	Min.	Max.	M	SD
Number of years the program has been in existence	14	10	30	16.86	7.75	2	1	3	2.00	1.41
Number of clinical hours required for graduation	14	525	875	699.50	90.17	2	1000	1170	1085.00	120.21
Number of credits required for graduation	14	39	58	48.14	4.93	2	84	86	85	1.41

In the master's level programs (n = 14), the number of years the program had been in existence had a range of 10-30 years with a mean of 16.86 years and a standard deviation of 7.75 years. In the doctoral level nurse practitioner programs (n = 2), the number of years the programs had been in existence had a range of 1-3 years with a mean of 2.00 years and a standard deviation of 1.41 years.

In the master's level nurse practitioner programs (n = 14), the number of clinical hours required for graduation had a range of 525-875 hours with a mean of 699.50 hours and a standard deviation of 90.17. In the doctoral level programs (n = 2), the number of clinical hours required for graduation had a range of 1000-1170 hours with a mean of 1085.00 hours and a standard deviation of 120.21.

In the master's level nurse practitioner programs (n = 14), the number of credits required for graduation ranged from 39-58 credits with a mean of 48.14 credits and a standard deviation of 4.93. In the doctoral level programs (n = 2), the number of credits required for graduation ranged from 84-86 credits with a mean of 85.00 credits and a standard deviation equal to 1.41.

A chi-square test of independence was conducted to determine if there was a relationship between program type (doctoral vs. masters) and the programs' level on Bloom's Taxonomy (low vs. medium vs. high) (see Table 9). The terminal objectives of the programs were categorized using the six levels of the cognitive domain of Bloom's taxonomy. Objectives were coded as follows: Bloom's level 1 or 2 = low, levels 3 or 4 = medium and levels 5 or 6 = high. The chi-square revealed a significant relationship between program type and the level on Bloom's taxonomy, χ^2 (2, N = 34) = 14.73, $p <$ .01. Review of the frequencies indicates that 100% of the doctoral programs were categorized as high on Bloom's taxonomy. Only 35% of the Masters programs, in contrast, were categorized as high on Bloom's taxonomy.

Table 9. Comparison of Terminal Objectives between Master's and Doctoral Programs.

Observed and Expected Frequencies for the Master's and Doctoral programs				
		Bloom's Taxonomy		
Program Type		Low	Medium	High
Masters	Observed	5	8	7
	Expected	2.9	4.7	12.4
Doctoral	Observed	0	0	14
	Expected	2.1	3.3	8.6

Note χ^2 (2, N = 34) = 14.73, $p < .01$

The means and standard deviations for each variable are listed in Table 10. Pearson correlations were calculated to determine if there was a relationship between pass rates on certificate examinations, number of clinical hours required for graduation and the number of credits required for graduation (see Table 11). The correlation matrix is displayed in Table 11. The correlations revealed a significant positive relationship between the number of clinical hours required for graduation and pass rates on certificate examinations, $r = .63, p < .05$. The correlations failed to reveal a significant relationship among the number of credit hours required for graduation and pass rates on the national certification examinations, $r = .16, p > .05$.

Table 10. Means and Standard Deviations for each Variable.

Variable	M	SD	N
Clinical Hours Required for Graduation	719.53	116.49	15
Pass Rates on Certificate Examination	98.07	4.22	15
Credit Hours Required for Graduation	50.67	10.87	15

Table 11. Pearson Correlations.

	1	2	3
Clinical Hours Required for Graduation (1)	---	.63*	.70**
Pass Rates for Certificate Examinations (2)		---	.16
Credit Hours Required for Graduation (3)			---

Note. $* p < .05, ** p < .01$

Summary

The data reported in this chapter consisted of answers to questions regarding curricular patterns as reported by participants in this study. It also consisted of a comparison of the terminal objectives of both master's level and doctoral level nurse practitioner programs using the cognitive level of Bloom's taxonomy. Finally, Pearson correlations were calculated to determine if there was a relationship between pass rates on certificate examinations, number of clinical hours required for graduation and the number of credits required for graduation. The evaluation of these results will be discussed in the next chapter.

CHAPTER 5

DISCUSSION

A discussion of the findings is presented in this chapter, beginning with significant findings comparing the curricular patterns and terminal objectives between doctoral level nurse practitioner programs and master's level nurse practitioner programs. The chapter concludes with a discussion of the limitations and implications for nursing, followed by recommendations for future study.

The purpose of this study was to examine the differences between doctoral and master's level nurse practitioner programs as reflected in terminal objectives and curricular patterns. The data obtained from this study identified variables in curricular patterns utilizing observed frequencies, comparing doctoral level nurse practitioner programs to master's level nurse practitioner programs.

A number of differences between the two types of programs were found. The doctoral programs tended to present essential content in separate courses rather than to integrate it throughout the curriculum. This is consistent with the fact that these programs required more credit hours than did the masters level programs. The majority of DNP programs appear to be distance-delivered from the start as compared to master's level programs. The movement to distance-delivery may be in response to the needs of practicing nurse practitioners who want to upgrade their practice level without relocating; or it may be that programs want to keep up with the trend of distance delivery in general.

In the examination of pass rates, both types of programs have high passing rates, thus there does not appear to be a difference based on program type. The correlation matrix displayed in Table 11 revealed a significant positive relationship between the number of clinical hours required for graduation and pass rates on certificate examinations. However, correlations failed to reveal a significant relationship among the number of credit hours required for graduation and pass rates on certificate examinations. These results may be due to a low sample size. It could be that the content relevant to the current certification exam is covered well in both the master's level and doctoral level programs. It is of note that the AACN guidelines for DNP programs require 1000 hours of clinical practice time and the eligibility requirements for national FNP certification exams requires 500 hours of clinical practice time, thus there is somewhat of a floor effect for clinical hours for both types of programs.

This study also examined the course delivery methods for areas of content determined to be essential for graduate level nurse practitioner programs. It appears that the DNP programs are more likely to have separate courses on: health promotion and disease prevention; policy, organization and financing of healthcare; professional role development; and theoretical foundations of nursing practice than programs at the master's level. This may make one expect a greater level of proficiency and/or knowledge in these content areas. It is also consistent with the fact that DNP programs have higher credit hour requirements.

In examining the terminal objectives for the doctoral programs in this study, of these both programs were rated at the highest level in Bloom's Taxonomy. This is

consistent with the DNP as a higher level program, not just a re-titling of master's level FNP programs. It suggests that there is a difference between these two types of programs.

Limitations

The findings from this study should be interpreted with care for several reasons. The sample was recruited from the list of programs on the AACN Web page. Since the time this list was constructed, many more programs have begun to admit students. While the sample was selected randomly, the population from which the sample was selected may not have been representative of all the programs in existence.

The cross-sectional design of the study was a limitation because it provided a snap shot in time, and therefore the data may not be accurately applied to another timeframe. However, the cross section design, allowed the researcher to collect a large amount of data in a short period of time.

The study was a mail survey, so there was no personal contact with respondents, and therefore no control over the surveys. However, there were three consecutive mailings for this thesis. This is a common recommended procedure for this type of study (Dillman, 2007).

The questionnaire developed for this study was comprised of multiple choice questions, leaving the respondents with limited choices. There is a possibility that respondents may have answered the questions differently had other options been available to them. Some of the questions may have been confusing to the respondents and thus were not answered.

The small response from the selected DNP programs was a large limitation for this study. A major reason for the poor response in this study may be due to timing. The study was sent to Deans of Graduate Studies at selected doctoral level and master's level nurse practitioner programs across the United States, in January, 2008. During this time of year, most universities are reconvening from Christmas and New Year's break. This is an especially busy time of year for faculty in preparing for their new semester. E-mail folders are often full and faculty does not have a lot of time to view all their mail in a timely manner. e-mailings such as this could be over looked and forgotten or inadvertently be placed in junk mail folders and deleted.

The comparison between the terminal objectives and the cognitive level of Bloom's taxonomy to determine if there was a relationship between Program Type (Doctoral vs. Masters) and the programs' level on Bloom's taxonomy, could be interpreted differently depending on the observations and interpretations of the verbs utilized in the cognitive domain. The level designated may not truly be representative of the program's level. This is dependent on how well the objectives were written. If the objectives were written with verbs used in the *Knowledge* level and the program was a doctoral level program, the designation of the objectives would be low. The opposite of the phenomena is also true. If the objectives were written with verbs used in the *Evaluation* level and the program was a master's level program, the designation of the objectives would be high.

Implications for Further Study

The implications for future research were derived from a review of the literature and the results of this study. Little is known about the differences between master's level and doctoral level programs that prepare nurse practitioners. One organization that has done some research on this matter is the American Association of Colleges of Nursing (AACN), a national organization that represents both baccalaureate and graduate schools of nursing and collaborates with different professions and disciplines to examine current issues in health care.

Survey results indicated higher numbers of required clinical hours were correlated with higher pass rates on certification examinations. Additional credit hours were not found to be significantly correlated with higher pass rates. It could be because the content relevant to the current certification exam is well covered in both the master's level and doctoral level programs.

Other questions that this study did not address include: "Will the DNP help to alleviate the current faculty shortage?" "Will the DNP create further confusion for those in the profession of nursing and distract professionals from dealing with current issues regarding the delivery of quality, safe care?" "Will shifting from master's level programs to prepare nurse practitioners to doctoral level programs prove to be cost-effective and affordable?" and finally, "Since there is currently no consensus on how the DNP will improve the nursing profession, and there have been no studies showing that nurse practitioners who earn a doctoral degree will provide better patient care than those who earn master's degrees, is it wise to proceed with the program conversion?" This study

should be repeated with larger a sample separating post-masters programs from post-baccalaureate entry DNP programs.

Conclusions

This study was designed to contribute information to examining the differences between the doctoral and master's degree level nurse practitioner programs as reflected in the terminal objectives and curricular patterns. The Cognitive Domain in Bloom's Taxonomy provided the framework for this study. The six levels (knowledge, comprehension, application, analysis, synthesis, and evaluation) in the cognitive domain become useful in designating where the objectives fall by the way they are written. These levels ranged from the lowest level; simple recall or recognition of facts, through a series of more complex abstract processes until the highest level; evaluation is obtained (Bloom et al., 1956).

The findings from this study provided some limited information. The results indicate that the majority of DNP programs appear to be distance-delivered from the start as compared to master's level programs. The results also show the higher number of clinical hours required were correlated with higher pass rates among students in the certification examinations. However, it also indicated that the greater number of credit hours had no correlation with higher pass rates. Lastly, it appears that the DNP programs are more likely to have separate courses on: health promotion and disease prevention; policy, organization and financing of healthcare; professional role development; and theoretical foundations of nursing practice than those at the master's level. This may

make one expect a greater level of proficiency and/or knowledge in these content areas. Prior to requiring the DNP as the degree for entry to the certification examination, it is important for the profession to obtain data to determine whether there is an increase in value of the graduate and, if so, is this increase relevant to the average clinical setting.

REFERENCES CITED

American Association of Colleges of Nursing (2004). AACN position statement on the practice doctorate of nursing. Washington, D.C.: AACN. Retrieved October 17, 2006 from www.aacn.nche.edu/DNP/DNPPositionStatement.htm.

American Association of Colleges of Nursing (2004). Doctor of nursing practice (DNP) talking points. Washington, D.C.: AACN. Retrieved October 17, 2006 from www.aacn.nche.edu/DNP/pdf/DNPTalkingPoints.pdf.

American Association of Colleges of Nursing (2006). Draft: DNP roadmap task force report. Washington, D.C.: AACN. Retrieved October 17, 2006 from www.aacn.nche.edu/DNP/pdf/RdmpRprt8-9-06.pdf.

American Association of Colleges of Pharmacy (2008). Doctor of pharmacy: (Pharm.D.) degree. Alexandria, VA: AACP. Retrieved March 10, 2008 from www.aacp.org/site/tertiary.asp?TRACKID=&VID=2&CID=686&DID=5748.

Bloom, B.S. (1956). The taxonomy of educational objectives, Handbook I: the cognitive domain. New York: David McKay Co. Inc. Retrieved February 10, 2008 from www.nwlink.com/~donclark/hrd/bloom.html.

Brown, S. A. & Grimes, D. E. (1995). A meta-analysis of nurse practitioners and nurse midwives in primary care. *Nursing Research, 44*(6), 332-339.

Carrol, T. L. & Fay, V. P. (1997). Measuring the impact of advanced practice nursing on achieving cost-quality outcomes: Issues and challenges. *Nursing Administration Quarterly, 21*(4), 32-40.

Clark, D. R. (2004). Instructional system design concept map. Retrieved February 10, 2008 from www.nwlink.com/~donclark/hrd/bloom.html.

Columbia University School of Nursing (2006). *Competencies of a clinical nursing doctorate*. New York: Columbia University School of Nursing, New York.

Dillman, D. (2007). *Mail and internet surveys: The tailored design method.* (2nd ed.).Hoboken, New Jersey: John Wiley & Sons.

Huck, S., Cormier, W., Bounds, W. (1974). *Reading statistics and research.* New York, New York: Harper Collins Publishers.

Huitt, W. (2004). Bloom et al.'s taxonomy of the cognitive domain. Educational
Psychology Interactive. Valdosta, GA: Valdosta State University. Retrieved
February 10, 2008 from http://chiron.valdosta.edu/whuitt/col/cogsys/bloom.html.

Hunter, J., Ventura, M., & Kearns, P. (1999). Cost analysis of a nursing center for the
homeless. *Nursing Economics*, *17*(1), 20-8.Inverarity, L. (2005). Physical therapy
degrees. Retrieved November 10, 2006 from
http://physicaltherapy.about.com/od/careersinphyssicaltherapy/p/PTDegrees.htm.

Jones, M. E. & Clark, D. (1997). Increasing access to health care: A study of pediatric
nurse practitioner outcomes in a school-based clinic. *Journal of Nursing Care
Quality, 11*(4), 53-9.

Kleinpell-Nowell, R. & Weiner, T. M. (1999). Measuring advanced practice nursing
outcomes.*AACN Clinical Reviews, 10*(3), 356-368.

Marion, L., Viens, D., O'Sullivan, A., Crabtree, K., Price, M., & Fontana, S. (2005).
Curriculum models for the practice doctorate in nursing. *Topics in Advanced
Practice Nursing eJournal. 5*(1).

Marion, L., Viens, D., O'Sullivan, A., Crabtree, K., Fontana, S., & Price, M. (2003). The
practice doctorate in nursing: Future or fringe?. *Topics in Advanced Practice
Nursing eJournal*, 3(2).

Meleis, A. I. (1988). Doctoral education in nursing: Its present and its future. *Journal of
Professional Nursing*, *4*(6), 436-446.

Meleis, A. I., & Dracup, K. (2005). The case against the DNP: History, timing, substance,
and marginalization. *The Online Journal of Issues in Nursing*, 10(3) Retrieved
February 24, 2008 from
www.nursingworld.org/MainMenuCategories/ANAMarketplace/ANAPeriodicals/
OJIN/TableofContents/Volume102005/Number3/tpc28_216026.aspx

Mundinger, M., Cook, S., Lenz, E., Paicentini, K., Auerhahn, C. & Smith, J. (2000).
Assuring quality and access in advanced practice nursing: A challenge to nurse
educators. *Journal of Professional Nursing, 16*(6), 322-329.

Munro, B., Page, E. (1993). *Statistical methods for health care research*. (2nd ed.).
Philadelphia: J. B. Lippincott Company.

National Association of Clinical Nurse Specialists. (2005). White paper on the nursing
practice doctorate. Clinical Nurse Specialist: *The Journal for Advanced Nursing
Practice*, *19*(4), 215-217.

National Organization of Nurse Practitioner Faculties (2006). Statement on the practice doctorate in nursing: Response to recommendations on clinical hours and degree title. Retrieved October 17, 2006, from http://www.nonpf.com/NONPF2005/PracticeDoctorateResourceCenter/PDstatement1006.htm.

Polit, D., Beck, C. (2008). *Nursing research: Generating and assessing evidence for nursing practice*. (8th ed.). Philadelphia: Lippincott, Williams & Wilkins.

Roblin, D. W., Howard, D. H., Becker, E. R., Adams, E., & Roberts, M. H. Use of midlevel practitioners to achieve labor cost savings in the primary care practice of an MCO. *Health Services Research*. *39*(3), 607-26.

Safriet, B. J. (1992). Health care dollars and regulatory sense: The role of the nurse practitioner. *Yale Journal on Regulation, 9*, 417-488.

Sperhac, A. M. & Clinton, P. (2004). Facts and fallacies: The practice doctorate. *Journal of Health Care, 18*(6), 292-296.

Spitzer, W.O., Sackett, D. L., Sibley, J. C., Gent, M., Roberts, R. S., Hay, W. I., Lefroy, G. M., Sweeney, P., Vandervlist, I., Sibley, J. C., Chambers, L. W., Goldsmith, C. H., Macpherson, A. S. & McAuley, R. G. (1974). The Burlington randomized trial of the nurse practitioner. *New England Journal of Medicine, 290*(5), 151-156.

U.S. Congress, Office of Technology Assessment. (1986). Nurse practitioners, physician assistants, and certified nurse-midwives: A policy analysis. (Health Technology Case Study37). OTA-HCA-37 (Washington, D.C.: U.S. Government Printing Office).

APPENDICES

APPENDIX A

CONSENT LETTER

To whom this may concern,

Hello, my name is John Dea. I'm a graduate student from Montana State University working on a master's thesis entitled, "Differences Between Doctoral Level Nurse Practitioner Programs and Masters Level Nurse Practitioner Programs As Reflected In The Terminal Objectives and Curricular Patterns." I have randomly selected 20 schools with masters level family nurse practitioner programs and 30 schools with doctoral level nurse practitioner programs from a listing from the American Association of Colleges of Nursing (AACN) and your school is one of the programs selected for the study. If you are willing to participate, please complete the online survey at: http://www.montana.edu/nursingsurveys/NursingPrograms/nursingprograms.htm and attach a copy of the terminal objectives for the master's level FNP and/or DNP program. The questions will only take about 15 minutes to complete.

If you have any questions about the study, you can contact me at 406-771-4447 or my advisor, Dr. Elizabeth Nichols at 406-994-3784.

I believe the information obtained from this study will benefit all interested parties because it will add to our better understanding of program differences. I would greatly appreciate your help in this endeavor. At the end of the study, I will send you a copy of the results if you wish. Thank you for your time.

Sincerely,

John Dea BSN, RN, CEN, CFRN, FNP student, Montana State University.

Elizabeth Nichols, DNS, RN, FAAN, Thesis advisor, 406-994-3784

APPENDIX B

SURVEY TOOL

<u>Survey for Graduate Nursing Programs</u>

Please answer the following questions. If you have a master's level family nurse

practitioner program, please answer questions 1-11. If you have a DNP-FNP program

please answer questions 12-23.

1. At what level is your FNP program?

    a. Masters

    b. DNP

2. Number of years your master family nurse practitioner program has been in

    existence. _____

3. Number of clinical hours required for graduation for the master

    FNP._____

4. Number of credits required for graduation for the master family nurse practitioner

    _____

5. Entry requirement for admission to your master FNP program: (mark all that

    apply)

    a. High school diploma

    b. Associate nursing

    c. Bachelors nursing

    d. Bachelors non-nursing

    e. Post master's degrees

6. Is the masters program accredited?

    a. Yes

    b. No

7. What type of terminal paper is required for your master FNP program?

    a. Project

    b. Thesis

    c. Capstone project

    d. Other_____

8. What is the pass rate for the master FNP graduates on the certification

    examinations? _____

9. What are the delivery methods of your courses?

    a. At the campus

    b. Distance

    c. Both

10. In your FNP program, how is the following content delivered?

    a. Ethics

        Separate Course   Integrated   Not Available

    b. Evidence-Based Practice

        Separate Course   Integrated   Not Available

    c. Health Promotion and Disease Prevention

        Separate Course   Integrated   Not available

   d. Human Diversity and Social Issues

      Separate Course   Integrated   Not Available

   e. Information Systems and Technology

      Separate Course   Integrated   Not Available

   f. Policy, Organization, and Financing of Healthcare

      Separate Course   Integrated   Not Available

   g. Professional Role Development

      Separate Course   Integrated   Not Available

   h. Theoretical Foundations of Nursing Practice

      Separate Course   Integrated   Not Available

11. What are the <u>minimum</u> qualifications of the faculty teaching in your master's level FNP program?

   a. Certificate

   b. Master in Nursing

   c. DNP

   d. PhD

   e. Other_____

12. Number of years your clinical doctorate family nurse practitioner program (DNP-FNP) has been existence. _____

13. Number of clinical hours required for graduation for the clinical doctorate family nurse practitioner (DNP-FNP)_____

14. Number of credits required for graduation for the (DNP-

   FNP)_____

15. Is the clinical doctorate program accredited?

   a. Yes

   b. No

16. What type of terminal paper is required for your DNP-FNP degree?

   a. Project

   b. Thesis

   c. Capstone project

   d. Other_____

17. What is the pass rate for the DNP-FNP graduates on the certification

   examinations? _____

18. What are the delivery methods of your courses for DNP-FNP?

   a. At the campus

   b. Distance

   c. Both

19. In your DNP-FNP courses, how is the following content delivered?

   a. Ethics

      Separate Course   Integrated   Not Available

   b. Evidence-Based Practice

      Separate Course   Integrated   Not Available

    c. Health Promotion and Disease Prevention

        Separate Course   Integrated   Not Available

    d. Human Diversity and Social Issues

        Separate Course   Integrated   Not Available

    e. Information Systems and Technology

        Separate Course   Integrated   Not Available

    f. Policy, Organization, and Financing of Healthcare

        Separate Course   Integrated   Not Available

    g. Professional Role Development

        Separate Course   Integrated   Not Available

    h. Theoretical Foundations of Nursing Practice

        Separate Course   Integrated   Not Available

20. What are the <u>minimum</u> qualifications of the faculty teaching in your DNP-FNP program?

    a. Certificate

    b. Master in Nursing

    c. DNP

    d. PhD

    e. Other_____

21. Entry requirement for admission to your DNP program: (mark all that apply)

    a. Post baccalaureate

    b. Post Master

   c. Both

If you have a post master option

21a. Number of credits post master_____

21b. Number of clinical hours post master_____

22. Does your program offer both dual track (DNP and PhD)?

   a. Yes

   b. No

23. If so, how many credits is the combined DNP and PhD program? _____

Please Attach a Copy of the Terminal Objectives for the FNP and/or DNP program.

If you wish would like to receive a copy of the results of this study, please place include

your e-mail address here.