Nurse Practitioner Education in the United States

By

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Abstract

This article chronicles the growth of nurse practitioner (NP) education in the United States since its inception in 1965. The history of NP education is presented in five time periods: the precursor period: 1965-1970, the role definition and legitimization period: 1971-1974, the maturation period: 1975-1980, the maintenance period: 1981-90, the new expansion period: 1991-2000; and the consolidation period: 2000-2005. Trends across time are explored and explained using data from organizational surveys and historical documents.

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The nurse practitioner role and its education in the United States has grown from a small well defined area of nursing education beginning with small rather select continuing education programs. Its momentum grew until the early 1990's the idea reached a "tipping point" to use a phrase coined by Malcolm Gladwell (2000) and entered the mainstream of nursing education in the new millennium with a leveling off of NPs educated during this period. This paper will chronicle the growth of nurse practitioners and educational programs in the United States from 1965 to the present. A framework developed by Loretta Ford is expanded upon to overview the six historical periods in the development of the nurse practitioner role and to demonstrate the changes over time.

Precursor Period: 1965-1970.

The development of the nurse practitioner (NP) role in the United States began more than 35 years ago as a response to shortages of primary care providers especially in rural and urban areas (Carnegie Commission, 1968). The pediatric nurse practitioner role was the first to develop as an outgrowth of the public health nurse role and was strongly focused on health promotion and community health. The first nurse practitioners worked closely with pediatricians who served as their mentors. The first nurse practitioner program, located at the University of Colorado, was developed in 1965 by Dr. Loretta Ford, a nurse and Dr. Henry Silver, a physician. The Bunker Hill/ Massachusetts General Nurse Practitioner program, located in Boston, Massachusetts, was initially directed in 1968 by Priscilla Andrews, a nurse and Dr. John Connolly, a pediatrician. These early nurse-physician educator teams were committed to increasing the supply of primary care providers to underserved children in these urban and rural areas. Early nurse practitioners were not well accepted by organized nursing, which at that time was struggling to

develop a separate identity from medicine. Many of the first NP programs were certificate or post-graduate programs for registered nurses that did not offer a Bachelor of Science degree. In 1968 Boston College initiated one of the earliest Masters programs for nurse practitioners funded by the Macy Foundation. The University of Colorado program, which began as a certificate program, required that enrollees at least have a Bachelor of Science degree in nursing and in the early 1970's became a Masters degree program. Many of the early NP programs were initially aided by federal funding through the Comprehensive Health Manpower Act of 1968 that was intended to increase the supply of primary care providers in the U.S. and through the Nurse Training Act of 1964 (Geolot, 1990). These programs were short term in length (<12 months). Another early program at the University of Rochester received federal funding for a certificate continuing education program that was intended to retool master's prepared faculty as NPs. These early master's prepared nurses had a commitment to practice and many became NP faculty.

Role Definition and Legitimization: 1971-1974.

During the decade of the 1970s many new NP specialties arose. These nurse practitioners worked collaboratively with physicians in an increasing diversity of sites and with many new populations. Legislative initiatives to change state laws and nurse practice acts further legitimized NP role expansion. In 1971 one of the first Family Nurse Practitioner Programs opened its doors at the University of Washington. At this time Adult Nurse Practitioner Programs also began to proliferate. By 1973 over 65 nurse practitioner programs were in existence in the United States. These early programs primarily granted a post-graduate certificate and some granted masters degrees. In 1974,

the American Nurses Association helped to legitimize the NP role by developing the Council of Primary Care Nurse Practitioners. This group developed an early definition and role description for the nurse practitioner role. In this same year, twenty-five nurse practitioner educators met to discuss nurse practitioner curricula at the University of North Carolina, Chapel Hill. This was one of the earliest attempts to discuss nurse practitioner curricula by educators from across the United States.

Maturation: 1975-1980

The Nurse Training Acts of 1971 and 1975 were an important federal funding source for NP programs (Geolot, 1990). By 1979 there were more than 133 NP programs or tracks and about 15,000 nurse practitioners were practicing. In 1977, the American Nurses Association began to offer the first nurse practitioner certification examinations. These certification examinations legitimized the role and led to more standardized outcomes for those practicing in this role. In 1976 the University of New Mexico was funded by the Robert Wood Johnson Foundation to develop curriculum guidelines for Nurse Practitioner programs under the guidance of Darlene Jelinek who directed their NP program. This work resulted in the Guidelines for *Family Nurse Practitioner Curricular Planning,* which was published in 1980. Another important outgrowth of this curricular work was the formation of the National Organization of Nurse Practitioner Faculties (NONPF) in 1980 with Darlene Jelinek as its first president. By the end of its first year, this organization had about 35 members who served as the core for its future activities.

During this period continuing education offerings for nurse practitioners also began to grow as these providers continued to develop and expand their knowledge base. The University of Colorado offered its first continuing education symposium in 1975,

and they will be sponsoring their 30th Symposium in July 2005. Nurse Practitioner Associates for Continuing Education (NPACE) began to offer continuing educational programs in 1980, and they currently hold conferences throughout the year in many different geographic areas of the country. In addition, a number of national NP organizations and other institutes sponsor annual continuing education conferences for nurse practitioners.

Maintenance Period: 1981-90

Nurse practitioners were well established by 1981 and continued to experience slow but steady growth in the next decade. By 1983 between 22,000 and 24,000 NPs had been educated. In 1985 and 1987 the ANA council of Primary Care Nurse Practitioners published the first general scope and standards documents for the nurse practitioner (ANA, 1985; ANA, 1987). These documents were a direct outgrowth of Nursing: A Social Policy Statement (ANA, 1980). By 1987 $100 million had been spent by the federal government on NP education largely through grant programs offered by the United States Public Health Service, Division of Nursing. A major educational trend in this decade was the shift from post-graduate certificate nurse practitioner programs to Masters programs in nursing with an NP specialization. By 1989 90% of nurse practitioner programs were either Masters Degree granting programs or post-masters degree programs. The National Organization of Nurse Practitioner Faculties began to thrive during this period developing many publications on curricula and competency based education as well as a very popular directory of programs. The first directory, entitled, A *National Profile of NP and Midwifery Programs* (1978) was jointly developed

with midwifery groups. Other publications that were developed by NONPF during this period included,

- *Developing Competent Nurse Practitioners (1981)*
- *Nurse Practitioner Faculty Practice Survey (1986)*
- *Desired Competencies For Nurse Practitioners (1988)*

The New Expansion Period: 1991-2000

The decade of the 1990s brought unprecedented rapid growth in the nurse practitioner role as other indirect hospital based roles, such as the Clinical Nurse Specialist, encountered difficulty with the increasing fiscal crisis in health care in the United States. The number of nurse practitioners grew from 40,000 in 1995 to over 60,000 in 1999. During this period legislative victories in acquisition of third party reimbursement and prescriptive authority led to an increasingly independent role for the NP in practice.

Table 1 demonstrates the growth of nurse practitioner programs to the present. With this expansion NONPF also thrived, increasing its membership from 250 in 1994 to over 1000 in 2001. NONPF continued with many important publications, which were important to its growth and growing prestige. NONPF's *Advanced Nursing Practice: Curriculum Guidelines and program standards for Nurse Practitioner Education* is essential reading for faculty on curricular issues for NP education. Another important source of growth was the organization's annual conference that was unique in its focus on nurse practitioner education and quickly became a "must" for nurse practitioner educators throughout the United States. Meanwhile the leadership of NONPF began its important

efforts to identify and standardize the measures of quality education and grapple with the emerging issue of appropriate faculty-student ratios.

An important activity of NONPF during this period was to survey nurse practitioner programs to determine curricular content and number of hours devoted to specific curriculum content and clinical precepting of students. The curriculum survey was conducted in 1992 and administered again in 1996 with funding from the W.K. Kellogg Foundation. In 2000 a collaborative curriculum survey was again initiated and published to determine changes over time and to inform NP educators and policymakers on this important educational component (Berlin, Harper, Werner & Stennett, 2002). In 1998 NONPF began to jointly collect data on an annual basis with the American Association of Colleges of Nursing on enrollment and graduations in Bachelors and graduate programs in nursing.

In this period of NP education some predicted a glut of providers as schools continued to graduate these advanced practice nurss (Cooper, Laud & Dietrich, 1998). Others predicted a continued need for nurse practitioners in the future as the population ages with fewer care providers to meet the demands (Harper & Johnson, 1998).

Table 2 indicates the relative dominance of nurse practitioner programs in the United States compared to other nursing specialties during this period. As nurse practitioner education entered the mainstream of nursing education several efforts have been initiated to standardize the way that this education is offered. In 1995 the National Task Force on Quality Nurse Practitioner Education was convened by NONPF. This group, which included eleven nursing organizations, developed a document published 1997 called, the

Criteria for Evaluation of Nurse Practitioner Programs, which was endorsed by 21 national nursing organizations.

Consolidation Period: 2000-2005

By the turn of the century nurse practitioner programs had entered the mainstream of graduate education in nursing. In 2001 the number of NPs in the United States was estimated to be 78,251 (Pearson, 2001, p. 26) and by the year 2004 the numbers were estimated to be about 106,000 (Towers, 2004). Currently all NPs in the United States can diagnose and treat patients and in 21 states they can practice independently (no physician involvement is required). Also, with the exception of Georgia, all NPs have some ability to prescribe medications and in 10 states they can prescribe independently (Pearson, 2005). Collaboration with physicians does occur regularly, but is not mandated by law. While enrollment and graduations in Master's NP and combined NP/CNS programs increased steadily in the 1990's, the year 2000 brought a 3.8% decrease in enrollments and only a 1.5% increase in graduations (Berlin, Bednash & Stennett, 2001). The next five years have been a time when the number of new programs leveled off as seen in Table 1 and a time of continued improvement of program curricula (Berlin, Stennett & Bednash, 2004). Table 2 indicates a slight decrease since 2001 in Master's NP graduates as compared to other specialties. There was a slight increase in NP student enrollments from 18,070 in 2003 to 19,286 in 2004 (Berlin, Stennett & Bednash, 2004). During this period the number of students who came in with a prior degree or accelerated masters students entering nurse practitioner programs grew exponentially. The AACN reports that since Fall 2002, when 105 such programs existed, there was a 48% increase to 151 programs with over 6,000 students enrolled (AACN, 2005).

During these first 5 years of the new century, work was underway to consolidate the educational gains that had been accomplished, to update documents that had been previously written, and to develop outcome competencies for nurse practitioner education. The National Task Force on Quality Nurse Practitioner Education was reconvened in 2001 by NONPF and the American Association of Colleges of Nursing (AACN) to update the *Criteria for Evaluation of Nurse Practitioner Programs* to meet current trends in nurse practitioner education. The revised document was published in 2002 (National Task Force, 2002). In addition to this effort, work began in 2000 to seek funding for the development of core and specialty competencies for nurse practitioner education. Funding was secured from the Division of Nursing of the Health Resources and Services Administration of the Department of Health and Human Services. A broad coalition of organizations developed these national, consensus-based competencies that under went external validation and endorsement within the nursing community before publication in 2002 (DHHS, HRSA, BHP, 2002). A similar consensus and validation process by stakeholder groups was facilitated by NONPF in the subsequent development of the Psychiatric-Mental Health NP Competencies and the Acute Care Nurse Practitioner Competencies (National Panel for Psychiatric-Mental Health Competencies, 2003; National Panel for Acute Care Nurse Practitioner Competencies, 2004).

As nurse practitioner education had become mainstream within nursing education, an important goal was to incorporate standards into the nursing accreditation process. Nurse practitioner organizations worked together to meet this important goal. Nursing accreditation is overseen by two separate accrediting bodies, the National League for Nursing Accreditation Commission (NLNAC) and the Commission on Collegiate

Nursing Education (CCNE). In 2003 the CCNE revised its Standards of Accreditation and agreed to incorporate the Criteria for Evaluation of Nurse Practitioner Programs into its accreditation process by January 2005 (CCNE, 2005). NONPF also developed the Consultation for Quality Nurse Practitioner Education Program or Q-NONPF, which is a voluntary multi-tiered quality improvement program to assist nurse practitioner education programs to improve their own educational programs through self-assessment and consultation with experts (NONPF, 2005).

The new focus of nurse practitioner education in the U.S. is the development of the practice doctorate. Since 2001, NONPF has been working on this important area to support faculty in the continued evolution of nurse practitioner education, and in 2003 NONPF co-hosted a National Forum on the Practice Doctorate in Nursing. In October 2004, the AACN issued a recommendation to "move the current level of preparation necessary for advanced nursing practice roles from the master's degree to the doctorate level by the year 2015" (AACN, 2004). This new direction for NP education will consume a great deal of energy in future years as the new recommendations come to fruition.

The other new focus is a growing globalization of nurse practitioner education. In 2004 NONPF signed a memorandum of understanding (MOU) with the Association of Advance Nursing Practice Education (AANPE) of the United Kingdom in order to facilitate global communications and resource sharing to promote quality NP education. This organization is an outgrowth of the UK NONPF, which represented a loose affiliation between US and UK educators. NONPF is also exploring a similar affiliation with organizations in Canada and New Zealand. Increasingly, faculty from countries

with NP programs are assisting other countries to develop or improve their educational programs. As more students and faculty move between countries, we expect to more global collaborative exchange and cooperation.

Conclusion

Challenges for the future in nurse practitioner education will be to continue to prepare excellent providers for the health care system of the future maintaining a viable growth and the highest quality education. Past lessons can be instructive as new leaders emerge in the field. Organizations such as NONPF have provided great leadership in working with coalitions of nurse practitioner organizations and with grass roots NPs support for their mission. The global increases in nurse practitioners and other advanced practice nurses create both an opportunity and a challenge as we strive to improve health care internationally.

Table 1

	1992	1995	1998	2000	2004
NP Programs	119	202	325	319*	330*
NP Specialty Tracks	235	527	769	741	706

Source: Harper & Johnson, 1996; Bednash & Hosier, 1999; Berlin, Bednash & Stennett.

2001; Berlin, Stennett & Bednash, 2004.

*Including combined NP/CNS tracks.

Table 2

Master's Graduates By APN Specialty in the U.S

	1998	2000	2004
Nurse Practitioner	57.5%	64.5%	59.4%
Clinical Nurse Specialist	13.6%	8.3%	9%
Nurse Midwife	3.7%	3.5%	2.8%
Nurse Anesthetists	3%	3.8%	6.4%

Source**:** Berlin, Bednash & Stennett, 2001;

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