The development of advanced practice roles: implications in the international nursing community

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Abstract
This article examined the critical elements that have been identified in the development of advanced practice roles of nurses in four countries: Brazil, Thailand, the United Kingdom and the United States of America. Several socio-political and professional forces were examined for possible insights and ways in which they may have shaped the development and evolution of the roles of advanced practice nurses (APNs). These forces were: the socio-political environment; the health needs of society; the health workforce supply and demand; governmental policy and support; intra- and interprofessional collaboration; the development of nursing education; and documentation of effectiveness of the advanced role. The development of APN roles in the four social systems was reviewed to illustrate how socio-political and professional forces may have shaped nursing roles in each health care delivery system. Commonalities and distinguishing features across the four health and social systems were analysed to assess the predictive forces that may be identified as advanced roles in nursing have evolved in the global community.

Introduction
In the United States of America (USA), various social, political and economic forces have been identified within American society that have shaped the roles of advanced practice nurses (APN). Over the last century, several key events have served as critical factors in the evolution of both expanded and advanced roles within nursing. The influence of these forces on the role of APN continues to evolve today as rapid changes in health care delivery, financing mechanisms and consumer demand influence the practice of all health care providers.

An extensive body of literature, which examines the various types of APN roles in the USA, has been developed. For example, there are varying defini-
tions of advanced practice (AP) nursing in the USA, with common elements. All identify that AP is beyond basic practice within the clinical domain. AP also requires higher levels of clinical skill and knowledge, which are acquired through graduate-level education and/or certification in a clinical specialty. This advanced preparation equips the professional nurse for an expanded range of theoretical and research-based interventions. Finally, advanced level of practice enables autonomous practice roles, which are at the edges of the expanding boundaries of nursing’s scope of practice (Hamric 1996).

The term APN is often used as though it is a homogenous category. In reality, it encompasses multiple types of nurses in advanced roles. These roles include nurse practitioners (NPs), certified nurse midwives, nurse anaesthetists and clinical nurse specialists (CNS). While each of these roles have developed individually at different points in the past century, they currently are grouped together as APNs.

Roles in nurse midwifery and nurse anaesthesia developed in the first half of the 20th century, while the CNS and NP roles developed in the second half. The NP and CNS roles began to be linked in public policy language in the 1980s (Joel 1998); nurse midwives and nurse anaesthetists were added to the APN family in the 1990s. In part, this grouping was driven by political reasons in response to reimbursement policies and issues.

The purpose of this article was to examine the critical elements that have been identified in the development of APN roles in the USA. The USA was selected for two major reasons: first, an extensive examination of the various APN roles has been conducted to date and presented in the USA literature; and second, the diversity of APN roles that has evolved in the USA is unique. It was intended to provide insight into the socio-political and professional forces that have shaped the development and evolution of the APN roles. In addition, the development of APN roles in three other social systems were examined as case studies to illustrate how the identified forces have shaped nursing roles in other health care delivery systems. These social systems included Brazil, Thailand and the United Kingdom (UK). Commonalities and distinguishing features across the four health and social systems were analysed to assess what predictive forces, if any, could be identified as advanced roles in nursing evolve in the global community.

**Critical elements in the evolution of APN roles in the USA**

Several authors have examined the diversity of APN roles in the USA and have analysed their development as a function of various social, political and economic dynamics within society (Bigbee 1996; Komenich 1998).

Styles (1996) identified foundational factors that were necessary for the development of defined AP roles. These included health needs in society, support for innovation in health care delivery, governmental health policy and regulation, health workforce supply and demand issues, the nursing profession’s support for new roles, development of advanced education, and the development and dissemination of a significant research base. Bigbee (1996) analysed the development of AP roles as a function of organizational and educational development and inter- and intraprofessional dynamics. Komenich (1998) conducted interviews with key nurse leaders involved in the development of each type of APN. This analysis focused on factors in the socio-political environment, the leadership within nursing, the influence of private and public agencies, and the contribution of educational institutions.

While each of these analyses contributes a unique perspective, there are also commonalities among all of them. Common critical elements we posit here include the influence of: the socio-political environment; health needs in society; health workforce supply and demand; governmental policy and support; intra/interprofessional collaboration; development of nursing education; and documentation of effectiveness of the advanced role. These elements are used to provide a framework for predicting the development of AP nursing roles in the USA. It should be noted that each of the selected elements is very broad. The explanatory statements and examples provided are intended to be illustrative, not comprehensive.
The socio-political environment has produced dynamics that were unique in the development of each AP role. The large immigrant population in the early 1900s, their preferences for midwifery services and the largely independent roles of public health nurses, all contributed to the development of roles for nurse midwives. Wars throughout the 20th century directly contributed to the development of nurse anaesthetists (Bigbee 1996) and had an indirect effect on both nurse midwives and CNSs. The lack of sufficient healthy males to serve in the armed forces, primarily during World War I, increased the government’s awareness of poor maternal and child health in the USA, which in turn increased support for nurse midwifery. After World War II and the Korean War, nurses returned to campuses, taking advantage of government funding for returning veterans and received advanced education in CNS roles (Komnenich 1998). Whether cataclysmic or positive, socio-political forces have had a profound impact on APN roles.

Health needs in society have spurred the development of AP roles in important ways. The poor statistics for maternal and child health in the first half of the 20th century supported the advancement of nurse midwives. The growing concerns about unmet needs in primary care, especially for children, led to the development of the first NP programme and paediatric NP roles at the University of Colorado in 1965 (Ford 1995). Consumer demand and preference has also led to the rapid expansion of nurse midwifery and NP roles in the USA, illustrating that consumers can influence health delivery by demonstrating their preferences for humanistic, health-promoting and cost-effective services.

Health workforce supply and demand has been a critical force in the development of APN roles, especially with regard to physician supply and demand. Strong physician interest in surgery and their general lack of interest in anaesthesia in the early 1900s provided opportunities for nurses to move into anaesthesia (Bigbee 1996). A similar lack of interest by physicians in obstetrics, along with support from the public health sector, provided opportunities for nurses to strengthen and expand their role in midwifery. Shortages and/or maldistributions of physicians in the 1960s created an environment that was supportive both for clinical specialization in nursing and the development of NP roles to meet unmet health care needs, especially in primary care (Ford 1995; Komnenich 1998).

Governmental policy and support, at both the Federal and state levels, was critical in stimulating both enabling legislation, which supported APN roles and, perhaps more importantly, financing, which funded the development of new programmes to prepare nurses for AP roles. While some funding came from the private sector through foundations and philanthropy, the majority of funding came from agencies such as the Division of Nursing and the Bureau of Maternal and Child Health, at the Federal level, or from the National Institute of Mental Health and the National Cancer Institute. The latter were critical for the development of CNSs in psychiatric/mental health and oncology (Bigbee 1996).

Intra/interprofessional collaboration has been central to the development of each role in nursing. While the CNS role arose uniquely within nursing, each of the other types of AP roles developed parallel to, and somewhat outside, nursing. Surgeons supported the early development of nurse anaesthetists; public health and medicine, to a lesser degree, supported the development of nurse midwifery; nursing and medicine conjointly developed the early NP roles (Komnenich 1998). It is interesting to note that there has been almost as much resistance within nursing to each of the AP roles as there has been within medicine. Some of this resistance continues at present. However, regardless of the varying levels of support, each APN role has resulted from strong collaboration and support, both within the profession of nursing as well as external to it. This support has come from early development of strong specialty-orientated professional organizations within nursing, as well as general support and collaboration from other sectors in the health professions (Bigbee 1996; Styles 1996; Komnenich 1998). The types of support have included financial, moral and political resources, which ensured maturation of the APN roles against a degree of intra/interprofessional resistance.

Development of nursing education to support the preparation of nurses for AP roles has been the
catalyst for all APN roles. While nurse anaesthesia and nurse midwifery initially developed educational programmes outside nursing, for the most part they have now become aligned within university-based nursing programmes. CNS and NP programmes began predominantly in colleges of nursing, where they are firmly based today. As the knowledge base in nursing developed from the mid-century to the present, APN preparation became well established in graduate education in nursing. Clearly, education has been a significant force in the development of each APN role, with a gradual movement over time towards postbaccalaureate education (Komnenich 1998).

Documentation of effectiveness of the advanced role has been central for all types of AP roles. Early in the 20th century, the pioneering efforts of both nurse anaesthetists and nurse midwives were documented in improving the health and clinical outcomes of patients (Styles 1996; Komnenich 1998). This research and documentation of positive outcomes continues today with an examination of the effectiveness of NP roles (Mundinger et al. 2000). Evidence of the contributions made by nurses in APN roles in terms of quality, cost-effective health care and access has been essential to the ongoing advancement of all nurses.

Several factors continue to challenge the APN role (Joel 1998). These include:

- **reimbursement issues** – when available, it is often at levels less than what physicians would receive,
- **prescriptive authority** varies considerably across the 50 States of the USA and continues to present challenges,
- **professional liability insurance and staff privilege issues** often prevent fully autonomous practice for many APNs.

Designation as a primary care provider in a managed-care organization also continues to be a challenge for APNs.

The rapid increase in number of APNs has affected the supply and demand for their services in many regional markets in the USA. In 1998, 61% of all enrolled master’s degree students were in NP programmes (Edmonds 1999). Key factors that are attributed to this rapid expansion include the increased recognition and reimbursement for primary care services and the decreased interest on the part of medical students to train in primary care specialties. However, the increased supply of NPs has also affected demand, with downward trends in salaries and increasing difficulty in finding positions after graduation.

The concept of value is closely associated with the use of APNs (Joel 1998). This value is derived from the rapid changes in the managed-care environment, which place high value on primary care providers as gatekeepers in the health care system. NPs have assumed important positions as primary care providers in the evolving managed-care network. With the ever-present cost-containment initiatives, NPs are seen as cost-effective providers of care – the caring dimension that nurses bring to a health care system which is increasingly focused on efficiency, is impersonal and dependent on high technology. Nurses continue to be valued for their focus on the human, caring aspects of health care. However, the matter of value is often approached from political and economic perspectives, and continues to be an issue for APNs vis-à-vis physicians.

**Framework for analysis**

The above framework used to examine the evolution of APN roles in the USA was applied to the social systems of three other countries: Brazil, Thailand and the UK. The results of this analysis are discussed below.

**Method**

The reasons for the selection of these three countries were:

1. nursing in all of them was in a dynamic state,
2. they represented different social systems, and
3. they represented different geographical areas.

Three individuals (the co-authors) were invited to provide information relevant to the project. Each had detailed knowledge of both historical evolution within their country, as well as current status and future plans. To assure consistency of information, a questionnaire was designed, which each individual completed in essay format. The responses were then
analysed according to the framework established, and were validated by the individuals who provided the information. Table 1 presents information on relevant features of APN in summary form.

Discussion

In embarking upon this project, several of the authors had expected that certain generalizations could be made about how AP nursing may have evolved in different countries. In reality, the picture that emerged from a summary of the features of APN from these four countries was more like a collection of unique tapestries forming a ‘suite’, to use a term from the field of art. If one were to look for a common theme, it would be a drive towards the professionalization and autonomy of nursing, and how the myriad challenges along that road were dealt with.

The APN roles and terms used tended to vary in each country; however, patterns are readily identifiable. While the term APN is not used in Brazil, the country has nurse midwives and CNSs, but no nurse anaesthetists or NPs. In Thailand, the role of CNS is just developing, but nurse midwives, NPs and nurse anaesthetists are well established. The UK also has well-established NP and CNS roles, but does not have nurse anaesthetists. In each country, postbasic education is required, either at the certificate or graduate levels, within a clinical domain. APN roles in all settings are implemented in autonomous practice roles at the edges of expanding boundaries of the scope of practice. The critical elements discussed above are operational in different ways in each of the countries profiled.

Socio-political environment

This factor has been influential in each setting. For example, in Brazil, where the attention has focused more on basic preparation of nurses and the term APN is not used, specialty programmes are offered on a temporary basis, according to societal needs, with regulation provided by government agencies. Thailand was in the midst of health care reform; it was also undergoing major social transformations throughout society, owing to the recent adoption of a constitution and the recovery of the country from an economic meltdown experienced 3 years previously. In the UK, while NP and CNS titles are not yet specifically regulated, these nurses are expected to practice at a higher level of sophistication, and their role definitions are conceived more broadly, requiring that they provide overall supervision of practice and carry functions related to research and teaching. Another feature, unique to the UK, relates to the statutory definition of nursing, which is both broad and non-restrictive. This makes it possible for nurses to become involved in almost any area of health care practice, provided that they assume individual responsibility for training and acquire the requisite skills (UKCC 1992a).

Health needs in society

Unmet health care needs in each country appear to have stimulated the development of APN roles. In the USA, specific societal needs at various points in time have resulted in the development of each of the APN roles. With respect to Thailand, where the majority of the population lives within rural areas, all nurses are trained as midwives so that they can provide maternity services. In Brazil, it appears that the health needs of the country are driving the educational developments noted within the profession. Greater emphasis is given for expansion of nursing education opportunities to meet basic manpower requirements (Neves & Mauro 2000). In the UK, nursing roles have been expanding since the mid-1970s, along with the scope of nursing practice. These have clearly evolved in response to the emerging health needs of various populations (Department of Health 1999).

Health workforce supply and demand

Within Brazil, a country with compelling health needs and a burden of economic constraints, the number of nurses is severely limited in meeting the needs of the population. The majority of care is provided by ‘health care agents’, who are untrained workers functioning under the supervision of nurses. Given the much higher ratio of physicians to nurses (3 : 1), the NP movement has not taken root.
Table 1  Summary features of advanced practice according to elements of the framework for four countries

<table>
<thead>
<tr>
<th>Feature</th>
<th>Brazil</th>
<th>Thailand</th>
<th>UK</th>
<th>USA</th>
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<tbody>
<tr>
<td>1. Socio-political environment</td>
<td></td>
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<tr>
<td>a. Reimbursement for APNs</td>
<td>No</td>
<td>No</td>
<td>Nurses and midwives working independently can be reimbursed directly but for those working in the state sector the fees are covered in doctor-to-doctor contracts for services</td>
<td>Available, but not consistently; it is continually challenged</td>
</tr>
<tr>
<td>b. Social milieu</td>
<td>Shorter hospital stays, in turn stimulating home care</td>
<td>Health care reform ongoing</td>
<td>Shorter hospital stays. The health care system unable to utilize CNSs</td>
<td>Shorter hospital stays. Health care reform and increased focus on primary care.</td>
</tr>
<tr>
<td>c. New role developments as needed</td>
<td>Yes</td>
<td>Proposal for new specialties and their certification under consideration</td>
<td>Yes, as societal needs arise</td>
<td>Yes, as societal needs arise</td>
</tr>
<tr>
<td>d. External forces</td>
<td>Yes, owing to scientific and technological developments in nursing and medicine</td>
<td>Various governmental initiatives</td>
<td>Various governmental initiatives</td>
<td>Technological and scientific developments in nursing, medicine and health care that lead to new treatments. Various governmental initiatives</td>
</tr>
<tr>
<td>e. Degree of consumer support for nursing and advanced practice</td>
<td>Consumers are not stimulated to support</td>
<td>Consumers do not benefit from APNs at present, as they are not well-utilized in practice settings</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>2. Pressing health needs of society</td>
<td>Access; poverty; inequality; quality of care; insufficient number of nurses</td>
<td>Access; inequality; quality of care; insufficient number of nurses</td>
<td>Changes in profile of general practice, increase in community-based services, ‘unpopular’ services such as for homeless</td>
<td>Access; equity; quality of care; high cost</td>
</tr>
<tr>
<td>3. Health workforce supply and demand</td>
<td>Insufficient nurses and physicians; maldistribution</td>
<td>Insufficient nurses and physicians; maldistribution</td>
<td>Workforce planning tied loosely to health need and government priorities</td>
<td>Supply sufficient; maldistribution a problem and varies regionally</td>
</tr>
<tr>
<td>a. Supply and distribution of health personnel</td>
<td>Health care agents supervised by nurses in communities, with short training; Nursing auxiliaries in hospitals with 1 year of training</td>
<td>Nurses; physicians</td>
<td>Nurses; physicians</td>
<td>Nurses and assistive personnel, and physicians</td>
</tr>
<tr>
<td>b. Personnel who provide the majority of health care</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. National plan for assessing health personnel needs</td>
<td>No</td>
<td>Yes; developed by government and nursing groups</td>
<td>Yes, by government agencies, with input from nursing organizations</td>
<td>Yes, by government agencies, with input from nursing organizations</td>
</tr>
</tbody>
</table>
Table 1 continued

<table>
<thead>
<tr>
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<th>USA</th>
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<tbody>
<tr>
<td>4. Governmental policy and support</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Nurse anaesthesia and legal authority</td>
<td>None exist</td>
<td>Yes. Formal education (diplomas), but no licence or certificate</td>
<td>None exist</td>
<td>Yes. Nursing certification by professional group</td>
</tr>
<tr>
<td>b. Nurse midwifery and legal authority</td>
<td>Yes</td>
<td>Yes. Part of nursing licence, but involves separate exam in 2013</td>
<td>Yes. Practice under a licence</td>
<td>Yes. Nursing certification by professional group</td>
</tr>
<tr>
<td>c. CNS, education and regulation</td>
<td>Yes, Certificate after specified training; is regulated</td>
<td>Development in progress at present</td>
<td>Not yet comprehensively regulated</td>
<td>Yes, master’s degree required</td>
</tr>
<tr>
<td>d. Nurse practitioners and regulation</td>
<td>None exist</td>
<td>Yes, they exist. Not regulated. They work under physician supervision. Role is similar to physician assistant in USA</td>
<td>Yes, in primary care and elsewhere. They fill gaps in service in different areas. Not regulated</td>
<td>No separate licence</td>
</tr>
<tr>
<td>e. Funding</td>
<td>Limited.</td>
<td>Available for education and training</td>
<td>Available for education/training and for vacant staff positions</td>
<td>Available for some training and research. Hospitals can cut staff positions to save money</td>
</tr>
<tr>
<td>f. Scope of nursing practice, presence of any constraints</td>
<td>No constraints. Expanded roles encouraged. Demonstration of continued competence stimulated</td>
<td>Varies by setting. Greater latitude in rural settings and in government hospitals to function within established protocols</td>
<td>No constraints except prescription of medication and certification of death. Expanded roles encouraged</td>
<td>Constraints vary across the US States</td>
</tr>
<tr>
<td>5. Intra/inter-professional collaboration</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Role of nursing leadership</td>
<td>Leadership active in area of graduate education, research, and clinical specialization</td>
<td>Leadership active in support of graduate education and research, and their funding</td>
<td>Yes, for graduate study and clinical specialization</td>
<td>Yes, for graduate education, research, advanced practice roles, and their funding</td>
</tr>
<tr>
<td>b. Professional credentialling for advanced practice</td>
<td>Profession determines levels of competence through examination or certification</td>
<td>No</td>
<td>Profession determines levels of competence along with employers, but no formal credentialling</td>
<td>Profession determines levels of competence, examinations and awards certification</td>
</tr>
<tr>
<td>c. Nursing involvement in health policy development</td>
<td>Yes, nursing organizations active</td>
<td>Yes, nursing groups active</td>
<td>Yes, nursing organizations active</td>
<td>Yes, nursing organizations active</td>
</tr>
<tr>
<td>d. Degree of nursing practice autonomy</td>
<td>Yes, autonomy in community agencies</td>
<td>Yes, in rural areas and health district centres</td>
<td>Yes, autonomy present</td>
<td>Varies across US States and settings</td>
</tr>
<tr>
<td>6. Development of nursing education for AP role</td>
<td>Specialization courses and/or master’s level education</td>
<td>Not required</td>
<td>Special training or advanced education not yet compulsory for all roles</td>
<td>Master’s level education required</td>
</tr>
<tr>
<td>7. Documentation of effectiveness for role</td>
<td>Does not exist</td>
<td>Does not exist</td>
<td>Growing body of research on quality, cost effectiveness, competence and career pathways</td>
<td>Research on quality and cost-effectiveness of APN compared to others</td>
</tr>
</tbody>
</table>

AP, advanced practice; APN, advanced practice nurse.
Against this background, nursing organizations and leadership have developed an educational system to credential specialty preparation, as well as to provide graduate education to future faculty members. In Thailand, nursing is assuming a very active role in decision-making around health policy at the Ministry of Health level and is helping to shape policy around workforce supply and demand (Srisuphan 1998). In the UK, an example of workforce needs can be found in the national decision to reduce the work hours of physicians-in-training (NHS Management Executive 1991). Such a reduction shifted part of their work to nurses, further stimulating newer areas of specialized training and roles for nurses.

**Government policy and support**

Governmental regulation varies with the social and political structure in each country. The continuum can be defined with heavy regulation of scope of practice at one end, such as found in the USA, and at the other, with little restriction in scope of practice, as seen in the UK (UKCC 1992b). Governmental policy is critical in the development of APN roles, primarily through financial support. This was true in all countries profiled. In addition, the governments in Thailand, Brazil and the UK play a more central role in controlling the education and numbers of the health professions, whereas in the USA market forces are more central. The different type of role played by governmental agencies is evident in the evolution of APN roles across all countries.

**Intra/interprofessional collaboration**

New roles have emerged in Brazil related to transplants, human reproduction, informatics and other areas, although these are not designated as AP roles. Nursing organizations seem to be intimately involved in the setting of practice standards and specification of broad areas of research for nursing schools. NP initiatives began in Thailand 25 years ago but did not survive because they were seen as a threat by physicians. A short training course for NPs continues, but these individuals work under physician oversight. Nursing leaders and organizations have been very active in shaping nursing policy at the governmental level. Yet, the majority of their concerns appear to be internally orientated, that is, concerned with improving the position of nurses and nursing. Perhaps as a result of this, the overall impact that nursing has had on the health care of the population, with regard to meeting both overall health needs as well as in addressing specific health needs, is difficult to determine, along with the attendant public notice that nursing might receive for its responsiveness.

In the USA, nursing organizations have been actively shaping health policy for a number of years; this has been spurred by the establishment of numerous specialty organizations. Nevertheless, nursing has been criticized for concerning itself with its own interests rather than with the good of the public. This perception has tended to undermine nursing. As a result of this type of awareness, nursing has shifted its stance and now takes positions and provides advice to legislators, both at the state and national levels, regarding many social and public policy issues. However, nursing has continued to lobby for its own interests, such as for funding for nursing education and nursing research. In addition, nursing organizations have had major impact at state levels to assure legislative changes that will allow greater autonomy for APNs, in areas such as scope of practice, reimbursement for nursing services, prescriptive authority, etc. At the same time, nursing has been a major advocate for efforts to improve health care quality and access to all populations.

Within the UK, nursing organizations have been instrumental in providing leadership in the development of standards for different areas of nursing and midwifery practice, and in their advice/collaboration with regulatory agencies. Physician support and collaboration seem to have been essential to the development of APN roles. Where this has not been present, the roles have either not evolved or have been hindered.

**Development of nursing education**

Within the USA, there has been an early emphasis, starting a century ago, on moving nursing into insti-
tutions of higher learning, to provide master’s and doctoral education for nurses. This was based on the expectation that raising the standard of education for nurses would have an impact on nurses and improve the care that they provide. Since the mid-1970s, the UK has seen a concomitant momentum in advanced education for nurses at the graduate level (master’s and doctoral). Many universities now provide such training for nurses. Most master’s programmes are course-based, but the majority of doctoral programmes and some master’s programmes offer education through an individual faculty/supervision system, as is the tradition in many European countries.

While nursing education was found to be very well developed in each of the profiled countries, the end products are quite different. It might be said that the development of graduate education is necessary, but not sufficient, in the preparation of individuals for AP roles. In Brazil, there have been significant developments in the field of nursing education, with 15 master’s and eight doctoral programmes. However, graduate education is not required for specialization. Rather, scientific productivity and research training are the expected outcomes in graduate education. Similarly, graduate education has made important strides in Thailand, in an effort to raise standards of nurse training. The focus of both master’s and doctoral education has been on the preparation of faculty or administrators (Phancharoenworakul 1998). It might be expected that, in due time, this will also result in the preparation of nurses for AP roles.

**Documentation of effectiveness of advanced roles**

This has been most evident in the USA where there is increasing literature that addresses both efficiency and effectiveness of AP roles. This area of research has been stimulated as a result of pressure from physicians and market forces for cost containment. Within the UK, a growing body of research is emerging on quality, cost-effectiveness and career pathways. Brazil and Thailand have not yet started to generate this type of data. No doubt, as the pressure builds in these countries, they will follow suit.

**Current state and future of APNs**

What the future holds for APNs is closely tied to the future of nursing as a whole and to the events, changes and needs of society.

**Impact of science and technology**

Changes that are brought about everywhere by advances in science and technology have been no less than seismic. Some authors characterize this era as a revolution towards an age of knowledge workers. The work of nursing is heavily dependent on knowledge – both its production and its use in patient care. The knowledge necessary to guide nursing practice is derived both from nursing research and from other fields. In a constantly changing environment, nursing education and practice must also change if they are to stay relevant.

Some authors liken the current health care environment to chaos, and the need to see chaos and disorder as a way to survive (Grossman & Valiga 2000). The new perspective that emerges from the use-of-chaos theory is that chaos is a good thing; that it challenges and leads to growth. Thus, we need to be able to make educated guesses, learn to be comfortable with ambiguity and turn problems to solutions (Grossman & Valiga 2000). The assumption, in this view, is that we will never again find ourselves in a world of order, certainty, or comfort. This, then, is the challenge for nursing – to prevail, evolve and grow in order to positively impact society.

**Health needs of societies**

The specific health challenges that societies face vary, and how nurses respond must match the challenge. Needs may relate to demographic trends, special health problems or epidemics. For example, Japan, the USA and other countries are expecting to see a major growth in the number of the elderly in the near future. While Japan is in the process of preparing itself to deal with this social phenomenon and the concomitant health needs that such a
growth will present, no similar national effort is evident within the USA, and certainly not within the nursing community. The specialty of gerontological nursing, long considered important, is still plagued by low enrolments at the graduate level; undergraduate programmes include neither sufficient theoretical content nor clinical experiences with elderly populations. No major mobilization effort is evident within nursing, or at the larger societal level for the time when the ‘baby boom’ generation will retire.

Conversely, some countries have, or will soon have, populations that are predominantly young. While the young tend to be a generally healthy group, they are also a group who engage in high-risk behaviours (smoking, drinking, drug use, fast-driving, or driving without seatbelts, etc.). Brazil is in the process of developing a national plan on adolescent and family health with the participation of nursing, suggesting a future-orientated vision to meet the needs of the population.

In relation to epidemics, acquired immune deficiency syndrome (AIDS) is a major health problem in both the USA and Thailand. Nursing in the USA is heavily involved in research and the care of this population, and is part of the overall national initiatives with regard to AIDS. However, in Thailand, this type of mobilization on the part of nursing is not in evidence.

The above examples, related to demographic trends and special health needs, illustrate and suggest the types of organized action that nursing must take to meet the needs of society. Planning has to occur at the levels of training and specialization of personnel, to direct the changes that nursing research must take, as well as influencing and providing leadership for the development of health and public policy.

Legislation and governmental support

Clearly, legislation and other forms of governmental support play significant roles in funding nursing education, the extent of autonomy with which nurses in general and APN specifically can practice, as well as whether nurses can be independently reimbursed for their services. For example, the ‘Balanced Budget Act’, enacted in the USA in 1997, mandates direct Medicare reimbursement to APNs for Part B services (ambulatory). The impact that such legislation has had on nursing cannot be overestimated. Along with this, nursing organizations and individual nurses need to assume responsibility for maintaining competence and expertise, and develop professionally orientated certification requirements validating competence with regard to specialization and/or AP.

Trends

Early discharge from hospital, and the increase in out-patient surgical procedures, have been driven by cost factors. These developments, now common in many parts of the world, mean that nurses must work effectively within community settings and provide teaching to patients and families so that they can participate in providing care at home. However, nursing schools in the USA continue to place emphasis on acute settings as the locale for health care. Nursing in the UK has been more attentive to this need, and nurse preregistration training is designed to enable practitioners to meet the needs of patients in both hospital and community settings. They are aided in this regard by the development of specialist community nursing roles such as health visiting, district nursing and community mental health nursing (UKCC 1994).

Nursing leadership

The role of nursing leadership and that of nursing organizations in influencing nursing and public policy appears to be critical in all the countries studied. These countries present a variety of issues specific to each. Within the USA, for example, where the APN roles have received acceptance in all sectors, oversupply threatens to undermine the value of the role. It appears that nurses are not learning from their history and are not inclined to apply the economic principles of supply and demand. The majority of graduate programmes have converted to APN preparation and are on the verge of flooding the market. As a result, there is now a dearth of available positions, with signs that com-
pensation is declining. This example illustrates the failure of leadership and the lack of national co-ordination.

The differences noted across the four countries, relative to AP, reflect, in part, differences in the countries, their contexts and traditions. In addition, it can be hypothesized that some of the differences may be accounted for in the different nursing identities and cultures in these countries, and ‘how, within their specific . . . contexts, nurses “make nursing”’ (Degeling et al. 2000, p. 133).

Skill mix

All four countries make use of support or unskilled personnel (who work under nursing supervision) in varying degrees and proportions. Nursing has shown a hostile attitude (in the USA and UK) to this group, rather than finding creative ways to make optimum use of support personnel to enhance nursing care. This analysis has made clear that AP nursing roles cannot be fully understood in isolation from nursing practice in general, or without a full appreciation of the traditions in nursing education in each country.

Implications

While this research studied only a small cross-section of the global community, the results raise a number of questions with important implications for the nursing profession. There are several patterns that are evident in the results. Inter/intraprofessional collaboration, support of nursing leadership, development of nursing educational infrastructure, support of governments through policy and financing, and the documentation of the effectiveness of AP roles, all appear to be consistent, critical elements in the development of APNs. Nurse leaders have a crucial role and must address the issue of educational preparation for APN roles, as well as becoming engaged in the public policy arena, by contributing to ongoing public policy debates that address both the health needs of society and the supply and demand issues of the health workforce.

Examination of the effectiveness of APN roles has been a critical factor in the USA health care system where nurses in AP roles face continual challenges in terms of efficiency, effectiveness and quality of care provided. The growing body of evidence documents that the care and services provided by APNs is equal to, and frequently better than, that of other providers. Most of the research focusing on effectiveness has been conducted in the UK and the USA. The challenges faced in these two systems are probably reflective of those challenges faced by nurses in AP roles throughout the global community. This type of research needs to be expanded to other countries and settings in order to strengthen the evidence of nurses’ ongoing contributions to the delivery of high quality, cost-effective care. Given the challenges that APNs have faced in the four countries profiled, it can be anticipated that challenges of this nature will continue to threaten the development and implementation of APN roles. Further research on the effectiveness of nurses in APN roles will counter those challenges.

Finally, there is an ongoing need to continue to conduct comparative analyses of the type reported here. Insights that are gained by these intercountry comparisons will benefit the global nursing community. The diversity in roles and approaches to AP nursing in the four countries profiled can be viewed as both an advantage and a challenge. While the roles and responsibilities for nursing practice will vary to some degree across different social systems, the need for clarification of roles, responsibilities and educational preparation are apparent in the results of this research. The need to address this now, while mistakes and diversity can be viewed as opportunities to learn and improve, is of prime importance as collaborative efforts in the nursing community increase around the world.

References


to Respond to Hospital Reform. *Nursing Inquiry, 7* (2), 120–135.


