



Primary Health Care and Nursing Education in the 21st Century: A Discussion Paper

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INTRODUCTION

Primary health care (PHC) is a philosophy and an educational practice approach. Nursing is one of the key services for the delivery of PHC. “Globally, nurses constitute the majority of the health service workforce and make a significant contribution to delivery of health care in a wide range of environments, particularly in hospitals and primary health care settings” (World Health Organization [WHO] and Sigma Theta Tau International Honor Society of Nursing [STTI], 2006, p. 9). In recognition of the vital role nurses play in the delivery of health services, WHO, the Pan American Health Organization (PAHO) and the International Council of Nurses (ICN) have urged governments to develop and strengthen PHC strategies to meet the health needs of individuals and the community (PAHO, 2004).

Furthermore, *the Chiang Mai Declaration: Nursing and Midwifery for PHC* (2008), which was developed at the International Conference on New Frontiers in PHC and unanimously endorsed by over 700 nurses from 33 countries, declared that nursing is a vital component of the health workforce that contributes significantly to the achievements of PHC and the Millennium Development Goals. Among the recommendations was the need for educational institutions to strengthen faculty development and curricular innovations, promote research and the establishment of infrastructure to produce qualified graduates who can meet the needs of their nation.

The purpose of this background paper is to examine PHC education for nurses in the globalized world. A case study approach is used to provide information about PHC education. The paper will define and describe PHC, nursing education in Canada and curriculum development. Challenges will be discussed and a policy framework will be provided. In addition, recommendations specific to PHC nursing education will be made.

DEFINITION OF PRIMARY HEALTH CARE

In 1978, WHO designated PHC as the “central function” of the health care system and a necessary strategy to reach the goal of “health for all by the year 2000.” The PHC setting is where both short-term and acute health issues are resolved and the majority of chronic conditions are managed. Primary health care is an interdisciplinary and multisectoral approach built upon a foundation of equity and access and includes services that emphasize prevention and promotion for the community as a whole (WHO, 1978). Nurses have adopted the definition of PHC put forth by WHO and recognize that it is an essential part of their practice. The inclusion of PHC in nursing curricula is strongly supported because of its ability to guide the scope of nursing practice (WHO, 1978).

In Canada, the importance of PHC was affirmed by the Canada Health Care Act of 1984. The tenets of public administration, comprehensiveness, universality, portability and accessibility outline the basic premise of PHC for all Canadians (Health Canada, 2007). When Canadians access health care their first point of contact is with essential PHC services at the community level. It is important to distinguish between primary care (PC) and PHC. In 2005, the Canadian Nurses Association (CNA) published findings on the various interpretations of PC and PHC.

Even though these terms are defined differently, they are often used interchangeably in the literature and in practice.

The CNA (2005, p. 1) defines PHC as "the first level of contact with the health care system, bringing health care as close as possible to where people live, learn and work." The goal of PHC delivery is to promote health and prevent illness by utilizing the most appropriate health disciplines, working in collaboration and delivering care within the context of the broader determinants of health (e.g., education, environment, socio-economic factors) (CNA, 2005). Primary health care is often institutionally-oriented and individually-focused. Primary care is included in the definition of PHC and "is an integral component of an inclusive PHC strategy" (Tarlier, Johnson, & White, 2003, p. 180). However, it has traditionally been viewed as physician-driven and based on clinical diagnosis and treatment of acute illnesses (CNA, 2005). The scope of practice of PC and PHC differ in what is defined as "minimum essential health care" (Barnes et al., 1995, p.10). Primary care places emphasis on physical health restoration. It has a limited focus on preventive care and does not include community participation. Primary health care uses a holistic approach. It is driven by the health care needs of individual communities and maximizes the potential use of all available health resources. Services are available to the majority and support overall determinants of health and well-being. The Canada Health Care Act clarifies that the principles of PHC as accessibility, public participation, health promotion, appropriate technology and intersectoral cooperation (Health Canada, 2007). These principals are based on patients being the consumers of health care and investments being made to improve the general health of the population (Barnes et al., 1995).

A GLOBAL PERSPECTIVE: PRIMARY HEALTH CARE AND NURSING EDUCATION

As globalization has increased, so has the worldwide demand for higher education. In response, "education has been made more accessible through online offerings and the development of on-site external campuses in foreign countries" (Baumann & Blythe, 2008,p.1). This has raised concerns about the lack of global standards for nursing education and the impact on human resource planning, management and the regulation of practice (WHO and STTI, 2006). Educators have emphasized the need for strategies to facilitate a uniform approach to nursing education such as implementing a curriculum that utilizes existing international nursing competencies as the foundation for development. However, WHO and STTI (2006, p. 13) caution that "curricula needs to reflect the unique cultural norms of the country where it is taught."

As indicated in the *World Health Report*, one strategy for targeting PHC nursing education includes a "fundamental rethink of curricula focusing on site job training, in close contact with the institutions where the expertise is located and developed (WHO, 2008). The report notes: The increasing cross-border exchange of experience and expertise, combined with a global interest in improving public policy-making capacity, is creating new opportunities - not just in order to prepare professionals in more adequate numbers but, above all, professionals with a broader outlook and who are better prepared to address complex public health challenges of the future (p. 76).

COUNTRY APPROACH TO PRIMARY HEALTH CARE DELIVERY

Many countries have adapted PHC as part of their core nursing curriculum (PAHO, 2004, Smith 2004, CASN 2007). In Cuba, for example, commitment of the national health care system to primary care and education was reinforced by changes in curricula and the focus on the implementation of population focused community health nursing practice as an approach to improve the health of the entire community (Swanson, 2007). By 1999, this community-oriented PHC system "covered 98.3% of Cuba's 11 million people and embedded health services deeper into communities, aimed at more effective health promotion and disease prevention efforts" (Medical Educational Corporation with Cuba [MEDICC] . n.d., para3).

WHAT SHOULD BE IN A PRIMARY HEALTH CARE CURRICULUM?

While the scope of this report is not to analyze specific curricula, the literature does provide general concepts integral to PHC. As mentioned previously, tenets of the Canada Health Care Act (1984) provide the basis for nursing curriculum and a broad foundation for PHC curriculum. Additionally, core program content includes an emphasis on the principles of PHC: appropriate technology, community participation, intersectoral collaboration, health promotion and prevention. Curricular modules can create matrixes that integrate essential concepts with continuity of care and community empowerment. In addition, there has to be a focus on PHC teams, patient involvement, serving disadvantaged and remote populations and addressing health equities. The WHO and STTI view PHC curriculum as a continually evolving process (2006, p. 5):

The ultimate responsibility and accountability for developing and revising nursing programs rests with the nursing faculty and their education institutions. In exercising good leadership, these faculties will seek and secure input from and form partnerships with stakeholders (e.g., students, consumers, service providers, communities, etc.) and meet the regulatory requirements of their country.

CASE STUDY ANALYSIS: PRIMARY HEALTH CARE NURSING EDUCATION IN CANADA

HISTORICAL BACKGROUND

The need for PHC reform was emphasized in the seminal report, *Building on Values: The Future of Health Care in Canada* (Romanow, 2002).¹ According to the report, there have been some changes in health care, but the pace has been frustratingly slow. Currently, PHC in Canada is out of balance, concentrating on the practice of health care providers with particular skills being assigned to cure people when they are ill. Romanow suggests there is no single right

¹ The report was released by the Commission on the Future of Health Care in Canada, headed by Chair Roy Romanow.

model; rather, good PHC is tailored to the needs of different communities. There are many benefits of PHC for individual Canadians such as more coordinated care and better quality of care based on interdisciplinary teamwork. In addition, replacing unnecessary use of hospital, emergency and costly medical treatments with comprehensive PHC will improve the access to other health care disciplines (Romanow, 2002).

In 2003, the First Ministers agreed that at least 50% of Canadians should have access to a multidisciplinary PHC provider 24 hours a day, 7 days a week by 2011 (Health Canada, 2003). Since April 2005, the government of Ontario has approved 150 Family Health Teams (FHTs), which have been created in urban and rural settings province wide. FHT's mandate is to involve multidisciplinary health teams in service provision, including physicians, nurses, nurse practitioners, and pharmacists, as well as engagement of the community and local providers into the development of the teams to best meet the needs of the local community (Health System Intelligence Project, 2007). It is anticipated that FHTs will improve access to PHC for more than 2.5 million Ontarians living in 112 communities. Fifty more FHTs are being planned, bringing the total to 200 (Ministry of Health and Long-Term Care, 2009).

CONCERNS ABOUT PRIMARY HEALTH CARE DELIVERY

In recent years, the organization and delivery of PHC services has been questioned. Concerns include continuity of care and accessibility and availability of medical services, particularly in rural areas. Insufficient after-hours PHC in urban areas is another problem because it leads to the use of emergency room services for non urgent care. Using PHC to reform PC has become increasingly important because of the growing number of Canadians who do not have access to PC services. As of 2008, 4.1 million Canadians did not have a regular family doctor (Statistics Canada, 2008). This situation places increased pressure on other parts of the health care system (e.g., hospitals, emergency rooms, nurses and physicians).

RECENT INVESTMENT IN PRIMARY HEALTH CARE

The Primary Health Care Transition Fund (PHCTF) has been an important federal mechanism for the acceleration of PHC renewal across Canada. Between 2000 and 2006, the federal government invested 800 million dollars in the creation of the PHCTF. Funding was given to provinces and territories and has resulted in various PHC models supporting individual renewal initiatives. This investment validates Canada's commitment to health care at the community level and has helped lay the groundwork for health care renewal. Most of the funding was allocated to various provincial initiatives at the national and community level. For example, establishment of collaborative care models of FHTs in Ontario and expanding use of telephone health (i.e., Telehealth) information lines in British Columbia and Alberta. A number of jurisdictions have focused on building capacity at the local and community level by increasing availability and access to PHC services and decreasing the long wait times in emergency units (Health Canada, 2005).

The main objective of the PHCTF was to make fundamental changes to the health care system using innovative approaches to deliver health care services to a diverse population. By improving the quality, accountability, accessibility and sustainability of front line health care services, the fund was intended to offer a catalyst for future PHC renewal initiatives.

Governments are aware of the importance of PHC in health promotion and disease prevention, and nursing services have provided the core for a comprehensive client-centered practice. Nevertheless, PHC renewal takes time. The PHCTF and reports conducted by the Health Commission are assisting government efforts to ensure long-term, sustainable changes are made within Canada's health care system (Health Canada, 2005).

THE CENTRAL ROLE OF CANADIAN NURSES IN PRIMARY HEALTH CARE

Nurses are community resources who share the common goals of PHC renewal in Canada. Primary health care allows the role of nurses to move from the hospital to the community. The CNA (2003) believes PHC is a model for improving health care delivery, the most effective strategy for providing equitable and accessible health care and provides a solid framework for the entire health system. Nurses in all settings need to understand and act on PHC principles because they are critical to comprehensive client-centered practice and recognition of the impact of the determinants of health and health status.

A key role is the function of the nurse practitioner (NP). The position of the NP represents a significant development in the renewal of PHC, as well as a means to increase access to quality care and reduce wait times in acute care centers. Research data supports both the effectiveness of the NP as a leading member of the health care team and the cost effectiveness of this role as complementary to the roles of physicians, nutritionists, therapists and registered nurses (RNs). Nurse practitioners can minimize current pressures on the health care system, improve health outcomes and increase awareness about health issues (DiCenso & Matthews, 2005).

Although there is significant evidence that NPs can provide high quality, cost effective PHC and play a critical part in PHC renewal, their implementation in Canada has been sporadic and variable (Health Force Ontario, 2006). While NPs have worked in Canada for decades, there has never been consistency in terms of their role. The Canadian public has a limited understanding of the function of NPs and the range of health services they provide (DiCenso & Matthews, 2005).

Primary health care NPs are RNs with additional education and experience. The education programs in the province of Ontario share a common curriculum across nine university sites delivering both distance and on site education. Like RNs, NPs are regulated by the College of Nurses of Ontario (CNO). Nurse practitioners who meet CNO criteria may register in the "extended class," which gives them the legal authority to independently perform diagnostic tests, communicate diagnoses to patients and prescribe certain pharmaceuticals (Government of Ontario, 2007).

Nurse practitioners use a holistic approach and emphasize health promotion and illness and injury prevention, which complement the care delivered by other health care providers (Health Force Ontario, 2006). Primary health care NPs work in the community health setting and are the

first and most frequent point of contact with the health care system for many people (Health Force Ontario, 2006). According to the *Regulation and Supply of Nurse Practitioners in Canada* report (Canadian Institute for Health Information, 2005), 45.1% of licensed NPs employed in 2004 worked in community health (22.8% in hospitals and 3.8% in nursing homes or long-term care).

The Canadian Nurse Practitioner Initiative (CNPI) is a project funded by Health Canada through the PHCTF. The CPNI is developing a pan-Canadian framework for the sustained integration of NPs into PHC (CNA, 2006), but adoption of the role is slow. According to CNO statistics from 2006, there are just over 639 NPs registered in the extended class and working in Ontario and there are a lot fewer in the other provinces. The province of Ontario has taken a lead in supporting the development of nurse practitioner run clinics. Following the introduction of the first nurse practitioner led clinic in 2007, the Ministry announced funding to support 25 nurse run clinics in Ontario (Ministry of Health and Long-Term Care, 2008).

Primary health care is also carried out by a large cadre of public and community health nurses, but the supply continues to be deficient compared population needs. Few provinces in Canada have midwifery services, even though they are central to the PHC model. Most care is now delivered by FHTs in which the physician is the lead within an interdisciplinary context (CNA, 2006).

NURSING EDUCATION: PRIMARY HEALTH CARE CURRICULA IN CANADA

Nursing education in Canada is at the degree and diploma level. Auxiliary nurses are represented by registered practical nurses (RPNs) found in some but not all provinces. The majority of nurses in community health have degrees. They work in various settings that would be considered PHC such as clinics, public health units, home care agencies, community health centres and physician's offices. The educational programs provide nurses with a background in community health that prepares them for service in these areas. While the diploma programs offer some theoretical base, the university programs emphasize theory relevant to PHC. All university programs in Canada are autonomous, thus the curriculum approach and content emphasis may vary. However, all programs are guided by accreditation standards set by the Canadian Association of Schools of Nursing. Additional principles are found in the Canadian Community Health Standards of Practice (2003). These include the promotion of health, building individual community capacity, building relationships, facilitating access and equity and demonstrating profession responsibility and accountability. The standards are based on the main principles of the PHC system. The implications for nursing education in Canada from a PHC perspective include preparing nurses for multiple levels of practice, which parallels the needs of the community (Community Health Nurses Association of Canada, 2003). Community health nurses recognize that PHC is a different way of thinking about health and health care, which is fundamental to their practice. They synthesize knowledge from PHC, the determinants of health, nursing science and social sciences theory and knowledge to provide clinical care and treatment directed towards health restoration and maintenance (Community Health Nurses Association of Canada, 2003).

PHC principles have been incorporated in various ways in Canadian undergraduate nursing education programs. A 2005 survey of Canadian nursing programs conducted by the Canadian Association of Schools of Nursing Task Force on Public Health Education (CASN, 2007) found that most undergraduate programs in Canada cover PHC as a topic in their programs although the way it is delivered varies. A qualitative descriptive study conducted by Cohen and Gregory (2007; 2009) found that roughly 20 percent of Canadian baccalaureate nursing programs used PHC as a conceptual framework in their approach to community health clinical education. Further having an understanding and/or application of PHC principles to community health nursing practice was identified as a common expectation in clinical courses. They also found that, unlike the U.S., where baccalaureate education emphasizes a shift toward community-based nursing (i.e., providing nursing care to clients in community settings), Canadian programs tend to stress community health nursing with an emphasis on health promotion and disease prevention. A significant variation in community health clinical courses (content, process, outcomes) exists across the country, suggesting that there is a need for national consensus regarding standard curriculum content.

COMMUNITY HEALTH AND PRIMARY HEALTH CARE NURSING PROGRAMS

Most programs in community health emphasize concepts such as community-based assessment, population health and evidence-based nursing care. The Community Health N3VV3 as well as Population Health N2Q03 undergraduate courses offered at McMaster University introduce the assessment of health status of communities within a PHC framework. Models of "community development and community assessment, health promotion and health education are critiqued and applied to clinical scenarios" (McMaster University, 2007, p. 288).

The only approved post-graduate course in Ontario is the Primary Health Care Nurse Practitioner Certificate program. It started in 1995 as an undergraduate course delivered across 10 sites and has since evolved to graduate level status. The program takes 12 months of full-time study to complete and is available to RNs who meet specific criteria regarding experience levels and previous academic performance. It is offered through a consortium of 10 universities province wide. Four of the universities offer the core courses on site or by electronic means. Students in the program come from across Ontario and provide the essential supply of PHC nurses in diverse settings. They are expected to complete courses in pathophysiology, advanced health assessment and diagnosis, therapeutics and professional roles and responsibilities. The clinical course is focused on PHC service delivery, and the program involves a 13 week full-time clinical placement in which students work alongside experienced NPs and/or family physicians with other team members (Government of Ontario, 2007). Appendix A lists the courses that are used to create a program that focuses only on PHC.

A PHC based curriculum needs to ensure that students obtain rich clinical community health experiences. A Canadian environmental scan involving nursing educators, practitioners and nursing policy makers and managers identified internal and external enablers and challenges influencing community health content in undergraduate nursing programs. Having strong community partnerships were seen as enablers as was having a supportive curriculum structure and process that supported a PHC philosophy and community-oriented mindset (Valaitis, Rajsic, Cohen, Leesburg Stamler, Meagher-Stewart and Froude, 2008). However, obtaining quality clinical placements was identified as a significant challenge. The scan revealed that

there is an increased demand and decreased supply of clinical placements in Canada. Further, students often have limited exposure to varieties of community health nursing placements; having students exposed to one focused public health program (e.g. a school immunization program) is not enough to understand PHC concepts. Internal barriers were a lack of qualified faculty to teach community health and a poor understanding of PHC concepts. Further, community health was generally devalued in nursing schools compared to acute care. Nursing leaders in academe often came with acute care nursing expertise and less often with PHC and community health nursing experience.

TECHNOLOGY AND PRIMARY HEALTH CARE NURSING EDUCATION

The use of e-learning tools to extend the reach of health sciences and nursing education has grown exponentially. A recent systematic review of Internet-based learning instruction for health professionals was conducted by Cook and colleagues (2009). They concluded that internet-based learning was associated with large positive effects compared to having no intervention at all. In addition, results suggest that the effectiveness of Internet-based interventions are similar to interventions that are traditionally delivered. Online educational course offerings are more readily available at no cost to the learners, such as the Skills Enhancement for Public Health Program in Canada (Public Health Agency of Canada, 2007) and the USAID Global Health eLearning Center. In addition, results suggest that the effectiveness of internet-based interventions are similar to interventions that are traditionally delivered. A recent global virtual learning centre—Health Sciences Online—founded by a partnership between the US Centre for Disease Control, the World Bank, the American College of Preventive Medicine, and the University of British Columbia was launched in September 2008. It has made a wide range of learning resources and courses available for free with a vision to democratize health sciences knowledge. Advanced Internet technologies as well as improvements in Internet connectivity worldwide have contributed to the success of such initiatives. We are challenged to consider how such initiatives can be broadened to reach nations with poor access to such resources as well as to ensure that resources available are culturally appropriate for the nations who need to access them.

POLICY FRAMEWORK NECESSARY FOR PRIMARY HEALTH CARE EDUCATION

Governments need to invest in education that is congruent with the Canada Health Care Act. Ministries of education and health have to work together to support educators in preparing and presenting curricular materials that emphasize PHC. At the governmental level, a seven-point framework suggested by Baumann, Yan, Degelder, and Malikov (2006) is a good guideline for assessing government interest in supporting education (see Table 1). The framework "draws on available country data and includes GDP and investments in health, policy frameworks, countrywide strategies, provincial/regional strategies and professional associations/regulatory bodies (Baumann et al., 2006, p. 3)." The framework "is extremely useful if a country has a comprehensive database readily available for analysis" (Baumann et al., 2006, p. 6).

Table 1 SEVEN-POINT FRAMEWORK

Areas of Focus

1	GDP and investment in health
2	Mix of private/public investment
3	International migration
4	Health policy frameworks
5	Countrywide strategies
6	Province/regional strategies
7	Professional association/regulatory body

Countries that are able to invest more in the seven focus areas are better able to implement PHC in the health care environment. Thus enabling "universal access and social protection, improvements in health equity, reorganization of service delivery around peoples' needs, remodeling leadership for health around more effective government/public policy and the active participation of key stakeholders" (WHO, 2008, p. 148).

Social trends such as increased acuity of client illnesses and shorter hospital stays present a challenge to nurse educators and heighten the need for health care reform. However, WHO notes:

Schools of public health, community medicine and community nursing have traditionally been the primary institutional reservoirs for generating that workforce that supports PHC. However, they produce too few professionals who are too often focused on disease control and classical epidemiology. (2008, p. 100)

Nurses must be able to adapt to institutional settings, as well as coordinate and provide follow-up care in the community (CNA, 2003). Educating the nursing workforce using standardized core competencies can facilitate delivery of PHC locally, nationally and internationally. De Maeseneer et al. (2007, p. 4) observe that:

In developing countries, there is a problem for recruitment and retention of PHC providers, especially nurses at the primary health care level. . . . [and] a shift of nurses from the local primary health care services in community clinics, towards vertical disease-oriented programs at the hospital level. On a global scale there is increasing emigration of PHC providers from developing countries to higher income countries.

Policies that emphasize PHC education are integral to implementation of a PHC approach in the health care system. Characteristics that shape the health care system have an impact on PHC nursing education. Currently, there is a "disproportionate focus on specialist, tertiary care, often referred to as 'hospital-centrism,'" which results in unnecessary medicalization of health care (WHO, 2008, p. 11). There is also fragmentation of health care systems built around priority programs that focus on disease control (WHO, 2008). In several countries this has led to the health care system drifting towards unregulation and commercialization, resulting in out-of-pocket payment by patients, which negatively influences access to health care services (WHO, 2008).

Schools are encouraged to build partnerships with community agencies where students can obtain rich clinical placements with exposure to intersectoral and interdisciplinary environments where health promotion and disease and injury prevention is modeled, and where the delivery of programs and services takes into account an equity lens. However, such collaborative programs require policy support, legislation as well as government funding to help to bridge health and education sectors. The Public Health Research Education and Development program which is funded in part by a provincial ministry as well as local municipal government in Ontario, is one example of a strong community university partnership (Public Health Research, Education and Development Program, 2009). Historically, in this program, joint appointments between academia and service delivery units were established to promote cross fertilization of practitioners and decision-makers with academia to enhance research and practice as well as undergraduate and graduate education in public health. (Black, Edwards, McNight, Valaitis, & VanDover, 1989; Ganley et al. 2004.) Such models should be considered for capacity building of the primary health care workforce.

GLOBAL CHALLENGES OF IMPLEMENTING PRIMARY HEALTH CARE NURSING EDUCATION

Primary health care nursing curriculum presents several macro level challenges in terms of nursing education:

There is still great variability which exists in levels of entry to the profession. There is great desirability to move to the Bachelor's level as the minimum entry standard to the profession. However, the majority of existing programs globally are not at this level (WHO and STTI, 2006, p. 13)

Nurses are traditionally socialized in expert care provider roles, associated with the traditional medical model (CNA, 2003). Primary health care education requires a shift from the top-down approach of nursing care to an increasingly greater emphasis on horizontal partnerships at the community level. This requires a change in nursing roles and resocialization targeting PHC curricula at the early stages of undergraduate nursing. Furthermore, there are insufficient numbers of nurse teaching faculty with higher degree qualifications, presenting a major challenge for expansion of advanced nursing education in primary health (WHO and STTI, 2006).

RECOMMENDATIONS

Primary health care nursing education requires multilevel institutional development involving many areas of the health care system. The WHO (2008, p.xix) believes "the current international environment is favorable to a renewal of PHC, as global health includes a growing interest in action." It is important to "capitalize on this momentum, investment in PHC reform" (WHO, 2008, p. xix) through nursing education can transform health systems and improve the health of individuals, and communities.

Recommendations include uniformity and standardized PHC nursing curriculums, policy frameworks that include the education of health professionals in PHC, faculty development and capacity building in PHC theories, concepts and practice, toolkits that outline curriculum and

core competencies in PHC, university and college diploma programs/ partnerships, university and health and community agency partnerships, educational delivery strategies which extends educational reach through the use of technology where needed, countrywide human resource plans, appropriate funding strategies and ensuring predictable PHC workforces.

As suggested above, nursing education should include a PHC focus at the undergraduate level, as well and standardization of nursing degree programs and financial investments in training educators to support institutions of higher education. Furthermore, PHC nurses need to work collaboratively with institutions of higher education, policy makers and the health care system in developing PHC nursing roles and responsibilities, ensuring professional standardization and integrating a PHC approach into their practice. Monitoring and evaluating models of PHC nursing practice and supporting the dissemination of PHC nursing education models within each sector are also recommended (WHO, 2008; WHO and STTI, 2006).

CONCLUSION

Services offered through PHC are not only provided to the individual but to the community as a whole. Primary health care nursing education offers tremendous potential benefits to Canadians and the health care system. The multidisciplinary and multisectoral approach, in which PHC is centered, combines high quality comprehensive medical, nursing and other health care and social services while focusing on disease prevention, health promotion and teamwork. Globally, nursing practice and education is evolving as nurses address the challenges of moving away from hospitals into communities. As illustrated through the Canadian case study analysis, it is imperative to invest in PHC nursing curricula and to remove any obstacles that prevent PHC from being utilized to its fullest capacity.

APPENDIX A

The following courses are used to create a program that focuses only on PHC:²

1. 4AA5 Advanced Health Assessment and Diagnosis I - Focuses on the development of clinical decision making and advanced health assessment knowledge and skills in providing primary health for the adult client.
2. 4AB5 Advanced Health Assessment and Diagnosis II - Applies frameworks, concepts and methods of health assessment and clinical decision making to specific populations across the lifespan, families and communities.
3. 4C13 Nurse Practitioner Integrative Practicum - An intensive field study with a focus on assessment, diagnosis and management of the care of clients. Emphasis is on synthesizing advanced knowledge and applying evidence based health care to clinical practice.
4. 4P03 Pathophysiology for Nurse Practitioners - Uses a systems approach to examine concepts in pathophysiology as a basis for advanced nursing practice in PHC. The course will provide a comprehensive overview of etiology, pathogenesis and clinical manifestation of diseases in adults and children found in primary care.
5. 4R03 Nurse Practitioner Roles and Responsibilities - Examines and analyzes the political, economic, social, ethical and legal issues related to the role and scope of practice of NPs.
6. 4TA4 Therapeutics in Primary Health Care I - Introduces concepts integral to pharmacotherapy, advanced counselling and complementary therapies related to episodic conditions across the lifespan. The therapeutic care plan approach is emphasized. 4TB5 Therapeutics in Primary Health Care II - Introduces concepts integral to pharmacotherapy, advanced counseling and complementary therapies related to episodic conditions across the lifespan are introduced. The therapeutic care plan approach is emphasized.

² All course descriptions are from the *McMaster University Undergraduate Calendar 2007-2008*, p. 290.

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