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Advanced practice nursing for enduring health needs management: A global perspective

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SUMMARY

Advanced practice nursing expertise has been acknowledged worldwide as one response to the challenges arising from changes in society and health care. The roots of advanced practice nursing education are at the University of Colorado where the first known programme started in 1965. In many countries advanced practice nurses (APNs) have taken responsibility for routine patient care formerly carried out by physicians in order to reduce their workload. However, more and more, APNs have taken responsibility for new service areas and quality programmes not previously provided. Chronic disease management is one of these new service areas because long-term diseases are increasingly challenging service systems globally. This article is based on an international APN partnership. The aim of the article is to describe how the partnership will design a 15 ECTS credit course on Enduring Health Need Management as a cross-cultural collaborative endeavour. The adaptation of an inquiry based learning framework will be described drawing on four main principles of the theory: authentic learning communities; student encouragement in analysing gradually more complicated problems; networking in knowledge creation and; student engagement and activity. The cross-cultural online course aims to increase APNs' intercultural competence as well as their global and international work orientation.

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Introduction

The pressure for cost-effectiveness in health care service provision combined with ever more complicated health needs of populations have challenged service systems worldwide. Therefore many countries are seeking ways to improve health care delivery by reviewing the roles of health professionals including the promotion of new and more advanced roles for registered nurses. The roots of advanced practice nursing were established in the USA during 1965, with the development of a nurse practitioner (NP) certificate program (Pearson, 1999). However, the term "advanced practice nursing" first did not appear in the nursing literature until the 1980s (Ruel and Motyka, 2009).

The International Partnership for Advanced Practice Nursing Education and Research (international APN partnership), as presented in this article, was established in London in 2009 as an endeavour by four universities, across three continents, to enhance the development of a collaborative advanced practice nurse (APN) education model. The partner universities in Europe, Australia, and the USA, had earlier jointly been involved in various cross-cultural competency developments and student exchange programmes since 1994. Thus the partnership was built on trust and friendship among the faculty of the partners. In two years, the partnership (Box 1) has expanded and now covers seven universities that constitute an international and multi-centre project team with a varied range of experiences in setting up and developing advance practice nursing. The central goal of the two-year project is to design a shared online course at master's level, which will be offered as an integrative course within each university's existing APN education programme. The online course is

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University	Country
Savonia University of Applied Sciences	Finland, Europe
North Karelia University of Applied Sciences	Finland, Europe
Glamorgan University	Wales, Europe
University College Cork	Ireland, Europe
Medical University of Varna	Bulgaria, Europe
Southern Cross University	New South Wales, Australia
Vanderbilt University	Tennessee, USA

Box 1. The international APN partnership.

titled "Enduring Health Needs Management". The aim of the cross-cultural online course is to increase APNs' intercultural competences and global perspectives in local care provision, leadership and research.

The International Council of Nurses (ICN, 2010) has defined the NP/APN as follows:

> "A Nurse Practitioner/Advanced Practice Nurse is a registered nurse who has acquired the expert knowledge base, complex decision-making skills and clinical competencies for expanded practice, the characteristics of which are shaped by the context and/or country in which s/he is credentialed to practice. A master degree is recommended for entry level."

APN has been used as an umbrella term signifying nurses practicing at a higher level than do traditional nurses (Sheer and Wong, 2008). The APN concept incorporates a number of advanced practice roles, such as nurse practitioner (NP), clinical nurse specialist (CNS), nurse anaesthetist (NA) and certified nurse-midwife (Cronenwett et al., 2011). While the overall goal is to bring APN education to master's level, not all countries have reached this goal (Sheer and Wong, 2008). In the USA, preparation for advanced nursing practice has been developed at doctoral level. The first practice-focused doctoral degree programme in nursing was established at Case Western Reserve University in 1979. Since then, Doctor in Nursing Practice (DNP or DrNP) programmes have emerged with the intent to improve health care systems through administrative leadership and advanced practice roles (Cronenwett et al., 2011). In this article, APN will be used as a generic term for nurses practicing at a higher level consistent with the ICN definition presented above.

It is widely agreed that advanced nursing practice is a unique blending of nursing (caring) and medicine (curing) (e.g. AANP, 1993a; Donato, 2009). In some countries such as the USA, the APN is a licensed, independent practitioner, who practices autonomously and, in collaboration with an interdisciplinary team to assess, diagnose, treat, and manage the patient's health problems and needs (AANP, 1993a).

Delamaire and Lafortune (2010) remind us that evidence shows how using APNs can improve clients' access to services, reduce waiting times and save health costs. APNs have been shown to deliver the same quality of care as doctors for various health problems and routine patient follow-ups, provided they have received education and training (Mundinger et al., 2000). Wilson et al. (2002) state that APNs can reduce cost and general practitioners workload without compromising quality of care or patient satisfaction, although physicians may perceive APNs as a threat to their role. High patient satisfaction with APNs delivering health care services has also been reported by Agosta (2009). Patient satisfaction is mainly due to the fact that nurses spend more time with the patients and provide information and counselling from a more holistic view (Delamaire and Lafortune, 2010).

Advance practice nursing combines the roles of provider, mentor, educator, researcher and administrator (Byrant-Lukosius et al., 2004). However, many challenges exist with regard to the increasing numbers of APNs globally. These include proliferation of APN titles with a confused scope of practice, differing educational requirements and qualifications, fragmentation and variability in educational standards as well as standardization of the educational programmes (Schober and Affara, 2006). Fawcett et al. (2004) asks nurses and the public to question the nature of advanced practice nursing when it chiefly incorporates activities traditionally associated with medicine, and is apparently not valued by physicians.

The aim of this article is to describe the work of the international APN partnership while designing the Enduring Health Needs Management Course and the application of the progressive inquiry framework as the pedagogical approach in the development process.

Scope of Advanced Practice Nursing

In many countries, the development of the APN role has been a reaction to the needs of our changing societies. The growing elderly population, changing demography, lifestyle health issues, and concerns about access, quality, and cost have fed this development and evolution (Donato, 2009). In all countries around the globe, the need for expanding the APN role is connected with political, demographic and societal health issues. The role of nursing as a whole is being scrutinized in many fora, in terms of skill mix, shortage, and career frameworks. The APN role is perceived to be important in the battle against the increase in enduring and life style diseases and in balancing the health and well-being inequalities seen between different client groups (Sciamanna et al., 2006).

The partner countries are at different stages in implementing APN roles, the USA being a pioneer with over 40 years of experience. The USA recently developed a consensus model to clarify the roles of APNs while also standardizing education, licensure and certification (Stanley et al., 2009). Certified nurse-midwives are considered one type of APN in the USA. Other countries educate midwives differently, so they are commonly not considered an APN outside the USA (Duffield et al., 2009).

The first APN programme was introduced in New South Wales in Australia in 1990 under the work titles of clinical nurse specialist (CNS) and clinical nurse consultant (CNC) (Appel et al., 1996). In Europe, the development of the APN role has been slow. In 1991, the first NP programme was introduced in the Royal College of Nurses in the United Kingdom (UK) (Sheer and Wong, 2008) thus catalyzing the development in the UK. In Ireland, the first "advanced nurse practitioner" was accredited in 1996, and a career pathway towards advanced nursing practice was established following a Commission on Nursing in the late 1990s (National Council for the Professional Development of Nursing and Midwifery, 2005). Many European universities have established APN degree programmes at master's level. For example, the University Medical Center Groningen in Netherlands, has the programme since 1997, (Donato, 2009), with specialities on managing chronic illness,

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critical and intensive care, acute care, prevention and psychiatric care. The University of Basel in Switzerland has the programme since 2000, with speciality on managing chronic illness, (Sheer and Wong, 2008).

Although the formal recognition of the APN is still in its infancy, Finland has much experience with advanced collaboration between doctors and nurses in primary care health centres (Delamaire and Lafortune, 2010) and master's level APN programmes have been established in the country since 2009. The Eastern European countries, including Bulgaria, are rapidly adopting new economic and political reforms that affect many sectors including health care. Bulgaria and many other Eastern European countries still have obstacles and severe financial problems in organising health care services and education (Wright et al., 2005).

The APN's professional role is to diagnose and manage acute episodic and chronic illness, and to promote health and prevent illness by counselling individuals, families and groups (AANP, 1993b). By promoting evidence-based care and patient adherence to health promotion recommendations, APNs are champions of quality improvement (Kleinpell, 2007). According to their practice speciality, APNs work in the acute care, long term care, primary care (Fawcett et al., 2004), community settings, and home health (Schober, 2007).

Delamaire and Lafortune (2010) distinguish between two broad types of activities of APNs: substitution of tasks and supplementation of tasks. The first includes certain tasks formerly carried out by physicians that are transferred to APNs, such as diagnosis and treatment of commonly occurring health problems. The second includes tasks where APNs take responsibility for new services not previously provided. They may act as part of a new chronic disease management programme or promote higher quality of care in community and hospital settings.

The international APN partnership will work by clarifying the scope of advanced practice within the context of respective countries and will describe the country specific educational needs. The partnership believes, however, that the nature of nursing is dynamic and forever changing. The advanced practice roles are connected with the historical and societal characteristics of each country. The partners agree with Brown (1998) who states that in spite of versatile roles, advanced practice nursing has recurring characteristics that reflect core values of the profession. These include viewing health and illness holistically and believing that health and patient strengths should be addressed to the same extent as illness and problems. Moreover, APNs clearly employ a nursing orientation, even when their role involves management of physiological conditions traditionally managed by physicians.

The partnership is concerned that APNs carry out functions from a health oriented nursing world view. By developing the Enduring Health Needs Management Course, it is hoped to take nursing into a future where patients with chronic ailments will be empowered decision makers of their own health and care. The APN will be the enabler, advocate, and constructor of a social and physical environment; the one who will provide cure and care in collaboration with the patient and interdisciplinary health care team.

Progressive Inquiry in APN Education

The work of the international APN partnership is based on the progressive inquiry framework. Progressive inquiry or inquiry based learning can be defined as a learning framework characterised by the following features: (1) authentic learning communities, (2) student encouragement in analysing gradually more complicated problems, (3) networking in knowledge creation and (4) student engagement and activity (Hakkarainen et al., 2004).

As previously mentioned, society and health care is undergoing rapid and profound changes globally. According to Hakkarainen and his colleagues (2004), a networked society is emerging and therefore new skills and competences will be demanded of health care professionals. Work in health care organizations is increasingly becoming managed by collaborative multidisciplinary teams supported by technology. The work is increasingly characterized by networked activities and distributed expertise. Thus expertise is shared within and across teams and networks (Hakkarainen et al., 2004).

Educational organizations are challenged to find new pedagogical models and practices in order to support the sharing and creation of knowledge, and to cope with the challenges arising from the multicultural world. It is believed that that the international community is a nurturing context for new networked knowledge creation and the development of a renewed APN role.

Enduring Health Needs Management Course

The Enduring Health Needs Management Course (EHNM) aims to increase advanced practice nurses' intercultural competences and global perspectives on local care provision, leadership and research. The goal is to share patient care practices from other countries that can be incorporated into nursing care delivery in the home country.

The planning work started in 2009 and has taken place through face-to-face annual meetings and email. Each university has allocated resources for one lead person who will work on the project and will present at international conferences. An application for funding the development of the course has been made to the Life Long Learning Erasmus programme. The two-year Erasmus project comprising of a 15 ECTS credits course will be piloted in an international virtual network simultaneously in each partner university. In the European Credit Transfer and Accumulation System (ECTS) for higher education, one credit corresponds to 27 h of work. The development work of the partnership has taken place through the key principles of the progressive inquiry framework as follows.

Providing Authentic Learning Communities

A starting point of the progressive inquiry in EHNM course will be to create a learning context where the investigated problems will be reviewed in relation to central conceptual principles of both caring and curing domains and to authentic, real-world problems arising from the advanced practices of each participating country. Hakkarainen (2009) emphasises that in progressive inquiry, the focus should be on educational arrangements and models which exchange knowledge between educational and professional communities. The authenticity of the EHNM course will be realised within the processes whereby students with different cultural backgrounds and experiences share knowledge and expertise in a cross-cultural learning online community. Thus the more advanced students will support the less advanced ones. The unit will be conducted online and expert lecturers from the participating universities will be utilised as learning resources.

Central to networking, is the task of defining the role of the registered nurse and APN in contributing to models of best practice designed to meet international healthcare needs. The course will explore the relationship between chronic disease management, health promotion, health care systems and policy frameworks in different countries. It will explain how evidence-based practice and health care delivery influences clinical decision making. The impact of socio-political, cultural, and historical determinants on health intervention in disadvantaged groups will be explored.

Student Encouragement in Analyzing Gradually More Complicated Problems

The inquiry based knowledge processing includes four stages: setting up questions, generating working theories, searching new information, and engagement in deepening inquiry (Lakkala, 2010). The first stage, setting up questions, guides the learning and inquiry process. It is important that the questions arise from students' own needs to understand the problem and content. In addition, it is vital to

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engage students in a process of question generation. An essential aspect of inquiry is generating working theories. Students will form their own hypotheses, theories or interpretations for the phenomena being investigated. In order to develop the inquiry, it is necessary that students obtain new information and knowledge. Students will be encouraged to explore diverse information sources to find answers to their questions. The final stage of deepening inquiry is critical for student progress. It is this stage when students will focus on improving their theory by developing more specific questions and searching for new information.

The objectives of the EHNM course emphasise that students will attain global APN competences. To reach these objectives, the students engaged in our network will be encouraged to inquire about chronic disease patterns across different populations, critique international health care systems and policy frameworks, explore health care provision and design in the context of various cultures, as well as explain the independent and interdisciplinary role of APNs in an international context. The inquiry process will be carried out in cross cultural online student groups.

Networking support in knowledge creation

According to Lakkala (2010), learning is participating in and growing up to a social community as well as developing one's identity. Networked learning communities enable access into various kinds of authentic expert knowledge, as well as a way to build connections between educational institutions and varied expert cultures and communities. When students work with their chosen problems, the collaborative group will seek to assess strengths and weaknesses of different explanations and identify contradictory explanations, gaps of knowledge, and limitations of intuitive explanations (Lakkala, 2010).

The EHNM network includes seven expert cultures and educational institutions (Box 1). Various kinds of authentic expert knowledge will be made available for the students participating in this project. The students themselves will be practising nurses and will have various professional backgrounds and practice environments. Societal structures, health service delivery frameworks, and demographic facts, as well as climate and geographic realities, vary in each of the participating countries thus providing a fruitful learning network for the APN students of this project.

Student assessment requirements of the unit will use a variety of environments and expertise. The assessment tasks will include participation in online discussion for a and two assignments focusing on enduring health needs management: (i) a critical comparison of health care systems between the student's country and another country; and (ii) designing an ideal health service delivery model.

Promoting student engagement and activity

According to Lakkala (2010), most students do not spontaneously take responsibility for advancing inquiry among other students or among a whole community about topics of mutual interest. Thus, it is important to define explicitly the common goals of progress for both individual students and groups. Lakkala suggests that students should be guided to jointly make a summary of all inquiry results.

Moreover, a challenge is how to encourage students to share the entire process and its progression (including original ideas, drafts and intermediate knowledge products) for commenting and co-construction through the online learning environment. To promote students to share the process, it is important to agree on some explicit, compulsory midway learning activities for presenting the intermediate outcomes among peers and groups (e.g. report drafts or written reviews of the current stage of the process). Such a process will support the development of students' metacognitive skills (Lakkala, 2010).

Metacognitive skills in this project can be defined as APN students' abilities to integrate their own work into the wider societal and global contexts as well as to base their own work on evidence. This can be reached only if students are active in sharing experiences and engaged in cross-cultural reflection.

Discussion

The health service provision worldwide is challenged by looking for new types of professional expertise and changes in the distribution of work. The international APN partnership (Box 1) was established in order to develop a collaborative APN education model.

The partner countries represent different histories and health care systems as well as variations in nursing education and roles. As the project is in its early stages, there are not yet systematic data about the detailed expectations of advanced practice nursing roles or scope of practice within the different health systems among the partnership. The key areas of similarity and difference will be described and as the foundation of the development work. During the two-year project a shared Enduring Health Needs Management Course will be planned and piloted online in the partner universities. By adopting both the progressive inquiry framework and health related nursing paradigm, the partnership is hoping to impact on the way the APN will practice and learn in the participating countries.

According to Koskinen and Jokinen (2007), gaining intercultural competence is a learning process where the learners must critically reflect on their earlier cultural and personal ideologies, seek new knowledge, and be in dialogue with individuals of a different culture. They believe that if educators want to prepare nurses to interact as members of a multicultural health service in an intercultural competent way, it is important to integrate intercultural experiences as a part of nurse education programmes. The partners of the EHNM course believe that by adapting pedagogical principles of inquiry based learning (Hakkarainen et al., 2004; Lakkala, 2010), this goal will be reached and both the students and faculty of the project will gain intercultural competence.

According to WHO, "Health promotion is the process of enabling people to increase control over, and to improve, their health. …Health is, therefore, seen as a resource for everyday life … health promotion is not just the responsibility of the health sector, but goes beyond healthy lifestyles to well-being" (The Ottawa Charter for health promotion, 1986 p. 1). The general public is not lacking the knowledge for healthy living but it is poorly motivated and supported with regard to maintaining and promoting personal health (Scholz et al., 2008). Therefore, the APN needs to be the practitioner with health orientation. Within the new agenda for health and health policy, the APNs scope of practice will be the provision of patient and family focused care and support for citizens' self management capacity regarding enduring health needs in relation to chronic diseases and illnesses.

Nursing is directed by the patient's articulation and expression of need. This need extends beyond the event of illness or injury but rather encompasses the need to promote health and well being. The patient, particularly one with enduring health needs, is informed and active, and is the one who gives the direction for the care or cure plan. The APN responds in such a manner as to create the therapeutic environment that patients require for their sense of coherence. In the design of the course, the partnership views it as more than just equipping the nurse with clinical skills. Rather, this course is central to creating leaders and reformers of nursing who can and will enhance the role of the patient in the provision of care.

Conclusions

The international APN partnership is a multi-centre project team with different histories and experiences in developing advance practice nursing and education. The partnership believes that through

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the development of the online Enduring Health Needs Management Course, a new type of APN role will be developed. Most likely, the APNs participating in this project will gain intercultural competence in as well as global perspectives on care provision, leadership, research, and improved skills for international networking.

References

AANP, 1993a. American Academy of Nurse Practitioners. Scope of Practice for NPs (Revised 1998, 2001, 2007, 2010. Available at:) http://www.aanp.org/AANPCMS2/AboutAANP/About+NPs.htm (Accessed 3 November 2010).

AANP, 1993b. American Academy of Nurse Practitioners. AANP statement on NP curriculum (Revised 1999, 2003, 2007, 2010. Available at:) http://www.aanp.org/AANPCMS2/ResearchEducation/EducationPageOne/NP+Preparation/NursePractitionerPreparation.htm (Accessed 3 November 2010).

Agosta, L.J., 2009. Patient satisfaction with nurse practitioner-delivered primary healthcare services. Journal of the American Academy of Nurse Practitioners 21 (11), 610–617.

Appel, A.L., Malcolm, P., Nahas, V., 1996. Nursing specialization in New South Wales, Australia. Clinical Nurse Specialist 10 (2), 76–81.

Brown, S.J., 1998. A framework for advanced practice nursing. Journal of Professional Nursing 14 (3), 157–164.

Byrant-Lukosius, D., DiCenso, A., Browne, G., Pinelli, J., 2004. Advanced practice nursing roles: development, implementation, and evaluation. Journal of Advanced Nursing 48 (5), 519–529.

Cronenwett, L., Dracup, K., Grey, M., McCauley, L., Meleis, A., Salmon, M., 2011. The doctor of nursing practice: a national workforce perspective. Nursing Outlook 59 (1), 9–17.

Delamaire, M., Lafortune, G., 2010. Nurses in advanced roles: a description and evaluation of experiences in 12 OECD countries. OECD Health Working Paper No. 54 (Available at:) www.oecd.org/els/health/workingpapers (Accessed 4 October 2010).

Donato, A.S., 2009. Nurse practitioners in Holland: definition, preparation, and prescriptive authority. Journal of the American Academy of Nurse Practitioners 21 (11), 585–587.

Duffield, C., Gardner, G., Chang, A.M., Catling-Paull, C., 2009. Advanced nursing practice. A global perspective Collegian 16 (2), 55–62.

Fawcett, J., Newman, D.M.L., McAllister, M., 2004. Advanced practice nursing and conceptual models of nursing. Nursing Science Quarterly 17 (2), 135–138.

Hakkarainen, K., 2009. A knowledge-practice perspective on technology-mediated learning. Computer-Supported Collaborative Learning 4 (2), 213–231.

Hakkarainen, K., Palonen, T., Paavola, S., Lehtinen, E., 2004. Communities of networked expertise: professional and educational perspectives. Advances in Learning and Instruction Series. Elsevier, Amsterdam.

ICN, 2010. International council of nurses. Nurse practitioner/advanced practice network(Available at:) http://icn-apnetwork.org/ (Accessed 4 October 2010).

Kleinpell, R.M., 2007. APNs Invisible champions? Nursing Management 38 (5), 18–22.

Koskinen, L., Jokinen, P., 2007. Multicultural Healthcare. A Transatlantic Project 32 (2), 89–93.

Lakkala, M., 2010. How to design educational settings to promote collaborative inquiry: pedagogical infrastructures for technology enhanced progressive inquiry. Academic dissertation. University of Helsinki. Available at: http://www.doria.fi/bitstream/handle/10024/59552/howtodes.pdf?sequence=2 [Accessed 19 October 2010].

Mundinger, M., Kane, R., Lenz, E., Totten, A., Tsai, W., Cleary, P., 2000. Primary care outcomes in patients treated by nurse practitioners and physicians. A randomized trial. The Journal of the American Medical Associate 282 (1), 59–69.

National Council for the Professional Development of Nursing and Midwifery, 2005. A Preliminary Evaluation of the Role of the Advanced Nurse Practitioner. Available at http://www.ncnm.ie/items/1314/85/6200145527%5CANP%20Evaluation%2012_05.pdf [Accessed 26th May 2011].

Pearson, L., 1999. Editor's memo. Lessons from a Leader… Loretta Ford. The Nurse Practitioner 21 (11), 25–26.

Ruel, J., Motyka, C., 2009. Advanced practice nursing: a principle-based concept analysis. Journal of the American Academy of Nurse Practitioners 21 (7), 384–392.

Schober, M., Affara, F., 2006. Advanced Nursing Practice. Blackwell Publishing, London.

Schober, M., 2007. The global emergence of advanced practice nurses in providing home and community health care services. Home Health Care Management 20 (1), 34–40.

Scholz, U., Nagy, G., Schuz, B., Ziegelmann, J.P., 2008. The role of motivational and volitional factors for self-regulated running training: associations on the between- and within- person level. British Journal of Social Psychology 47 (3), 421–439.

Sciamanna, C.N., Alvarez, K., Miller, J., Gary, T., Bowen, M., 2006. Attitudes towards nurse practitioner-led chronic disease management to improve outpatient quality of care. American Journal of Medical Quarterly 21 (6), 375–381.

Sheer, B., Wong, F.K.Y., 2008. The development of advanced nursing practice globally. Journal of Nursing Scholarship 40 (3), 204–211.

Stanley, J.M., Werner, K.E., Apple, K., 2009. Positioning advanced practice registered nurses for health care reform: consensus on APRN regulation. Journal of Professional Nursing 25 (6), 340–348.

The Ottawa Charter for Health Promotion, 1986. World Health Organization. (Available at:) http://www.who.int/healthpromotion/conferences/previous/ottawa/en/(Accessed 6 February 2011).

Wilson, A., Pearson, D., Hassey, A., 2002. Barriers to developing the nurse practitioner role in primary care—the GP perspective. Family Practice 19 (6), 641–646.

Wright, S., Cloonan, P., Leonhardy, K., Wright, G., 2005. An international programme in nursing and midwifery: building capacity for the new millennium. International Nursing Review 52 (1), 18–23.

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