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Advanced Practice Nursing: a concept analysis

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Abstract

A variety of terms are used to describe advanced practice nursing roles internationally. This has resulted in confusion in terminology around these roles. The aim of this concept analysis was to clarify what is meant by advanced practice nursing internationally, what attributes signify advanced practice nursing and what are its antecedents, consequences, references and related terms. Rodgers's evolutionary method of concept analysis was used. Data sources included Medline, CINAHL, Applied Social Sciences Index and Abstracts (ASSIA), Cochrane Library, Science Direct, SCOPUS, Web of Science, Dissertation Abstracts, and DARE as well as relevant nursing texts and professional organisation web sites. The analysis reveals that there are many different articulations of the advanced practice nursing role outlined in the literature. This variety in terminology hinders developments in advanced practice nursing roles. Consensus on advanced practice nursing definitions, terminology, educational requirements, and regulatory approaches is integral to the implementation of the advanced practice nursing role internationally.

Key words: advanced practice nurse; clinical nurse specialist; concept analysis; nurse practitioner.

Introduction

There is continuing confusion in terminology surrounding advanced nursing roles.^{1,2,3,4} A survey of 18 countries conducted by the Nurse Practitioner/Advanced Practice Nursing Network (INP/APNN) of the ICN,⁵ identified 14 different titles designating advanced practice roles and noted great variety in educational and practice requirements. Moreover, the pursuit of cross-cultural comparison in advanced practice roles is considered questionable in view of the difference in these roles internationally.⁶ This concept analysis is timely in view of the recent 2010 report by the Office of the Organization for Economic Co-operation and Development (OECD) which examined the state of development of advanced practice nursing roles (APN) in 12 countries.⁷ This report illustrates that there are various roles and contexts which apply to advanced practice nursing internationally.

Methods

Content analysis is a strategy used to examine the attributes or characteristics of a concept through a rigorous review process.⁸ The central purpose of this concept analysis was to distinguish between the defining attributes of the concept of advanced practice nursing (APN) and its irrelevant attributes through refinement of ambiguity found in numerous definitions and descriptions of the concept in various sources. Rodgers's evolutionary method of concept analysis formed the framework for this analysis.⁹ Rodgers's model is based on the assumption that concept development is a fluid ongoing process, subject to change within contextual and temporal aspects.

Inclusion criteria were sources containing one or more of the following key words: 'advanced practice nursing', and 'advanced nursing practice' were used to search the literature and 'advanced', 'practice', and 'nursing' were combined.

Additional terms used in the search included the following: ‘clinical nurse specialist’, ‘nurse practitioner’, ‘advanced nurse practitioner’, ‘advanced midwife practitioner’, ‘clinical midwife specialist’, ‘nurse consultant’, ‘midwife consultant’, ‘clinical nurse consultant’, ‘advanced clinical nurse’, ‘advancing midwifery practice’, and ‘nursing outcomes’. These were combined with the following countries: ‘United Kingdom (UK)’, United States (US), ‘Canada’, Australia, New Zealand, Ireland, and Nordic States. The role of nurse anaesthetist was not used in this search due to its very specific and unique interpretation of advanced practice.

Data sources included Medline, CINAHL, Applied Social Sciences Index and Abstracts (ASSIA), Cochrane Library, Science Direct, SCOPUS, Web of Science, Dissertation Abstracts, and DARE as well as relevant nursing texts and professional organization web sites. No time limit was set. Studies and discussion papers were included if published in English and their abstract included one or more of the search terms. The initial search of databases identified 184 papers meeting the inclusion criteria. Reference lists for article, book or chapter were also examined for any relevant literature not identified through electronic databases.

Results

The literature retrieved was reviewed and relevant attributes, antecedents, consequences, references and surrogate terms for advanced practice nursing identified.

There is consensus that advanced practice is “beyond basic practice within the *clinical* domain” (p.153)¹⁰ and can be distinguished from basic practice through specialisation, advancement and expansion.¹¹ However, subtle differences in the attributes of various advanced practice roles internationally, are evident. For instance,

in Ireland, a distinction between the core concepts of advanced practice and clinical nurse specialist/clinical midwife specialist is made.¹²

The five roles commonly associated with the CNS role internationally (i.e. educator, researcher, expert practitioner, consultant and leader),¹³ are reflected in the four functions of the consultant nurse; i.e. expert practice, leadership and consultancy, education, training and staff development and service development, research and evaluation.^{14,15} Recent work also provides greater clarity through the identification of seven generic abilities of advanced nurse practitioners.⁴ (Table 1).

Attributes of advanced practice nursing

Four attributes of advanced practice nursing were identified in the analysis, i.e. clinical expertise, leadership, autonomy and role development. Designation of nurses in advanced practice as ‘clinical experts’ emerges strongly in the literature¹⁶, and advanced practice is synonymous with expertise. However, “the quest for expertise in advanced nursing practice may be likened to the Holy Grail as a mysterious object of search and as the source of ultimate knowledge” (p.206)¹⁷.

The theme of leadership also emerges strongly in views of advanced nursing practice.^{14,18,4} Leadership skills are repeatedly noted to be essential to implement innovation and change integral to these roles. Autonomy similarly emerges strongly as a central attribute of advanced practice nursing.⁴ Advanced practice is often discussed in the context of the autonomy it affords nurses through expanded and extended roles.^{19,20} Both leadership and autonomy are considered central to effective performance of advanced practice roles.^{21,22}

Any discussion on the attributes of advanced practice cannot occur without attention to role expansion and extension. Role extension is the inclusion of a role that was previously regarded as the role of another profession, and the Nurse Practitioner

(NP) role and medicine falls into this category.²⁰ However, fragmentation of nursing care is possible with role extension.⁴ Moreover, the focus on role extension raises concerns that a medical focus rather than a nursing focus gains dominance in APN practice.¹⁶ Role expansion evolves when additional skills and responsibilities are integrated into the specialist role in the context of the core elements of nursing practice resulting in more autonomy.²⁰ However, use of the term ‘role development’ appears more appropriate in current discussions on advanced practice.²⁰ Interestingly, while prescribing is a role only undertaken by nurses in advanced roles in some countries (e.g. Nurse Practitioners in Canada and in US), legislation in other countries permits nurses with the appropriate training to prescribe while not necessarily being in approved advance practice roles (e.g. Ireland).⁷ A comprehensive review of varying scope of practice and legislation is provided in the OECD report on advanced nursing roles.⁷

References of advanced practice nursing

The purpose of identifying the references of a concept is to clarify the range of events and circumstances over which the application of the concept is considered fitting.⁹ Many different titles are used internationally to describe advanced practice nursing roles.^{5,7,23,24} Eight advanced role titles are identified (CNS, ANP, NP, Higher Level Practitioner (HLP), Nurse Consultant (NC), Specialist Practitioner, Nurse Therapist and Physician’s Assistant).²⁰ Other titles found in the literature include advanced midwife practitioner,²⁵ nurse clinician,²⁶ advanced practice nurses²⁷ and clinical nurse consultant.² However, only four APN roles have been officially designated by the American Association of Nursing and include nurse practitioner, clinical nurse specialist, nurse anaesthetist, and nurse midwife,²⁸ with six population foci identified, namely, family/individual across the lifespan, adult/gerontology,

neonatal, paediatrics, women's health/gender, and psychiatric-mental health.²⁴ In addition, the scope of practice for certified nurse anaesthetists (CRNA) is often considered unique from other APNs, illustrated by their exclusion from a Delphi study to identify nurse-sensitive outcomes of advanced practice.²⁹ Finally, the CNS and NP roles are adopted across international settings, while the title of ANP (Advanced Nurse Practitioner) is only adopted in some countries, most notably Ireland, with Canada using the term Advanced Practice Nursing in the context of the Nurse Practitioner role. Interestingly, in one study NPs were excluded from the generic title of APN because the core of this role is diagnosis and treatment.³

The inclusion of 'nurse midwife' under the heading of advanced practice in the US is noteworthy. Discussions on midwifery roles in advanced practice are sparse in the literature, with only brief reference to midwifery specialist roles.³⁰ In addition, roles in nurse midwifery, which developed in the first half of the 20th century were only "added to the APN family" in specific countries (p. 153).¹⁰ Interestingly, standard midwifery roles in the UK are differentiated from consultant midwife roles. A similar view is taken in Ireland with the role of advanced midwife practitioner differentiated from the standard midwife role.³¹

The title used in one country may be equivalent to a different title used in another. For instance, the CNS role as it is envisaged in the US has notable similarities to the clinical nurse consultant (CNC) role in Australia.² In addition, the CNC role in Australia, in existence since the late 1980s is similar to that of the role of 'advanced practitioner' in the UK.³² These differences in titles have resulted in confusion over advanced practice roles internationally and have often hindered development of these roles.³³

The two most common advanced practice roles are those of CNS and NP. In the US, nurse practitioners initially became synonymous with primary care, and clinical nurse specialists with specialised acute care,³⁴ with the view being that the NP role intersects with medicine; whereas the CNS role does not.³⁵ However, in recent years with the evolution of the acute care nurse practitioner roles in health care this dichotomy has become less evident.^{24,36} It is argued that the CNS role is not as clearly defined as that of the other advanced practice roles (NP, CRNA and CNM) in the US.³⁷ This view is illustrated by the difficulty in determining the exact number of CNSs in the US “because a large number of them are working under different titles” (p. 38).³⁸ The numbers of NPs has risen considerably when compared with that of CNS.^{39,40} Figures released in 2005 reveal that there were 116,447 registered NPs in the US compared to 15,098 CNSs.⁴¹ In the UK, it is argued that the introduction of the Nurse Consultant role has resulted in the erosion of the position of CNS at the top of the clinical ladder.⁴²

Related terms of advanced practice nursing

Multiple related terms appear in the literature (Table 2). Interestingly, many related terms are evident in the speciality of oncology nursing. Earlier related terms evident in the literature are that of ‘expert practitioner’, ‘advanced practitioner’ and ‘specialist practitioner’.⁴³ A related term used less frequently in the literature is that of ‘specialist nurse’.⁴⁴ Another related term is that of the lead cancer nurse, a relatively new role that developed in the UK to allow nursing at senior level to contribute to the planning and delivery of cancer services.⁴⁵ The ANP role is also discussed in relation to ‘nursing triage’, ‘nurse –led’,⁴ Clinical Nurse Leader (CNL) and Doctor of Nursing Practice.⁴⁶ The terms ‘nurse registrars’ (NRs) in emergency care in the UK and the

pioneering role of ‘lecturer practitioner’ are also used in the context of the expanding nursing role.⁴⁷

Another related term is that of ‘modern matron’ in the UK.^{7,48} This role resembles that of the unit-based CNS in the US. Other terms used include ‘case manger’,²¹ ‘clinical nurse resource’,⁴⁹ ‘nurse-led’⁴ and ‘midwife-led’.²² Finally, the role of the public health nurse in Nordic countries is discussed in the context of advanced practice.^{7,50}

Antecedents of advanced practice

On a macro level, advanced practice roles have evolved out of a multitude of factors including health needs of society, support for innovative health care delivery systems, governmental health policy and regulation, workforce supply and demand issues, nursing’s support for new roles, advances in nurse education and the development of a significant nursing research base.^{51,52} For instance, advanced practice roles are more developed in countries where primary care is organised around a team approach by virtue of its opportunity to share tasks.⁷

It is also proposed that the development of advanced practice nursing roles evolved out of influences from the socio-political environment, society’s health care needs, supply and demand of health workforce, governmental policy and support, intra/interprofessional collaboration, development of nursing education and documentation of effectiveness of the advanced role.¹⁰ Moreover, the development of advanced practice nursing roles is also viewed as a catalyst to make nursing a more attractive profession and increase retention rates by virtue of the career options it offers.⁷

Three essential antecedents to advanced practice emerge from the literature; one external and two internal. The external antecedent to advanced practice development has been the changes in medical practice internationally. The internal antecedents are higher education and clinical expertise.

The shortage of physicians in the US during the 1960s and 1970s as well as trends toward specialization versus primary care resulted in the development of NP posts.⁵³ In addition, the reduction of doctors' hours internationally also offered advanced practice nurses with an opportunity to fill the gap.^{54,55} In an analysis of nursing workforce reform in the US, Sochalski and Weiner⁵⁶ note that "the growing evidence of the influence of prolonged hours of interns and residents on medical errors and adverse events has led to the introduction of regulations limiting their hours. This 'shortfall' in medical resident hours has stimulated a demand for, and a gradual migration of NPs to acute care settings (np)". Cost of medical care has also had a significant impact, with nursing viewed in many studies as comparable quality and more cost effective.^{24,57,58} Finally, consumer demand for more choice and accessibility of medical care has significantly challenged health care delivery systems to relook at alternatives to traditional medical models of care.⁵⁹

Regarding higher education for advanced practice roles, it is recommended internationally that nurses practicing at advanced practice level should hold a Master's degree.²¹ This appears to be the case generally, with nurses and midwives in Ireland working at advanced practice level educated to at least the level of a Master's degree,²⁵ and also in Australia for the NP role.⁶⁰ All 4 APN roles in the US require master's level preparation with the more recent term 'graduate education' substituted to address the movement toward Doctorate in Nursing Practice (DNP).^{46,61}

In England, however, concern has been raised in the past regarding the absence of universal standards for the educational requirements of CNSs/NPs,⁶² and that training for nurses varied widely from short courses delivered locally to postgraduate study.²⁰ Advanced practice in the UK has ‘suffered’ as a result.⁶³ However, the NMC is presently proposing that nurses obtain a Master’s degree before being afforded the title of advanced practitioner,⁵⁵ which is in line with the ICN who recommend a Master’s degree for entry to advanced practice,⁶⁴ and doctorate programmes are now offered for nurses assuming the title of ‘nurse consultant’.⁶⁵

The picture is less clear with CNS roles. For instance, in New Zealand, the CNS role has no national certification and the role may differ from one district health area/hospital to another.⁶⁶ This further highlights the ‘levels’ that pertain within advanced practice roles.

Five years clinical experience of working within a speciality is generally agreed internationally to consolidate specialist competencies in preparation for an advanced practice role.³⁶ However, in the USA, there is no mandate for extensive clinical expertise as admission to the advanced practice role. Although several specialities may recommend 1 to 2 years clinical practice prior to entering graduate programs, there is variability in these requirements with some nurses obtaining simultaneous RN and APN status.⁶⁷

In Australia, nurses and midwives wishing to become NPs respectively must have at least three years postgraduate diploma experience in their speciality; they must seek employment as a NP/ANP candidate and pursue a Master’s degree.⁶⁰ Similarly, in Ireland, those wishing to become ANPs must have at least five years experience in their speciality, and also pursue a Master’s degree.⁶⁸ Some universities

build an internship aspect to their master's programme, where the nurse practitioner candidate works with a suitably qualified mentor in achieving their learning objectives in practice.⁶⁰

Consequences of advanced practice

“Articulating how, why, and for whom they [APNs] add value is critical to the future viability of the APN role and the delivery of quality healthcare services to the public” (p.219).⁴⁰ However, patient care provided by advanced practice nurses is often “invisible” (p.18).⁶⁹ The challenges in evaluating advanced practice outcomes include the use of multiple definitions for APNs and a lack of conceptual transparency regarding the role of the APN.⁴⁰ The difficulties of evaluating health outcomes of advanced practice roles is also due to the view that the role tends to have an indirect rather than a direct effect on patient outcomes.²⁰

This analysis has found that existing research examining advanced practice nursing outcomes may be viewed as belonging to 5 distinct categories: comparative studies between APNs and medical/other healthcare counterparts;^{70,57,71,72,73,74} studies describing APN skills and function;^{75,76} satisfaction with APN care studies;^{77,26} categorization of indicators of nursing outcomes studies;^{14,78} and those studies that focus on the “value added” contributions of the APN.^{79,80} However, there continues to be a scarcity of studies that utilise outcome indicators sensitive to advanced nursing practice.²⁹ In general, the impact of advanced practice nursing on patient care and costs is positive, with improved access of care for patients, reduced waiting times, and the delivery of similar quality care as doctors for a variety of services reassigned to them (e.g. review of patients with chronic conditions).^{7,81}

The approach to comparing APNs with other health care professionals is criticised by some,⁸² as it fails to explicate the complexity of care delivered by nurses in such roles, a task that has been acknowledged as being particularly difficult.⁸³ This complexity of care is, in part, due to the fact that nurses often work as part of a collaborative team,⁸⁴ thus making it difficult to evaluate their individual contribution to patient care.⁸⁵ Moreover, “the more complex the role, the harder it was to be clear about the APN’s individual impact” (ix).⁸⁶ Newhouse and colleagues⁸¹ in a landmark systematic review on care provided by APNs in the US between 1990-2008 concurred with these challenges to discerning APN outcomes, specifically noting failure to describe the exact nature of the APN roles and responsibilities, the bundling of APNs into teams and collaborative practice, and the complexity of interventions as study limitations.

Midwife consultants report statistically more significant impact on improving client access to the service, than mental health consultants.¹⁴ In addition, consultant posts which focus on a specific condition (e.g. diabetes or cancer) report having a major impact on discharge procedures.¹⁴ One systematic review also provides convincing evidence for midwife-led care.⁷⁸

Although few in number, several key studies have attempted to go beyond validation of the comparative value of APNs and have tried to illuminate this “added value’ which APNs bring to practice. The term ‘added value’ is used to describe the unique contribution nurse practitioners bring by blending nursing skills with medical knowledge.⁸⁷ Advanced practitioner effectiveness “may be related to knowing their patients as individuals” (p. 306),⁷⁹ suggesting the need to illuminate this often ‘taken-for-granted’ aspect of advanced practice in any evaluation of such practice.

Finally, recent developments include a tool to facilitate systematic evaluation of advanced practice,⁸⁷ and a systematic review outlining comprehensive evidence illustrating outcomes of advanced practice nursing.⁸¹ In the US, the Committee on the Robert Wood Johnson Foundation Initiative on the Future of Nursing (Institute of Medicine), emphatically supports the advancement of nursing roles in healthcare and provides ‘a blueprint for how the nursing profession can transform itself into an ever more potent and relevant force for lasting solutions to enhance the quality and value of U.S. health care in ways that will meet the future health needs of diverse populations.’ (ix)⁸⁸

Discussion

There are many different articulations of the advanced practice nursing role outlined in this analysis. Of all the advanced practice roles in nursing and midwifery, the role of CNS is the most unclear. This issue is also evident in the UK, where concerns regarding the proliferation of ‘site-specific’ cancer CNS roles are raised, because they may result in a fragmented service to patients.⁸⁹ However, a recent systematic review highlights that acute care CNSs can reduce hospital stay and cost of care for hospitalised patients.⁸¹ Moreover, efforts to improve the quality and consistency of education for CNSs in the US is evident with current developments for new proposed standards for the criteria for the evaluation of clinical nurse specialists’ masters, practice doctorate and post master’s certificate programmes.⁹⁰ In addition, the recent effort in the US to curb the proliferation of multiple narrow sub-specialisations in advanced practice roles is intended to more consistently regulate advanced practice and assure public safety and provision of quality care.²⁴ Furthermore, several major initiatives by the Canadian Nurses’ Association have

resulted in the acceptance of a national framework for advanced nursing practice,⁹¹ with agreed upon core competencies for the Nurse Practitioner role.⁵² Similarly in the UK, the RCN have officially substituted the term ‘advanced nurse practitioners’ to “acknowledge explicitly the advanced level of the nurse practitioner role, the scope of practice, and its associated competences” (p.2).⁹² In addition, the Scottish government has recently issued guidance on governance of advanced practice and consultant nurses.⁹³ This guidance is welcome in the UK in particular, where the ““hotchpotch” approach to providing credentials and titles may be an obstacle to the promotion and development of ANP role” (p.2946).⁹⁴

This concept analysis has clarified the attributes of advanced practice nursing internationally, these being, clinical expertise, leadership, autonomy and role development. Role development acknowledges that both role expansion and extension occurs in advanced practice nursing, however, some advanced practice roles (such as the NP role); promote more role extension than expansion.

This concept analysis reveals the complexity of advanced practice roles internationally and the difficulties in identifying the unique contribution of advanced practitioners in nursing and midwifery to healthcare. Four existing areas of conceptual confusion in the evolution of advanced practice have hindered its development.⁹⁵ These include lack of well defined and consistently applied terms; consideration of existing literature directly related to conceptualisation of advanced practice; clarity regarding conceptualisations that differentiate between and among levels of practice; and differentiation between APN and medicine (p.35).⁹⁵ It is of concern that a recent report concludes the difficulty in defining “precisely what the term “advanced practice nursing”” is (p. 8).⁷

The US urges the nursing community to ‘strive for harmony’ in understanding all aspects of advanced practice role to best promote safe, quality practice.²⁴ The development of advanced practice worldwide is underpinned by standards, regulations and legislation;⁹⁶ universal agreement is therefore needed to progress advanced practice nursing internationally. Debate at international nursing forums, such as the ICN Congress; provide opportunities to debate the need for universal agreement on advanced practice terminology.

Despite these aforementioned issues, support for advanced nursing practice remains steadfast. OECD countries who are only now developing advanced practice nursing roles can learn from those countries (e.g. US, Canada and UK) with years of experience in the development of these roles.⁷ Moreover, major interprofessional support for advanced practice nursing is evident with a call for transformation of graduate nursing education in the US and removing existing barriers to advanced practice.⁸⁸ In addition, a rethinking of the educational preparation for advanced nursing practice is also evident in countries such as the United States and Canada where nursing leaders are proposing a doctorate in nursing practice as an entry level for advanced practice nursing.^{88,97,98} However, continued debate over the definition and scope of advanced nursing practice hinders the development of innovative practice and impedes the recognition of nursing’s critical contributions to international healthcare. Global advancement of nursing as a leading provider of safe, accessible, quality healthcare is dependent upon achieving consensus on these issues. Less time spent in such debate will result in more time to implement high quality nursing care.

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Table 1 Advanced Practice attributes

7 Generic Abilities	7 Core Competencies
Use of knowledge in practice Critical thinking and analytical skills Clinical judgement and decision making skills Professional leadership and clinical inquiry Coaching and mentoring skills Research skills Changing practice	Direct clinical care Collaboration Coaching and guidance Research Ethical decision making Consultation Leadership

(Mantzoukas and Watkinson, 2007)

(Spross and Lawson, 2009, p. 59)

Table 2 Related terms for advanced practice

Speciality Practice Focus	Administration/Management Focus	Academia/Research Focus
Specialist Nurse Lead Cancer Nurse Advanced Clinical Nurse Modern Matron Macmillan Nurse (Palliative care) Nursing Triage Clinical Nurse Leader (CNL)	Nurse-led Midwife-led Case manager	Clinical Research Nurse Lecturer-Practitioner Clinical Nurse Resource