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Original Article

Factors Influencing Advanced Practice Nurses' Ability to Promote Evidence-Based Practice among Frontline Nurses

Kate Gerrish, RN, PhD, MSc, Mike Nolan, RN, PhD, Ann McDonnell, RN, PhD, MSc, Angela Tod, RN, PhD, MSc, Marilyn Kirshbaum, RN, PhD, MSc, RN, Louise Guillaume, PhD, MSc, BA (Hons)

ABSTRACT

Background: Advanced practice nurses (APNs) have an important role in promoting evidence-based practice (EBP) among frontline nurses (FLNs). Factors influencing FLNs' engagement with EBP are well documented but little is known about factors that affect APNs' ability to facilitate evidence in practice.

Aims: To identify factors that influence APNs' ability to promote EBP among FLNs.

Methods: A multiple case study of 23 APNs from hospital and primary care settings across seven English health authorities was undertaken. Data collection comprised interviews and observation of APNs and interviews with FLNs and other healthcare professionals. Data were analysed using the Framework approach.

Findings: Four groups of influencing factors were identified: (1) Personal attributes of APNs included knowledge and skills in EBP, clinical credibility with frontline staff and leadership style. (2) Relationships with stakeholders included APNs' interactions with FLNs and the level of support from managers and medical colleagues. (3) Aspects of the APN role included their sphere of responsibility and workload. (4) Organisational context included the organisational culture, FLNs' workload, professional networks and available resources.

Implications: Educational preparation for APNs should enable them to develop expertise in EBP plus interpersonal and leadership skills to manage relational dynamics in clinical settings. APN role specifications should provide the opportunity to promote EBP. The organisational culture should be conducive to enabling EBP with managers supportive of this aspect of the APNs' role.

Conclusions: APNs need to be supported to address the individual, interpersonal and organisational factors, which influence their ability to promote EBP. Organisational commitment at the highest level is key to APNs' ability to fulfil this aspect of their role.

KEYWORDS evidence-based practice, advanced practice nurses, frontline nurses, case study, leadership

Kate Gerrish, *Professor of Nursing Research, School of Nursing and Midwifery, University of Sheffield and Sheffield Teaching Hospitals NHS Foundation Trust, Sheffield, UK;* **Mike Nolan**, *Professor of Gerontological Nursing, School of Nursing and Midwifery, University of Sheffield, Sheffield, UK;* **Ann McDonnell,** *Reader, Centre for Health and Social Care Research, Sheffield Hallam University, Sheffield, UK;* **Angela Tod**, *Principal Research Fellow, Centre for Health and Social Care Research, Sheffield Hallam University, Sheffield, UK;* **Marilyn Kirshbaum**, *Reader in Nursing, School of Human and Health Sciences, University of Huddersfield, Huddersfield, UK;* **Louise Guillaume**, *Information Specialist, School of Health and Related Research, University of Sheffield, Sheffield, UK.*

We would wish to thank Dr Susan Read who contributed to the design and conduct of the case studies. This study was commissioned and funded by the Policy Research Programme in the Department of Health. The views expressed are not necessarily those of the Department. This research was funded by the Policy Research Programme of the Department of Health, England. Grant number 0160072.

Address correspondence to Kate Gerrish, School of Nursing and Midwifery, Samuel Fox House, Northern General Hospital, Herries Road, Sheffield S5 7AU, UK; kate.gerrish@sheffield.ac.uk

Accepted 15 August 2011
Copyright ©2011 Sigma Theta Tau International
doi: 10.1111/j.1741-6787.2011.00230.x

BACKGROUND

Despite research demonstrating the effectiveness of nursing interventions and evidence-based guidelines to inform practice, the use of evidence by frontline nurses' (FLNs) who provide direct care to patients leaves considerable room for improvement (Parahoo 2000; Squires et al. 2007). Barriers to research use among FLNs are similar irrespective of context. Reviews of international studies examining barriers to research use (Nolan & Cooke 2002; Markussen 2007) identified common barriers relating to: (1) lack of expertise in appraising research reports, (2) an unsupportive organisational context with insufficient time to evaluate research reports together with lack of authority and support to implement findings, (3) failure of researchers to communicate research findings effectively to practitioners and (4) limited research, which is perceived by practitioners to be relevant.

In a survey of FLNs, Gerrish et al. (2008) defined evidence-based practice (EBP) broadly to include research and other forms of evidence such as national guidelines and organisational information. Whereas achieving EBP remains challenging, Gerrish and colleagues (2008) indicate that progress is being made. Senior clinical nurses appear more confident than junior nurses in using different sources of evidence, utilising formal sources of knowledge and in gleaning knowledge about patients and the organisation. In contrast, junior FLNs are more aware of barriers to changing practice and accessing evidence-based information.

Several studies have examined the types of evidence that FLNs use. Nurses commonly acquire knowledge to inform practice from the workplace. This includes formal knowledge acquired from training and policy manuals and experiential knowledge gained from caring for patients and interactions with more experienced colleagues (Estabrooks 1998; Estabrooks et al. 2005; Spenceley et al. 2008).

Research has highlighted the role of advanced practice nurses (APNs) in promoting EBP among FLNs. Whereas there is considerable diversity in the role and function of APNs internationally, (Bryant-Lukosius et al. 2004) there is general consensus that APNs, by virtue of their expert knowledge base, complex decision-making skills and clinical competencies for expanded practice, can make an important contribution to influencing the practice of FLNs (Schober & Affara 2006). APNs disseminate evidence to FLNs (Thompson et al. 2001a) and act as knowledge brokers helping FLNs link evidence to practice (Milner et al. 2005). In a cross-sectional survey of 855 APNs in the United Kingdom, Gerrish et al. (2011) identified that APNs facilitate EBP among FLNs by disseminating evidence, working alongside FLNs and assisting them to solve clinical problems. APNs were also instrumental in developing and implementing evidence-based guidelines. Role modelling, impromptu teaching in clinical settings and formal training were used to raise FLNs' awareness of best practice and support nurses to implement change (Gerrish et al. 2011).

A Canadian survey (Profetto-McGrath et al. 2010) identified how clinical nurse specialists (CNS) use evidence to facilitate improvements in care, in face-to-face discussions with FLNs and to develop policies and protocols. For approximately three quarters of CNS surveyed, communication skills, nursing expertise, credibility with FLNs and being present in practice settings facilitated CNS' use and dissemination of evidence. In contrast, half the CNS identified that their multiple roles, together with heavy workload and time constraints experienced by FLNs were the most commonly experienced barriers to EBP. Similarly, Gerrish et al. (2011) identified that half of APNs surveyed reported that FLNs' heavy workload made it difficult to promote EBP, and a third felt that their own workload adversely affected their ability to influence FLNs' practice. However, other barriers to research use among FLNs were not reported to be so great for APNs, for example lack of support and access to resources.

SIGNIFICANCE

Although previous research provides insight into APNs' self-reported barriers to promoting EBP among FLNs, evidence is lacking on the broad range of factors that facilitate or hinder APNs' fulfilling this aspect of their role. Moreover, little is known about the perspective of healthcare professions with whom APNs work. The study reported in this paper sought to address this gap in knowledge.

AIM

To identify factors that influence APNs' ability to promote EBP among FLNs.

METHODOLOGICAL APPROACH

A multiple case study design was used to capture the broad range of APN roles in different care settings. By examining a variety of APN roles in different contexts, a comprehensive understanding of factors influencing APN's promotion of EBP could be gained. Twenty-three APNs who worked in hospital and community settings across seven Strategic Health Authorities (SHAs) in England formed the focus of individual case studies. For the purpose of the study, an APN was defined as a nurse whose role involved a component of clinical practice that required expert knowledge

TABLE 1
Summary of data collection

TYPE OF CASE STUDY	PARTICIPANT	DATA COLLECTION	DURATION (APPROX)
Standard ($n = 18$)	Advanced practice nurse	In-depth interview	60 mins
	Frontline nurses, members of multi-disciplinary team (5 per case study)	Semi-structured interview	40 mins
Extended ($n = 5$)	Advanced practice nurse	In-depth interview	60 mins
		Non-participant observation	1 day (8 hours)
		Follow up in-depth interview	60 mins
	Frontline nurses, members of multi-disciplinary team, nurse managers (approximately 10 per case study	Semi-structured interview	40 mins

and skill and included, but was not be limited to, CNS, matrons, nurse consultants, nurse practitioners and practice development nurses. FLNs included senior clinical nurses (ward managers, charge nurses) and junior colleagues (staff nurses, nurse assistants). EBP was defined as the integration of best evidence with expert clinical opinion while taking into account patient preferences. 'Evidence' was conceptualised broadly, to include research findings, best practice guidelines, organisational information, for example, derived from audit or service evaluation etc.

APNs who had participated in an earlier survey examining the role of APNs in promoting EBP among FLNs (Gerrish et al. 2011) and had expressed interest in taking part in the case studies were recruited. A sampling matrix, which comprised the following criteria derived from the survey, was used to purposively sample APNs.

- APN role, for example, CNS.
- Clinical specialty, for example, stroke.
- Focus of role, clinical specialism, for example, palliative care, organisational focus, for example, infection control.
- Types of organisation, for example, hospital or primary care trust (PCT).
- Organisational responsibilities, for example, single ward/department, whole/several organisations.
- Ways of working with FLNs.
- Examples of innovative approaches to promoting EBP.
- Geographical location across the seven SHAs.

Twenty-three APNs were recruited to capture maximum variation across the criteria.

Data Collection Methods

Eighteen case studies were undertaken which involved interviewing the APN and five healthcare professionals who worked with the nurse. A further five extended case studies were undertaken to examine the research aim from a broader range of perspectives: these involved interviews with the APN and up to 10 healthcare professionals. Interviews explored participants' perceptions of individual and organisational factors, which influenced APNs' ability to promote EBP among FLNs. In extended case studies, APNs were also shadowed for a day in order to gain more insight into their role in promoting EBP. An experienced nurse researcher adopted a non-participant role, observing what the APN considered to be a normal working day. Detailed field notes were recorded of how APNs used different forms of evidence and promoted its use. A follow-up interview was undertaken to reflect upon observations made and seek clarification of issues arising. Table 1 provides a summary of data collection.

Data Analysis

Interviews were audio-recorded and transcribed. Field notes were analysed alongside interview transcripts. Data analysis was undertaken using the 'Framework' approach (Ritchie et al. 2003) outlined in Table 2. Researchers familiarised themselves with data from the case studies they had completed and shared their initial impressions to provide a collective overview of the material. This led to the

TABLE 2
Five stages of Framework analysis (Ritchie et al. 2003)

Familiarisation: immersion in the full data set by reading interview transcripts/field notes
Identifying a thematic framework for coding data from the data collection tools and initial scrutiny of the transcripts/field notes
Indexing: coding individual transcripts by applying the thematic framework
Charting: organising the coded data into major themes. Separate charts are developed for each theme
Mapping and interpretation: mapping the relationships between different themes by interpreting the data set as a whole.

identification of initial themes, which were then cross-referenced with topics from the interview agenda and developed into a thematic coding framework. The coding framework was refined following preliminary analysis of the transcripts to capture the full range of factors influencing the promotion of EBP. All interview transcripts and field notes were analysed using the revised coding framework. Within-case analysis was undertaken for each case study. This involved the systematic coding of data from each participant and then developing a matrix, which drew together all data from each individual case study. Cross-case analysis was undertaken by mapping the relationship between different themes across the complete data set. This enabled common themes, which were shared across case studies, to be identified as well as differentiating the contextual issues, which related to individual case studies.

Rigour

Strict adherence to the research protocol ensured consistent data collection across research team members. The research team met regularly while undertaking data analysis to develop shared understanding and ensure consistent interpretation of themes. Within and cross-case analysis enabled inconsistencies in data to be examined and negative cases to be identified. An audit trail of research activity was maintained for the duration of the study.

Ethical Issues and Approval

Ethical approval was obtained from an NHS Research Ethics Committee. Prior to obtaining written consent, participants were provided with an information sheet outlining the purpose of the study and strategies to ensure confidentiality. Participating NHS organisations granted research governance approval to undertake the study.

During observation if an APN considered it inappropriate for the researcher to be present, (e.g., breaking bad news to a patient) the researcher withdrew temporarily from the setting. Verbal agreement from patients and healthcare professionals to the researcher being present to observe interactions was obtained by the APN, rather than the researcher to enable those being observed to feel more able to decline.

FINDINGS

APNs occupied a variety of roles and worked in a broad range of clinical specialties. Thirteen APNs were located in hospital settings and the remaining 10 in primary care trusts. Table 3 details the characteristics of APNs involved in the study.

APNs and healthcare professionals with whom they worked shared a broad understanding of evidence as a component of EBP. In addition to research publications and research products such as guidelines, participants stressed the value of evidence derived from organisational policies, audit and evaluation activities and clinical knowledge gained through experience. Although APNs sought to promote the use of research evidence, they emphasised the need to draw upon other forms of evidence identified above, especially where research evidence was lacking or they were unaware of it.

Four groups of factors influencing APNs' ability to promote EBP among FLNs were identified: personal attributes, relationships with stakeholders, the APN role, and the organisational context (see Table 4).

Personal Attributes

Personal attributes, which influenced APNs' ability to promote EBP, included their expertise in EBP, clinical credibility and leadership style. APNs' knowledge and skills to facilitate EBP varied. Several APNs referred to the benefits of graduate study that advanced their clinical knowledge and developed their expertise in EBP. Although APNs generally felt confident in appraising evidence-based guidelines, some were less skilled in evaluating research reports. Whereas all APNs read professional journals, they varied in the extent to which they accessed research journals. Several indicated deficits in their literature searching skills and relied on medical colleagues to source primary research evidence.

APNs spoke of the need to be seen as 'credible' in their clinical field in order to influence FLNs' practice. Clinical credibility was demonstrated by in-depth knowledge of the specialty and advanced clinical skills. Such expertise was developed through professional experience, graduate education, networking with other experts and self-directed enquiry. Maintaining clinical credibility required ongoing engagement in clinical practice.

> If you're promoting EBP, you have to be credible to FLNs to be able to put the message across. (APN)

In order to gain FLNs' confidence and respect, APNs needed to understand the realities of clinical practice and the work pressures FLNs experienced. This was essential to ensure that initiatives led by APNs were perceived by FLNs to be achievable.

> [APNs] need a realistic view of what happens on the coal face. There's no point them suggesting something if it won't work because of constraints we're working under. It doesn't matter if it's the best evidence available; they need to adapt it to what's workable. They need that street credibility. (FLN)

Street credibility was gained through interacting with FLNs.

TABLE 3
Characteristics of the APN sample

CASE STUDY	TITLE OF POST	FOCUS OF POST	LOCATION
Standard			
	Clinical nurse specialist	Acute pain management	Hospital
	Clinical nurse specialist	Cardiac	Hospital
	Clinical nurse specialist	Falls prevention	Primary Care Trust
	Clinical nurse specialist	Nutrition support	Hospital
	Clinical nurse specialist	Tissue viability	Primary Care Trust
	TB nurse specialist	Tuberculosis services	Primary Care Trust
	Lead nurse infection control	Infection control	Hospital
	Older people outreach nurse	Older people	Hospital
	Lead nurse for care homes	Nursing/residential care home sector	Primary Care Trust
	Matron	Cardiac services	Hospital
	Community matron	Long term conditions	Primary Care Trust
	Nurse consultant	Back pain	Hospital
	Nurse consultant	Infection control	Hospital
	Nurse consultant	Sexual health	Primary Care Trust
	Nurse consultant	Stroke	Primary Care Trust
	Nurse practitioner	Primary care	Primary Care Trust
	Practice development nurse	Cancer	Hospital
	Practice development nurse	Critical care	Hospital
Extended			
	Lead nurse breast care	Breast care	Hospital
	Elderly care nurse specialist	Nursing/residential care home sector	Primary Care Trust
	Stroke nurse co-ordinator	Stroke	Hospital
	Matron	Renal dialysis	Hospital
	Nurse consultant	Palliative care	Primary Care Trust

TABLE 4
Factors influencing the APN's ability to promote evidence-based practice among frontline nurses

APN's personal attributes	Knowledge and skills in promoting evidence-based practice, clinical credibility, leadership style
Relationships with stakeholders	Frontline nurses, managers, medical staff
APN role	Sphere of responsibility, workload
Organisational context	Culture, workload of front-line staff, professional networks, resources

> It's about walking the walk, seeing people, having a presence, being credible with staff. This comes through face-to-face contact with us. (FLN)

There were common features of APNs' leadership style, which participants considered important to facilitating EBP. Nurse managers emphasised the need for APNs to motivate and inspire FLNs to develop their practice; they should lead using a collaborative and inclusive approach.

> APNs need to be enthusiastic about what they do and share that enthusiasm with others. If they want to influence FLNs, they need to motivate, encourage and inspire them to develop patient care. It's not easy. FLNs have their own pressures, so it's about influencing people, winning them over, helping them see the benefits of change. (manager)

One APN outlined how she sought to achieve this by anticipating how FLNs might respond and promoting a climate in which practice was questioned.

> It's about talking with (FLNs), trying to understand how they might react, making sure I present things in a non-threatening way. Trying to gain their opinion, draw on their expertise, supporting them. (APN)

Interpersonal and facilitation skills were important to the APN's leadership role:

> Personal attributes play a huge role in terms of leadership. They need the capacity to learn and understand, engage with people, listen to what they say and alter their approach accordingly. (doctor)

> It's about skills to facilitate learning and help people develop. Interpersonal skills, and a way of working that's not threatening. Not being seen as the person who does, but the person who can help us do it ourselves. (FLN)

Relationships with Stakeholders

The personal attributes identified above influenced the relationships APNs established with FLNs, nurse managers and doctors, which in turn affected their ability to promote EBP.

> The relationships I build with people enable me to do the role, working alongside people, nurturing working relationships. (APN)

APNs who managed FLNs were well placed to influence their practice. Other APNs had to establish collegial relationships with FLNs, built on mutual trust and respect as well as clinical and street credibility. Building and sustaining relationships with FLNs was more straightforward when APNs had a regular presence in clinical settings; conversely limited contact made it more difficult to influence practice.

> It's much easier to influence FLNs on the stroke unit that I work with closely and have built up a good relationship than FLNs in areas where stroke outliers are based but which I don't visit that often. Because they don't have many stroke patients they're less interested in stroke so it's much harder to motivate them. (APN)

Moreover, APNs needed to introduce change sensitively in order to engage FLNs.

> It's difficult when you know that several things need to change. If you push too many things too quickly, the staff won't buy into it. It's about working with them, building up relationships so they respect you and will work with you. (APN)

As the above quote indicates, the approach used by APNs influenced how successful they were in engaging FLNs:

> It is about how APNs are perceived in terms of the team and the dynamics. If they're seen as a 'know-it-all' who goes in and throws a few instructions and disappears again, that's not conducive to FLNs learning from them. It's about how they're regarded and how they behave in the environment. (manager)

Several APNs highlighted how support from senior nurse managers enabled them to work more productively with FLNs.

> For any change, if I've help from the top, from my executive nurse, it makes a big difference. Like the oral care guidance I've developed, once the committee has passed it, it'll be cascaded jointly. I'll take it forward, but (executive nurse) will be the driver, saying 'this is what we're going to do'. (APN)

However, APNs also needed to be given autonomy by managers to be creative in facilitating EBP.

Several APNs identified benefits to having a local champion who supported them to take forward initiatives. Champions were often senior doctors who helped APNs build alliances with various stakeholders in order to overcome barriers and to win over those they were seeking to influence. This was especially beneficial when working across professional boundaries. For example, an APN in pain management explained how support from an anaesthetist was instrumental in getting surgeons to agree to initiatives she wanted to introduce for managing postoperative pain by nurses. Membership of a cohesive and supportive multi-disciplinary team enabled several APNs to introduce EBP.

APN Roles

Two factors relating to the characteristics of APN roles influenced their ability to promote EBP: responsibilities of the role and workload. APNs whose roles involved a strong clinical component felt most able to influence FLNs as it created opportunities to promote EBP in tangible and relevant ways through informal teaching and role modelling. FLNs commented that seeing an 'expert in action' was a very powerful way to learn.

The multiple and sometimes conflicting role expectations of many APNs made it difficult to juggle the various demands placed on them. Where the role was 'spread too thin,' the resultant lack of a clinical presence was a significant barrier to promoting EBP. If APNs lacked visibility in clinical settings, they were unable to establish their credibility with FLNs and act as conduits for evidence.

Lack of role clarity could hinder an APN's ability to promote EBP. For example, an APN employed by a PCT made a 20% contribution to a local hospital. The APN's lack of authority in the hospital made it difficult for her to influence practice.

> [An APN] has that vision for developing the service but without line-management responsibility she can only achieve so much. There's a need for innovative service development but she doesn't have the authority in the hospital and this has hindered her impact on FLNs. (manager)

APNs whose roles spanned several organisations faced additional challenges, especially where organisations were geographically spread. An APN in falls prevention liaised with several hospitals and GP surgeries across a county: her ability to promote EBP had been constrained by the sheer number of organisations.

> Working across multiple organisations to get agreement for change is problematic. The falls prevention protocol had to be agreed by several organisations; this involved approval by different committees that might each propose amendments. (APN)

APNs' heavy workload meant that they often lacked time for teaching and role modelling for FLNs. The observational data confirmed that direct contact with FLNs was often limited. Many encounters were brief, lasting less than 5 minutes and provided little opportunity for meaningful engagement. Contact was often with senior clinical nurses

rather than influencing junior nurses who might benefit most from the APN's expertise.

Wider organisational responsibilities often prevented APNs from engaging with FLNs.

> I need to spend more time on the wards, seeing what's going on, working with staff. That's the way to improve quality. But so much of my time is spent working on organisation-wide initiatives. It's a missed opportunity. (APN)

Organisational Context

The organisational culture, workload of FLNs, resources to support EBP and professional networks influenced APNs' ability to promote EBP. Senior managers' commitment to EBP influenced the organisational culture; they set the expectation and created the environment to facilitate EBP.

> My role (in relation to EBP) is two-fold; to create the structures and processes to allow EBP to develop and support APNs in fulfilling their role, but also to provide vision, leadership and expectations within the organization that enable EBP to flourish. (manager)

Where strong organisational commitment to EBP existed, other facilitative factors were evident.

- A supportive infrastructure was in place; for example, audit departments provided expertise to help APNs evaluate evidence-based initiatives.
- Structures and processes were in place to cascade evidence-based information throughout the organisation.
- Education and training on EBP was available to APNs and FLNs.
- Investment was made in IT and library resources.
- Work patterns were arranged to allow time for FLNs to engage in EBP.
- Senior managers led organisation-wide EBP initiatives.

A supportive organisational climate was likely to impact upon the clinical micro-system whereby FLNs were empowered to question existing practice.

> We've a "can do" culture that comes from the chief nurse. Staff feel they can approach you and say "I'm not happy doing this, can we try X?" (APN)

Senior FLNs' leadership style influenced the receptiveness of clinical teams to change proposed by APNs. Where senior FLNs led by example and encouraged others to contribute ideas, APNs found it easier to facilitate EBP. In contrast, some APNs struggled to influence practice where senior FLNs were less embracing of change and their involvement was not actively fostered.

Heavy workloads meant that FLNs were often unable to benefit from opportunities APNs provided to develop their knowledge and skills. FLNs were often observed to be too busy with other commitments to accompany APNs when they were treating patients and so missed valuable learning opportunities.

> I may desire to be a role model and for someone to accompany me but you're constrained working in an environment where staff appear not to have the time. (APN)

APNs regarded networking as beneficial to promoting EBP. Some APNs were involved in local or regional clinical networks. Networks served several purposes. They provided information on up-to-date evidence and the opportunity to collaborate in setting standards or developing guidelines.

> The Pain Network regional group brings all the specialist nurses together. We're looking at whether we should have a regional protocol for patient-controlled analgesia and epidural observations, there's currently no evidence for what we do. The networks really useful in supporting EBP, by working together we're sharing expertise and not reinventing the wheel. (APN)

APNs were also involved in clinical networks in their organisation. These provided a forum for disseminating information and for discussing developments with FLNs and the wider multi-disciplinary team. Several APNs with organisation-wide responsibilities, such as infection control or tissue viability, had established link-nurse schemes, which were valued by FLNs and APNs as a means of developing expertise in EBP.

The availability of resources also impacted upon APNs' ability to promote EBP. Access to electronic journals, a work-based library and help from librarians in undertaking literature reviews were valued highly. Whereas all APNs had good IT access, the lack of IT facilities for FLNs hindered APNs' ability to disseminate evidence-based information, especially where teams were geographically dispersed in the community.

LIMITATIONS

The case studies provided insight into factors, which influenced APNs' ability to promote EBP among FLNs. The sampling strategy sought to capture the perspectives of APNs who, on the basis of their responses to an earlier survey, had adopted innovative approaches to promoting EBP. It cannot be assumed that the experiences of these APNs are shared by APNs more broadly. It may be that APNs who are less innovative in EBP experience additional factors, which hinder their ability to promote EBP. Although the degree of consistency with which issues were raised across the 23 case studies, gives confidence to the findings, further research is warranted to assess the full transferability of the findings.

DISCUSSION

This study has identified four groups of factors, which facilitate or hinder APNs' ability to promote EBP among FLNs:

- Personal attributes.
- Relationships with stakeholders.
- APN role.
- Organisational context.

Although these are presented as separate groupings, they are inter-related. For example, as the findings indicate, personal attributes such as the APN's leadership style and clinical credibility influenced the relational dynamics with FLNs in taking forward EBP initiatives.

Research examining nurses' attributes that support their engagement with EBP has often focused on the knowledge and skills necessary to access, appraise and use evidence in practice. Graduate education is seen as a major contributor to nurses developing such expertise (Squires et al. 2011). APNs with master's qualifications are also more likely to view themselves as competent in implementing guidelines, setting evidence-based standards, identifying the need for change and implementing and evaluating evidence-based change than those with lesser academic qualifications (Gerrish et al. 2011).

In this study, additional mechanisms were identified whereby APNs acquired skills in EBP: networking with experts in the field and self-directed enquiry were valued highly. Moreover, participants emphasised the importance of APNs being perceived as clinically credible; a view endorsed by others (Thompson et al. 2001b; Profetto-McGrath et al. 2007). As Thompson et al. (2001b) observe, FLNs view APNs as a valued resource to assist in clinical decision making because they are seen to be credible and their advice can be trusted. The findings from this study elaborate on the nature of clinical credibility. Although APNs were perceived to be credible in terms of expertise in their clinical specialism, this was not sufficient. They also required street credibility through which they demonstrated an understanding of the constraints that FLNs encountered in their everyday practice. Whereas other studies identify that APNs require a presence in clinical settings in order to promote EBP (Thompson et al. 2001b; Profetto-McGrath et al. 2010) they say little about the knowledge exchange necessary. By gaining an understanding of the realities of clinical practice from FLNs, APNs were better able to foster their use of evidence.

Participants emphasised the need for APNs to be enthusiastic about EBP in order to motivate FLNs to develop practice. This observation is supported by a recent systematic review, which identified that research use is positively associated with attitudes and beliefs (Squires et al. 2011). Leadership is also a key component of facilitating EBP (Dogherty et al. 2010). Whereas other studies identify that nurses in clinical leadership roles facilitate EBP (Gerrish et al. 2008; Pipe et al. 2008), this study suggests that APNs who adopt a transformational leadership approach through which they empower FLNs were most successful.

Building relationships for collaborative working is a central component of facilitation in EBP (Harvey et al. 2002). The importance of the relationship between the person facilitating EBP and practitioners whose practice is to be influenced is identified in other studies (Jones et al. 1996; Stetler et al. 2006). This study has shown that the relational dynamics that APNs established with colleagues were central to their ability to influence FLNs' practice. Liaschenko and Fisher (1999) draw attention to how nurses use their understanding of relationships with different professionals with whom they interact, what they refer to as 'relation knowledge,' to bring about desired goals. It is evident from this study that APNs drew upon relational knowledge to influence how they took forward EBP initiatives. Studies examining barriers to EBP have consistently identified that managers, medical staff and nursing colleagues can inhibit FLNs' use of evidence, although senior FLNs perceive these barriers to be less insurmountable that junior nurses (Gerrish et al. 2008). By contrast, the earlier survey identified that very few APNs perceive these professional groups to be antagonistic to EBP (Gerrish et al. 2011). This study has identified the beneficial support that some APNs experienced from senior managers and medical colleagues. The importance of support for APN roles from influential champions in the same organisation is a recurrent theme in the wider literature on the factors supporting successful APN role development (Read et al. 2001; Schober & Affara 2006). In this study, the part they play in supporting APNs to promote EBP is also highlighted.

The collegial relationships that APNs developed with FLNs were instrumental to their success in promoting EBP. Whereas communication skills facilitate the use and dissemination of evidence among CNS (Profetto-McGrath et al. 2010); this study expands upon the broader repertoire of interpersonal skills APNs require to manage the dynamics of the clinical setting in order to influence FLNs' practice.

In addition to the attributes of individual APNs and relational dynamics outlined above, role complexity, role conflict and excessive role demands influenced some APNs' ability to influence FLNs' practice. Read et al. (2001), McCaughlan et al. (2002) and Lloyd-Jones (2005), similarly identify APNs who experience heavy workloads, role ambiguity and lack managerial support are less able to fulfil the broader remit of their roles. In contrast, organisational

commitment to EBP at the highest level, when complimented by APNs having autonomy to develop their role, enabled them to identify creative opportunities to promote EBP.

The findings from this study reinforce the importance of organisational context in achieving EBP. Healthcare organisations are complex, multi-faceted systems where the interaction between practitioners and their clinical environment means that there are no easy solutions to making EBP a reality (McCormack et al. 2002). As participants in this study identified, an organisational culture where EBP fits with strategic goals, has an enabling and empowering approach to change, and provides appropriate resources (Rycroft-Malone 2010) is most likely to enable success. Successful implementation of EBP requires that facilitation is tailored to the local context (Dogherty et al. 2010). APNs who possess both clinical and street credibility are well placed to use their understanding of the micro-context in which FLNs work as well as the wider organisational context in order to promote EBP.

IMPLICATIONS

The findings from this study highlight the importance of education preparation for APNs. In additional to skills in EBP, APNs need to develop interpersonal skills and leadership expertise including change management, influencing, negotiating and motivational skills to manage the relational dynamics of clinical settings.

APN role specifications should provide the opportunity for them to devote time to promoting EBP and establish and maintain clinical and street credibility with FLNs whose practice they seek to influence. It is also imperative that the organisational culture is conducive to enabling EBP with systems and processes in place to enable this activity and managers who support of this aspect of the APN's role.

Further research is required to ascertain the extent to which APNs working in different healthcare systems globally experience similar influences on their ability to promote EBP. Whereas this study focused on APNs who were positive about promoting EBP, future studies need to consider whether APNs who are less engaged experience additional factors, which hinder their ability to promote EBP.

CONCLUSIONS

Ensuring that nursing practice is based on robust evidence should lead to improved patient outcomes. APNs have a pivotal role in promoting EBP among FLNs. This study has identified factors, which influence APNs' ability to achieve this aspect of their role. In addition to individual attributes and particular characteristics of the role, APNs need to establish their clinical and street credibility and manage relational dynamics in order to influence FLN's practice. Organisation culture and context also influence APNs' ability to promote EBP. Organisational commitment at the highest level together with APNs autonomy to develop their role, are key to their ability to promote EBP among FLNs.

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