

INCORPORATION OF RESEARCH INTO CLINICAL PRACTICE: THE DEVELOPMENT OF A CLINICAL NURSE RESEARCHER POSITION

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Abstract

The role of research within nursing is gaining a higher profile, as nurses move towards advanced practice roles, and concepts such as evidence based practice and clinical governance are accepted. Research has long been incorporated in both undergraduate and post graduate nursing education, but has often been viewed by nurse clinicians as too difficult and expensive, with little direct clinical relevance. The current focus on developing Nurse Practitioners has emphasised the need for a research component in such practice, but it is not only the 'advanced' practitioners who can benefit from a greater understanding and involvement with the research process. The development of an innovative research role in Christchurch Hospital has the potential to demonstrate that research can be incorporated and accepted into a clinical area. The role of Clinical Nurse Researcher in the Emergency Department has resulted in a higher profile for research, and the gradual integration of research as a clinical skill with direct practical relevance.

Key Words: Research, emergency nursing, advanced practice

Introduction

There is a growing demand from nurse clinicians, employers and professional bodies for opportunities to develop increased nursing knowledge. This is demonstrated in the movement towards the establishment of Nurse Practitioners, and the general increase in nurses seeking post-graduate education. The integration of educational, research and professional guidance into areas of clinical practice is essential if nursing knowledge is to be seen as clinician driven. Academic debate has sought to overturn the concept of a 'theory-practice' gap, and to demonstrate the need for nursing research (Richardson, 2003b;

Mulhall, 2002; Rolfe, 1998). Despite this, anecdotal evidence would suggest that for many nurses, research remains a distant and essentially non-clinical skill.

Concepts such as professional supervision, evidence-based practice and clinical governance are becoming part of the practice setting. In order for these to be actively integrated into clinical settings, and to move beyond simple rhetoric, there is a need for accessible, timely and relevant nursing research (Adams, 2001; Closs & Cheater, 1999; Colyer & Kamath,

Richardson, S. (2005). Incorporation of research into clinical practice: The development of a Clinical Nurse Researcher position. *Nursing Praxis in New Zealand*, 21(1), 33-42.

1999). There is growing interest in the expansion of nursing roles amongst nurse clinicians, academics and those involved in policy decision making. If truly nursing focused roles are to be developed at an advanced level, then it is essential that nursing research continue to expand. The identified and uniquely New Zealand aspects of nursing practice that will be uncovered must be incorporated into such roles. Research is one means by which nurses can demonstrate their professionalism, and enter into robust academic dialogue with peers. Key features of research practice, the ability to critically review, assess and analyse material, allow the nurse to articulate his/her practice, and to provide clear rationale for decision making and clinical intervention. Nurses need to demonstrate their commitment to the knowledge-based economy of the future and develop credible means of articulating the reality of nursing practice.

Clinical Nurse Researcher: A case study

Nurses have always been researchers, whether in a specifically designated role or as an informal part of their everyday practice. What is often lacking, however, is the acknowledgment of the nursing input and the influence this has on the research undertaken. For many years, nurses have been employed as 'Research Nurses', carrying out research under the direction and supervision of (usually) a medical practitioner or medical scientist. Closs (2001) suggests that this is a further aspect of the 'doctor-nurse'

game, and notes that the collaboration between doctors and nurses in research publications is rarely made clear, stating that it "would be interesting to know, for example, who was the principal investigator and the nature of the nurse's role, e.g. as a data collector or an equal collaborator" (p. 102). This is linked in part to the stereotypes and constraints surrounding nursing, and the early focus on nursing 'training' as opposed to nursing 'education'. Schwirian (1998) suggests that it was not until nursing education was incorporated into the more formal, academic setting that research as an independent function of nurses was established. While working in collaboration with or for other researchers allows nurses to develop and expand their research skills, it also limits their ability to initiate nursing specific research.

For nurses wishing to carry out independent research, it is often difficult to access funding and research grants. Closs (2001) identifies that for many nurses, independent research is difficult as nurses often find themselves in a catch 22 situation, where it seems almost impossible to get prestigious funding, unless you've had prestigious funding before. It seems that the only way of getting into the game is to work with someone who already has a track record - rarely a nurse (p. 103).

For many nurses, research is only a possibility when undertaken as part of a post graduate program of study. The New Zealand Health Information Service (NZHIS) (2004) Health

Statistics for 1993 identifies only 103 nurses of the 32,687 currently registered in New Zealand working in research (0.8% of all nurses). There is no identification of how the role is structured (i.e. whether it is an independent nursing role, or where the nurse is employed to carry out research activities devised by others).

This case study presents the development of a unique role, that of Nurse Researcher (Emergency Medicine), in a defined clinical area. This position has developed within a major tertiary teaching hospital, and demonstrates an innovative and collaborative practice role. In order to understand how the role developed, it is necessary to provide an overview of the practice environment. Christchurch Hospital Emergency Department (ED) is one of the largest in Australasia, employing 110 registered nurses. Many of these are part time or casual staff, who together with the 65 full time equivalents (FTE's), provide a high standard of clinical care to patients. The average patient throughput is 65,000 patients per annum, with an average admission rate of close to 50%. In common with many other EDs, there are problems such as bed-block, overcrowding, staff shortages and high staff turnover rates. The Christchurch Emergency Department is the sole ED available within the catchment area. After-hours clinics are available, but only one is open after 10pm. There are no alternative venues for patients requiring hospital-based tests, investigations and/or interventions. The patient population is increasingly older, sicker and more acutely unwell. At the same time,

healthcare staff are carrying out more technical investigations and treatments. Statistics from 1998 show an average attendance rate of 178 patients per day, with children under the age of 14 and adults over the age of 65 representing approximately 21% each of the total patient population (Richardson, 2003a).

Despite the high level of acuity and intense nature of the work, many staff are recognising the need (and finding the time) to further develop their clinical practice through consolidating and expanding their knowledge base. There is a growing interest in post-graduate nursing education and a developing culture that values nursing knowledge and nursing research. Recent developments within the department, which support this culture change, include the appointments of a Nurse Educator and a Nurse Researcher.

The Nurse Researcher role

The role developed as a result of the vision of the Professor of Emergency Medicine, and the Nurse Manager. It was believed that there was a need to provide additional support to those staff already undertaking research within the department, as well as to present a strong nursing perspective. The Nurse Researcher is jointly responsible to the Professor of Emergency Medicine and to the Nurse Manager, ensuring nursing line management remains. The area of focus associated with the role has continued to develop and be refined since its inception in 2002. The role was initially established for a trial

period of one year, but has continued since this time, with funding to support this position now generated from the newly established Emergency Medicine Research Foundation. At the same time as the establishment of the Nurse Researcher position, a formal Emergency Medicine and Nursing Research Group was set up, with the aim of co-ordinating and facilitating research relevant to emergency care. The Nurse Researcher is involved as an active participant in this group. There is a strong commitment from the Research Group and from within the Emergency Department in general to fostering nursing research in its own right, as well as seeing it as part of collaborative research practice. The establishment of a specific Nurse Researcher role has raised the profile of research within the department, and there is increasing evidence of individual commitment to research in practice. An increasing number of nursing staff are undertaking post graduate education, and the role, relevance and scope of research within the department continues to expand.

The Nurse Researcher role is currently an 0.5 full time equivalent position, with the option to 'pick up' another 0.5 in clinical practice. This allows the incumbent to maintain clinical skills and an 'on the floor' profile. There is no set requirement for clinical hours, and these are currently worked as suits the Nurse Researcher, and when occurring within the ED are paid for from the general nursing budget. Funding for the position is currently provided for by the Emergency Care Research

Foundation, a recently established Charitable Trust that developed as a result of the Christchurch EDs research group.

The Nurse Researcher has maintained a clinical profile in several ways. Clinical involvement has incorporated not only ED staff nurse duties, but also work as Hospital Duty Manager, Clinical Nursing Tutor for the Christchurch Polytechnic Institute of Technology and for the Otago School of Medicine Centre for Post Graduate Nursing Studies. The Nurse Researcher acts as a focal point and resource, co-ordinating research projects, acting as a mentor and clinical supervisor, as well as an active researcher, allowing practitioners to see the interrelationship of theory and practice in the clinical setting.

Specific activities related to the Nurse Researcher position include the development of physical resources, for example the commissioning of two specific display boards in the department which are kept updated with a range of nursing and medical literature. This includes topical issues (for example SARS, ED overcrowding, meningitis), concepts relevant to the various post graduate courses being undertaken by staff (such as nursing theory, cultural safety and clinical governance), updates and information relating to current research projects, and recently published articles and seminar or conference presentations.

Research Projects

A series of specific nursing research projects have been undertaken,

including review of the Triage system, with a focus on the role of the Triage First Assistant; exploration of nursing documentation practices and analysis of patient presentations. Funding has been awarded to allow a research project comparing nurse and physician assessment and diagnostic ordering for patients who present with a possible Deep Vein Thrombosis. This has been undertaken with a view to developing a nurse initiated clinical pathway if the results support this. As well as formal research, a number of ED nursing staff are completing clinical projects in conjunction with a range of educational organisations. Recent projects include a review of care of the dead and dying within an ED setting, triage documentation, domestic violence surveillance, assessment and treatment of chemical eye injuries, nurse initiated wound care management with suturing, and treatment of patients with mild to moderate asthma - the role of metered dose inhalers.

Collaborative research projects within the department have included work with the Pegasus IPA on community acquired pneumonia and cellulitis, with the University of Otago Injury Prevention Unit looking at home injuries in under five year olds and with Transfund New Zealand, researching cyclist and pedestrian injuries. Specific ED research, initiated and implemented by departmental staff includes the development of a detailed Myocardial Injuries Marker request form, which has allowed the collection of a range of data. Following the introduction of this a series of audits of both medical and nursing documentation

have been carried out, to see if a follow on effect on the standard of documentation regarding assessment of patients with cardiac presentations has been achieved. Other projects generated by ED staff include a randomised controlled trial to compare different forms of pain relief, in relation to the insertion of IV cannula, and the collection of data related to patients who present with a suspected Pulmonary Embolus.

The role of research and its relevance to clinical practice is highlighted, and demonstrated in a number of ways. It is an expectation of the Nurse Researcher role that the nurse will be involved in presenting and publishing research, as well as promoting research as a concept. This has included the participation of the ED in the Canterbury Medical Research Foundation (CMRF) open day for the first time in 2002, and then each year subsequently. Considerable interest was displayed by members of the public in the interactive display, and also by colleagues with regard to the display of current, ongoing research projects. Presentations have also been made at a range of nursing and other related conferences, including the Australasian Nurse Educators Conference, the Australian Resource Centre for Hospital Innovations, the Emergency Nurses Conference (New Zealand) and the 15th World Congress on Medical Law.

The nature of nursing in relation to research

Inevitably there are difficulties associated with integrating research into clinical practice, and more so in

areas where acuity and workload are variable. Given that ED practice needs to be flexible to meet the fluctuations in presenting patient populations, both in terms of volume and acuity it may be seen as a difficult area in which to introduce a research focus. Yet despite this, EDs have been identified as providing an appropriate setting within which to introduce an integrated research program. In addition, it is suggested that not only is a research culture appropriate in an ED setting, but it is a clinical necessity. Heartfield suggests that “the interdisciplinary and dramatic nature of emergency nursing practice demands contextualised research to contribute to quality health care provision and explication of the knowledge and skills of nursing practice...” (2000, p. 221). Because of the variety of patients who present for ED care, the nurses and physicians working in this area need to maintain a broad knowledge base, as well as a variety of skills.

There is a growing focus within New Zealand health care on the concept of clinical governance as a working model for practice. Associated with this is an emphasis on autonomy of practitioners, and the acceptance of individual responsibility. Evidence-based practice is seen by many as an appropriate framework for nursing (Adams, 2001; Docherty, 2001; Simpson, 1996). This has led to the need to ensure that current practice meets appropriate, research based standards, and enables practitioners to provide a sound rationale and articulate the basis for nursing actions (Adams, 2001; Closs & Cheater, 1999; Colyer & Kamath, 1999).

Given the heavy workload facing most nurses, exacerbated by issues such as an ageing population (both patient and nursing), increasing fiscal constraints and growing patient expectations, it is not surprising that nurses are reluctant to take on the additional ‘burden’ of research activities. Despite recognising these barriers, Kotzer suggests that nurses need to move past these limitations, and states:

While finding the time and resources to carry out clinical research can be a formidable task for the bedside staff nurse, we are obliged to do so if we are to advance the art and science of nursing and further develop a scientific knowledge base for clinical decision making and clinical practice (2000, p. 143).

Research has been linked to ‘professionalism’, with this connection used to support the need for an increased nursing knowledge base (Bassett, 2001; Kotzer, 2000). Bassett makes this link explicit, suggesting that “If nursing is to be considered as a profession, it must continue to develop a distinct body of knowledge. We need to continually update our knowledge to ensure effective, safe, high-quality care. This is a professional obligation” (2001, p. 8). This focus on research as the means to developing a credible and specific nursing knowledge base is further emphasised in the advanced practice movement.

The current movement towards formalising advanced nursing practice highlights the need to broaden the accepted scope of practice and

associated nursing roles. The need to both initiate and utilise research is identified as a core element of advanced nursing models (Pearson & Peels, 2002; Read 1998; Woods 1999; Woods 1997). There is a range of advanced practice roles currently identified in the nursing literature, including amongst others, Clinical Nurse Specialists, Nurse Clinicians and Nurse Practitioners. Incorporated in each of these is the concept of research and its importance to evidence based practice guidelines.

Research not only represents a guiding principle in nursing practice, but also an action. Nurses utilise the 'product' that is research, but need also to be part of the process by which that product is formed. The Nursing Council of New Zealand (NCNZ, 2001) identified a number of required competencies for nurses seeking recognition as advanced practitioners. They explicitly identify the role of research, stating that Nurse Practitioner's need to show "scholarly research inquiry into nursing practice" (NCNZ, 2001, p. 17). As well as this recognition of the role of research in its own right, there is implicit reference to a research base in the additional competencies concerning articulation of nursing practice and the development and/or influencing of health and socio-economic policy at a range of levels.

The culture of nursing has a tendency to diminish those who move into 'academia', often with the aside that nursing is, after all, a practical profession. Yet the development of a nursing knowledge base (as opposed to a borrowed medical version) must

benefit nurse clinicians. Nurses are historically positioned as an oppressed group (Roberts, 2000; Turkoski, 1995) but does this need to continue? One way forward is to clarify and value nursing's own knowledge base, and to develop the confidence and competence to disseminate this to colleagues.

Nursing research and the Nurse Researcher

If an evidence base for nursing practice is to be developed and maintained, the role of the nurse researcher becomes paramount. In comparison with other professional groups, there is a relative lack of nursing generated research and publications. This in turn limits the ability to establish 'evidence-based' changes to nursing practice. Hicks (1999) identifies a range of possible factors leading to this situation, including the prevailing nursing ideology, skill deficits, organisational barriers and gender stereotyping. She states that: "...it is self evident that clinical practices will remain unmodified if there is no critical mass of soundly conducted nursing research to inform this change" (p. 130).

There is considerable rhetoric within nursing to suggest that research is a necessary and significant element of practice, on both an academic and clinical level (Ramprogus, 2002; Storch, 1999; Kirchhoff, 1993). One developing theme that has emerged from the literature is the need for closer links between the researcher and the clinician, and indeed the need for the development of joint

appointments such as can be associated with a clinical researcher position. To be relevant to nursing practice, research needs to be carried out by nurses, and not only by individuals with nursing qualifications but more specifically those who have practiced as nurses. Storch (1999) suggests that pivotal to developing relevant nursing research, is the need to understand the intricacies of nursing practice. She suggests that “Without the lived experience of nursing practice, including a lived understanding of nursing’s moral foundations and the meaning of nursing, the translation of that meaning into administrative, educational, and research practice is impoverished and frequently rendered meaningless” (p. 2).

Many clinicians presume a disparity between academic/theoretical nursing knowledge and clinical ‘hands-on’ practice. This artificial ‘gap’ between theory and practice has been challenged, but the myth remains. For the clinical nurse, what can be more practical than the development of knowledge that influences practice? Whether the research or study is seen to be specifically focused on task based actions, the knowledge generated inevitably impacts on the researcher’s wider understandings and critical abilities. Few nurses are able to carry out research in isolation, and the change in understanding alone has a direct impact on their clinical practice.

Nurses need to recognise the utility of research, in order for it to become widely accepted, both as a foundation for challenging existing practices, and

as a practical role for the clinical nurse. This requires the researcher/s to clearly explain the rationale underpinning any piece of research, in a manner that is easily understood, and to be able to demonstrate or speculate on the likely clinical impact of any findings. As long as research is perceived as ‘academic’, ‘isolated’ and ‘abstract’, then it is unlikely to be given a high priority by busy clinical staff. Research offers an added dimension to the professionalism of nursing, and is linked inevitably to academic standards and structures, but it is also a practical tool that can be utilised by all nursing staff to provide direct improvement for patient outcomes.

Research as a clinical practice function

The Nurse Researcher is not subservient to researchers from other professions, but an equal partner in the research process. With the establishment of such a position in a busy ED, it becomes apparent that research is not only compatible with clinical nursing, but essential to its development. Nurse Researchers need to articulate the role of nursing, and to develop collaborative relationships with a range of health professionals. Emergency Medicine is a generic term, used to refer to the overall care provided on an emergency basis, and as such inevitably requires a strong nursing input. An Emergency Nurse Researcher is able to offer a unique and valuable perspective, not only on the role and activities of emergency nursing, but in relation to the ‘bigger picture’ of emergency care.

Conclusion

Nursing research needs to be incorporated into the clinical area, and seen as a standard practice element. Response by staff in the Christchurch ED, nursing, medical and allied health, has been universally supportive of the Nurse Researcher role. The increased access to literature, resources and advice has

impacted on staff ability to integrate research and an evidential base into their practice. The focus on research has also provided relatively neutral ground from which to expand and consolidate existing inter-professional relationships and collaborative practice. The 'theory-practice gap' is neither necessary nor inevitable, and the Nurse Researcher is in a prime position to demonstrate this.

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