Clinical Practice Priorities for Research in Nursing

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Abstract

Background

In nursing practice in common with other professional disciplines the generation of new questions to inform research is the foundation of the development of new knowledge. Undertaking research is most often the domain of the academic sector in the clinical disciplines of healthcare. However, nurses in clinical practice are in a unique position to identify, at source, deficits, incongruencies, boundaries and other stimuli or questionable areas of practice in which further enquiry could be focused. Yet research enquiry remains a mystery to many. The aim of this study was to demonstrate how issues in health care practice can be translated into coherent researchable questions that are consistent with professional and organizational directives.

Method

Part 1 A short review of the literature reporting on nursing and wider healthcare research policy and strategy context was undertaken. Databases: Pubmed (2010 onwards), Cinahl Plus; Search terms: *Healthcare research strategy; Research priorities; Nursing research.*

Part 2. Focus group interviews were used to investigate health care practice perspectives as priorities for researchable projects areas, consistent with professional and organizational priorities.

Results

Four research thematic areas, namely 'Effectiveness of healthcare interventions'; 'Patient and family-centred care'; 'Nursing careers and professional development'; 'Multi-disciplinary team working' were identified. Research questions and appropriate methods were suggested and used as illustrations. Alignment with strategic healthcare organizational goals and processes was shown to be consistent.

Conclusion

The practitioners' perspective for generating research questions via the identification of problems, at the point-of-care, is a credible and feasible route for developing researchable questions. The solutions to such 'practice-grounded' research questions have the potential to generate new knowledge which offers direct benefit to patients, engages clinical practitioners and meets professional directives and organizational goals.

Introduction

The movement to improve healthcare provision and ensure that care is evidence-based has been recognized and addressed to some extent through the establishment of Government expert bodies of healthcare professionals. The term *evidence based practice (EBP)* has been widened to encompass a "lifelong problem-solving approach to clinical practice" incorporating external evidence (research), internal evidence (performance improvement or outcomes management data) and patient preferences and values [1]. Many healthcare planners view research activity as the cornerstone of a strategy to develop the organization with research into nursing practice being recognized as an important component [2]. Health service research, however, is predominantly focused on medical-management [3], quality and safety movement [4], the patient-centred care movement [5], or healthcare management, leadership and organizational theory [6]. While these are all important areas for consideration, arguably these themes are "too theoretical" from the perspective of practice because they do not lie at the heart of clinical care. Consequently, patient-centred nursing practice remains under-investigated despite the volume of health service research. Often research priorities are set locally, differing from location to location and from sub-discipline to sub-discipline.

Recommendations from the Robert Wood Johnson Foundation Initiative on the Future of Nursing [7] underline the importance of the role of nurses in creating innovative solutions for health care delivery, and the importance of attracting and retaining well-prepared nurses in a variety of settings. This has consequently led to a dearth of theoretically informed insights and subsequent actions that could help healthcare systems understand and improve the direct nursing care and management of the nursing workforce [8]. Nurses at the point-of-care should be encouraged and enabled to reflect on their practice in ways that generate new insights into nursing practice [8]. The WHO strategy places a large emphasis on centralizing health research

research knowledge and activity, including that of nurses, but with a lesser focus on directing new research [9]. Evidence-based practice requires research outcomes to drive clinical decisions and care. Peer-reviewed, published data provides guidance and establishes best practices in the field. Current health challenges continue to be influenced by rising healthcare costs, lack of equality and an ageing population [10]. Moreover higher levels of 'identified' mental health problems are being reported but their impact for overall healthcare providers remains to be clarified. Although informed by a range of interest groups including senior clinicians, scientific investigation remains a 'top down' approach with minimal input from the nursing profession as a whole, and in particular nurses providing clinical care. By their nature the foci of strategies to advance research-based knowledge are broad and include topics such as 'enhancing disease prevention', 'enhancing innovation in practice' and 'improving quality of life' [11]. An overview of research priorities from health policy makers and professional bodies and some of the challenges in being research active in clinical nursing practice are reviewed.

Background and Focus Group Study

Background

The overall objective of this article is to outline a process by which areas of clinical importance in clinical nursing practice can be translated into researchable questions that are aligned with professional and policy strategy recommendations. We believe that this is an important process to outline because in my experience when clinical practice nurses are asked about an area of importance to research, they have difficulty in addressing such a request. However, they most often have many suggestions from experience that either work well or have problems or could be done differently. Such reflections in practice can be used in combination with existing knowledge to generate research questions ranging from implementation or evaluative research through to explorative research to gain a greater understanding of phenomena noted in clinical practice.

The focus is therefore on generating relevant clinical topics that are consistent with healthcare policy and professional practice. It is beyond the scope of this article to examine the supportive structures that exist to allow clinical research to be undertaken in a safe, ethical, resource defined manner without disruption to the context of the clinical service in which the research activity is to be conducted.

Focus Group Study

An investigation was undertaken to identify areas of clinical nursing care that could merit further research in order to either improve practice or enhance understanding of the issues of concern. Participants in this investigation were encouraged to make suggestions for research questions in their identified research priority areas that they thought could be the starting point for a focused project in a specific area of practice. The objective was to demonstrate how broad areas of enquiry could be translated into questions that could be addressed within a research project.

Method

Six focus group sessions each involving 4-6 participants were conducted using the topic guide [12] at an acute-care setting in the UK. This guide listed several broad questions on areas relevant to their practice that were thought could present particular challenges, or had unknown components, uncertain consequences, new features or changing ways that practice was being delivered. Exemplars for research questions relating to the identified areas of professional practice were formulated and agreed prior to the closing of each focus group session. Hand written notes were taken at the time of each session and subsequently transcribed.

Analysis, Findings and Discussion

Transcripts were reviewed individually following each session and were re-reviewed as a group once all sessions had been conducted and a thematic analysis [13] undertaken. Within group discussion, practitioners identified clinical issues that they considered important to address or had a greater insight into their nature. Thus research focus was informed by those with clinical expertise and with knowledge of the context of current organizational and professional healthcare priorities. Emerging topics were then grouped or categorized into cognate areas (sub-themes and then themes). The analysis highlighted four main themes and ten sub themes as presented in columns A and B of Table 1. Exemplars of research questions in the thematic areas identified are presented in column C with the relevant research method list in column D.
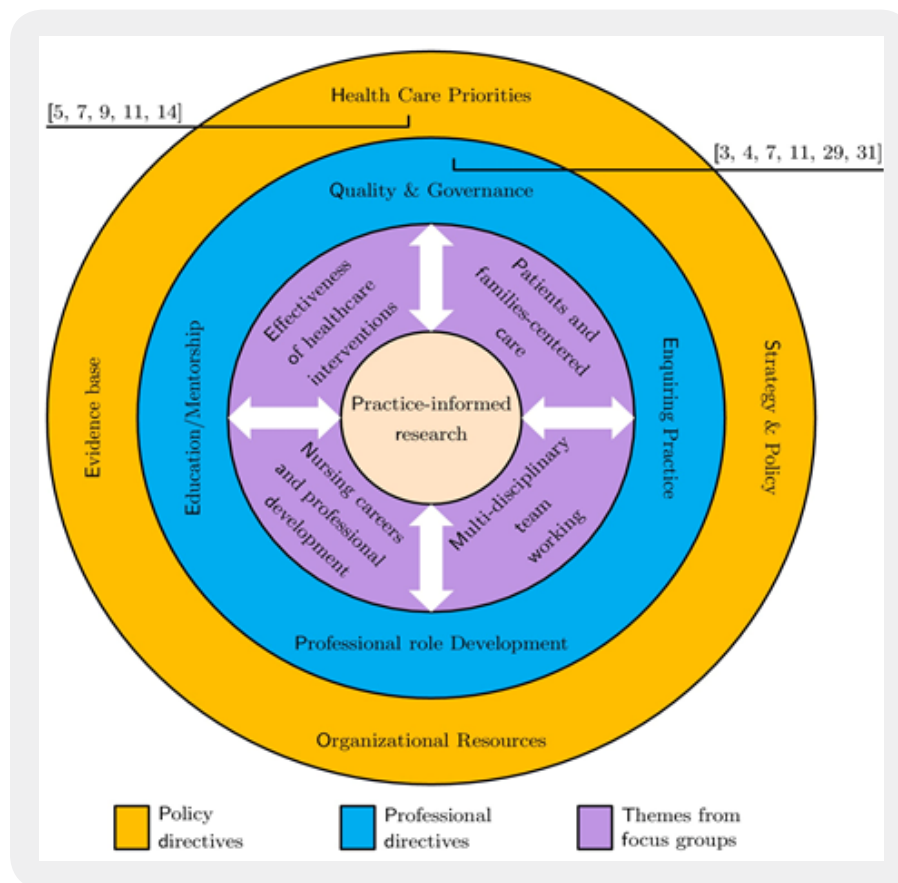
Table 1: Areas of healthcare practice identified as research priorities

A Theme	B Sub theme	C Exemplars of research questions	D Research Method
Effectiveness of healthcare interventions	Reducing clinical risk	Can a pre-habilitation intervention improve hip replacement surgical outcomes?	Intervention
	Patients with co-morbidities	A survey to identify the number and type of multiple conditions in medical patients?	Survey/ case note review
	Continuity of care	What are the health consultation patterns of patients following discharge from cardiac care unit?	Longitudinal study
Patient and family-centered care	Greater patient and family involvement in self-care	Are self-care instructions with diary completed in heart failure patients?	Descriptive: Pre- and post-design
		Improving understanding of patient journeys in an older care facility: case studies	
	Value individuals and their families	What are the root causes of patient complaints?	Descriptive: Retrospective case note and interview

Nursing careers and professional development	Continuing professional development	What are the educational needs for nurses working with new digital technologies?	Survey
	Building research capacity & capability	Does a research journal club improve nursing research activity?	Intervention
	Advanced practice and nurse practitioner roles	Impact of nurse-led care in patients awaiting coronary surgery?	Intervention
Multi-disciplinary team working	Shared roles and responsibilities	What is the contact time with different team members for chest pain patients in the Emergency Room?	Descriptive/ observation
	Communication	Diabetic Clinic patients' satisfaction with the provision of information	

The interactive discussion that took place within the focus groups reflected an appreciation of the guidance provided by successive Governments through policy directives and the emerging priorities within healthcare providers. The need to ensure that practice was 'evidence-based' was articulated and the role of clinical guidelines as the 'vehicles' for implementation of research findings to practice.

Figure 1 illustrates how the research themes identified could be aligned to the strategic areas of healthcare organizational and professional priorities. These overarching policies take account of the following domains of strategic importance namely: "Health Care Priorities"; Evidence Base", "Organizational Resources" and "Strategy & Policies" [5,7,9,11,14] and Professional directives of "Quality and Governance", Education/ Mentorship", "Enquiring Practice" and "Professional Role Development" [3,4,7,11,29,31].

Figure 1: Areas of healthcare practice identified as research priorities and their integration within the wider framework of policy and professional directives

To be compatible with organizational strategy and goals, new or enhanced activity such as 'practice-informed research' must function within the complex context of professional, organizational and policy outlined in Figure 1. The identified themes for research demonstrate a strategic 'fit'.

(NB. A similar framework of influence for basic nursing care [8] also recognizes that the wider context of systems and organization policies play a crucial role in helping or hindering the delivery of the quality of fundamental care).

Professional and Policy Directives and Health Research

Health care practitioners, including nurses have a professional responsibility to take cognisance of relevant research findings as well as generate ideas that may be researched for the purpose of improving patient care. The UKCRC [14] supports practitioners whose investigative skills are at the level required to advance practice and improve care, or who have the ability to attain this level. Career pathways have been developed for such practitioners so as to equip them with the research and clinical skills necessary to deliver organisational

goals. The nursing knowledge base should be a dynamic and able to respond to the continuing flow of new developments and knowledge in the healthcare environment, patient populations and government regulations.

The healthcare sector is dealing with more complex health problems together with the need to master advancing technologies and treatments. In addition to strategy and policy directives (Table 2), the pan-impact of new technology is leading to the creation of change and changing environments and conditions for relationships, communication and balance of care between the care providers and care recipients (e.g. in self-care) [10]. Basic research studies are needed in developing areas in which the conditions for care and health are undergoing significant change.

Table 2: Examples of nursing and wider healthcare research priorities

Nursing and wider healthcare Policy	Priorities and strategic goals
National Institute of Nursing Research (NINR) Research programme "Advancing Science, Improving lives: A vision for Nursing Science" [11].	Symptom Science: promoting personalized health strategies;
	Wellness; Promoting health and prevention of illness;
	Self-management: Improving quality of life in people with chronic illness;
	Improve end-of-life and palliative care.
NHS 2018 initiated a strategy of health research [15,16]	Creating a clinical research culture that is patient and public focused.
	Promoting innovation in research delivery practice to include the use of digital technologies.
	Improving awareness and understanding of the specialty of clinical research nursing and its contribution and impact
	Developing leaders to share best clinical research nursing practice locally, nationally and internationally.

Research in Nursing

Graham *et al.* [17] propose a similar starting point to clinical research and go further to describe the process of translating research into practice. The first step proposed involves the collection of relevant evidence from a variety of sources, *e.g.* appropriate literature or field data. In this way current best available evidence can be incorporated into the development of a practice tool or guideline to inform new practice delivery. Following the implementation of the tool, operational data is then collected for the purpose of evaluating the clinical efficacy/practice outcomes of the tool. Consequently a method of utilization and evaluation of new

practice can be achieved. Both procedures can be combined in an action research mode [18] whereby operational findings are fed back into the design of the care delivery tool with the objective of optimizing its effectiveness while simultaneously collecting knowledge or evidence of the care episode under investigation. This approach is congruent with the implementation of researchable clinical issues identified in this study. It relies, however, on evidence being available for the design of a clinical implementation tool and a mechanism through which evidence can be introduced into practice within an evaluation framework that has the potential to conform and refine existing knowledge as well as develop new knowledge.

It has been noted in the literature there is a significant gap between the research-based healthcare guidelines and care received by patients [19-21]. Although the body of research evidence grows steadily, changes in clinical practice reflecting this evidence have lagged behind [22-24]. The implementation of existing research knowledge to practice is an important method for identifying research areas to receive attention as opposed to the generation of *de novo* research areas of enquiry [10]. Barriers to implementation of research have been widely reported in the literature [7,25]. Many initiatives start before comprehensive baseline data have been collected and are often afflicted by competing work demands, low priority given to the research activity and changing staff roles and responsibilities to name but a few impediments to the successful execution of the research work. It has been reported that healthcare professionals, including nurses, have difficulty in using new de-contextualized and explicit knowledge in their daily work practice [26,27]. What directs the professional's actions in practice will often be the established *'know-how of routines'*- even when decisions on new methods and the commitment to put them into practice is present [28,29]. It may be unrealistic to expect nurses providing clinical care to add these activities to their duties unless they are compensated for the time and have the support of Masters or Doctorally prepared nurses to serve as evidence-based practice (EBP) coaches and champions [21]. A recent survey of nurse engagement in research activity within Magnet hospitals revealed that 40% of those who were research active did so in their own time [30]. This finding gives an indication of the interest that nurses have in undertaking research, perhaps as part of ongoing personal study, but also reflects the fact that unless working in a dedicated research post, few nurse job specifications include research activity within their descriptors. Without external research funding to support the manpower to conduct the research, healthcare practitioners have little time to devote to the additional activity associated with research. Furthermore, very few nurse employment contracts outline research activity within their roles and responsibilities. Even with a 'good idea' the alternative route of gaining specific research funding is not straightforward. The preparation of a technically sound and original proposal of sufficient merit to achieve research grant funding is a daunting and skilled task even for the most experienced of academic researchers.

Engagement in nursing research can provide clinical nurses with the opportunity to address meaningful issues from clinical practice and seek to contribute to the generation of new knowledge-base in their realm of practice. The Medical Research Council (MRC) have produced a research methods pathway to gain understanding of appropriate research methodologies specifically related to the type of complex interventions that most commonly arise in health service research [31]. Healthcare research is complex and those practitioners embarking on a research proposal/project should recognize this and get appropriate guidance from R&D departments, relevant academic colleagues and research funding councils *e.g.* Medical Research Council. Many sectors of professional practice have been noted to support research engagement

in clinical practice [21,32]. Factors associated with success include shared perceptions of the importance of innovation implementation, the necessary managerial support, availability of financial resources and a learning oriented environment encompassing a set of interrelated practices and beliefs. Strategies to improve implementation of research priorities in practice include closer academic and practitioner collaborations to enhance synergy between practice-based research and research expertise. This could be facilitated through improvements in mentoring mechanisms for 'on the job' training and explicitly include research responsibilities as a specific role component of nurses in clinical practice.

Conclusions

Nurses in clinical practice, the largest single professional group in the health care sector, with its diverse roles across the healthcare continuum, are in a unique position to develop ideas and strategies for improving the healthcare needs of patients. Nursing roles and responsibilities are varied, dynamic and complex as reflected in the different perspectives of patients, families, interventions and care approaches encountered. Greater use of existing knowledge as well as the generation of new knowledge should be sought to improve the effectiveness of current care. Clinical issues identified by practitioners are an appropriate mechanism for the generation of meaningful topics for research activity which has been shown to align to professional priorities. However, to have a realistic opportunity of funding, the research must also align with policy as shaped by the priorities of funding bodies. Enhanced mentoring, supported practice development of research skills and inclusion of research activity in employment remit are possible strategies to further engage nurses in clinically-generated research enquiry.

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Conflict of Interest

No conflict of interest arose in either conducting this study or writing the submitted manuscript entitled "Clinical practice priorities for research".

Ethical Statement

No ethical approval was needed.

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