Nursing and Evidence-based Practice

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Introduction

Nursing historically has been characterised by a large variability in practice and a serious lack of research utilisation in the planning and implementation of nursing care. This situation has had a number of undesirable consequences: on the one hand, it has sometimes resulted in the delivery of 'toxic service' and even harmful nursing care to people; on the other hand, it has sometimes resulted in effective nursing practices being undermined and under-recognised because of a lack of evidence supporting their therapeutic (and economic) efficacy (Craig & Smyth, 2002; Gray, 1997; Hamer & Collinson, 1999; Pearson et al., 1997; Smith et al., 2004). In recognition of the need to improve this situation (i.e., to improve the safety, quality and demonstrated efficacy of nursing care and related services) - and in keeping with the evidence-based medicine practice movement that has gained momentum in countries around the world since the early 1990s - the nursing profession globally has sought to adopt an evidence-based practice. Initiatives are developed to aim at achieving 'best practice' outcomes in nursing.

The adoption of evidence-based nursing has not been without controversy. These controversies include: what constitutes 'best evidence' in nursing, what research approaches are best suited to generating trustworthy 'evidence' for informing the practice of nursing, how best to facilitate the uptake of research in nursing practice, and whether evidence-based practice will ultimately translate into the 'best practice' outcomes envisaged. These concerns are cross-cultural considerations in advancing evidence-based nursing - an issue that, up until now, has received relatively little attention in the evidence-based practice literature. In this paper attention will be given to addressing some of these questions, with brief consideration being given to the following issues:

- the nature of and controversies surrounding evidence-based practice in nursing
- the importance of research, practice and policy development in nursing in ensuring safety and quality in nursing and health care; and
- cross-cultural considerations in advancing the evidence-based nursing practice agenda.

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The nature and controversies surrounding evidence-based practice in nursing

The evidence-based practice (EBP) movement is a relatively recent phenomenon that dates back to the evidence-based medicine movement of the early 1990s (Greenhalgh & Donald, 2000; Smith et al., 2004). The evidence-based nursing movement is also a relatively recent phenomenon that dates back to the mid-to-late 1990s. Like its counterpart, evidence-based medicine upon which it is modelled, evidence-based nursing is fundamentally concerned with 'applying the best available evidence to a specific clinical question' (Roberts & DiCenso, 1999) and to improving 'the quality of clinical procedures' as well as 'the [bases] of the wider concept of care' in nursing (Pearson & Craig, 2002, p. 10).

Although concerned with and obviously important to improving the quality of care given to patients, it is important to understand that an evidence approach to practice is only part of the complex of 'best practice'. As Moynihan (1998, p. 215) points out, in order to be translated into 'best practice',

Good quality evidence must [also] be integrated with the individual skills of the [practitioner] and the needs and preferences of the individual patient.

Despite having gained worldwide currency, the evidence-based practice movement has not been without controversy (Trinder & Reynolds, 2000). Of particular concern have been questions concerning:

- nature and constitution of what is to count as 'best evidence' (i.e., what is accepted as 'best evidence' might

not be 'best' at all; for example, a study might demonstrate the 'average effect' of a treatment or clinical procedure on a group of people, but fail to capture a 'particular effect' on an individual);

- risks of a 'tyranny of knowledge' being imposed, whereby one school of thought and approach to knowledge generation is accepted narrowly and uncritically to the exclusion of other innovative approaches;
- risks of adopting a 'cook book' approach to practice and suppressing innovative and ethical practice;
- placing too little emphasis on the outcomes of treatments and procedures which don't have quantifiable outcomes;
- paying too little attention to possible adverse side effects of 'effective treatments' (i.e., focusing only on what did work, not on what didn't);
- placing too much emphasis on finding profitable solutions to technical problems at the expense of genuinely improving the health and wellbeing of people (Goodman, 2003; Moynihan, 1998; Traynor, 2004; Trinder & Reynolds, 2000).

The problems facing evidence-based nursing, however, while including the above, are more fundamental. For instance, a key issue facing the nursing profession at this time is its lack of a significant evidence base for practice at all (Pearson et al., 1996, p.10). Although the field of nursing research has developed enormously in recent years, the realities are that, currently, a research evidence base for nursing is either:

- absent;
- present, but deficient or inadequate in design and scope;
- present, adequate, but not utilised appropriately, effectively, or at all (James & Lorentzon, 2004; Pearson et al., 1997).

Consequently, while nurses are 'expected to ensure the delivery of "research based care"', as Pearson et al. (1997, p. 10), point out, 'they may not be able to access research findings during their working day', let alone appraise and utilise it in their practice.

Another fundamental issue facing the development of evidence-based nursing is the controversial acceptance of the 'gold standard' of research (notably in the form of the random clinical trial) as the norm in evidence-based practice. In medicine, the notion of 'evidence' is usually taken to mean 'scientific' evidence or 'gold standard' research. For example, when a drug is tested in a random clinical trial, the published results of the trial become the 'evidence for how well it works' (Moynihan, 1998, p. 215). Roberts and DiCenso (1999) point out, however, that it is not always feasible or indeed ethical to evaluate certain clinical procedures and processes using the random clinical trial method. Many nursing cares and procedures, for instance, are not amenable to being evaluated this way. Instead, an evidence-based nursing practices would be more reliably provided and evaluated using qualitative methods, or multiple methods of research. This is because, as Roberts and DiCenso (1999) correctly point out:

Different clinical questions require evidence from different research designs. No single design has precedence over another, rather the design chosen must fit the particular research question. Questions focused on the cause, prognosis), diagnosis, prevention, treatment, or economics of health problems are best answered using quantitative designs, whereas questions about the meaning or experience of illness are best answered using qualitative designs

Pearson and Craig (2002, p.12) have taken a similar position, arguing that: 'Nursing care needs to draw on a wide range of evidence bases, within and beyond the "medical" sciences, including behavioural and social sciences'. The value of qualitative research in providing an evidence-based practice has also been recognised in the medical literature. For example, Kaplan and Barach (2002), citing Runciman (1993) writing in the medical periodical Anaesthesia and Intensive Care, note that:

Pulse oximetry is considered today the gold standard for patient monitoring. However, clinical trials have yet to show that pulse oximetry monitoring improves patient outcomes. On the other hand, qualitative data such as [that obtained via] incident reports have been the cornerstone for mandating the use of pulse oximetry - today no anesthesia would be allowed without its use.

The importance of research and evidence-based practice in ensuring safety and quality in nursing and health care

The importance of research and the development of an evidence-based nursing practice cannot be over emphasised. Without such a basis, nursing will remain at perpetual risk of providing care that might not only just be 'useless', but also harmful. Here some valuable lessons can be learned from the medical profession. In medicine, for example, there is a lot of uncertainty about 'how well a particular treatment works and what harm it might do' (Moyniham, 1998, P.217). This is because, contrary to popular assumption, many common medical practices are not based on evidence. Significantly, when various procedures have been systematically evaluated, they have been found to be either:

- *not as effective as previously believed;*
- *useless;*
- *downright harmful; or*
- *more effective than others commonly used (Moynihan, 1998, p. 217).*

The systematic evaluation of various nursing practices has yielded similar findings to medical studies about the efficacy and non-efficacy of common practices and procedures. Notable examples of the evaluations conducted can be found in the Australian-based Joanna Briggs Institute's Best practice: evidence based practice information sheets for health professionals (published regularly by the Institute since its foundation in 1997 and available at www.jonannabriggs.edu.au). A number of studies have also demonstrated the efficacy of nursing. For example, research by Shindul-Rothschild et al. (1996, 1997) has shown that adequate registered nurse staffing levels can have a significant impact on reducing such adverse events as: wound infection, urinary tract infection, falls, drug errors, and unexpected readmissions. More recently, a study conducted by the Harvard School of Public Health, involving a national sample of 799 hospitals and the analysis of data from more than 5 million patient discharges, found strong and consistent correlations between adequate registered nurse staffing levels and a reduction in: urinary tract infection, pneumonia, length of stay, logarithm of stay, upper gastrointestinal bleeding, and shock (Needleman et al., 2001; Needleman et al., 2002). These and other studies are consistently demonstrating the importance of nurses to the provision of safe quality care and patient health outcomes.

For all the developments that have been achieved in the evidence based-practice movement generally and evidence-based nursing in particular, however, there remains a glaring omission in the movement that, unless addressed, will see harmful and 'toxic' services continued to be provided to patients. The omission being referred to here concerns the conspicuous absence of cultural considerations. Indeed, as will now be shown, there is considerable room to argue that 'culture' stands as the critical missing link to the effective and ethical development of evidence-based nursing. Consider the following.

Cross-cultural considerations in advancing the evidence-based nursing practice agenda

In recent years there have been a number of influential texts written on evidence-based nursing and health care (Craig & Smyth, 2002; Gray, 1997; Greenhalgh & Donald, 2002; Hamer & Collinson, 1999; Smith et al., 2004; Trinder & Reynolds, 2000). Most of the six texts cited above make reference to 'organisational culture' and the 'culture of evidence-based practice'. Only one (Smith et al 2004), however, makes specific reference to the culture of the patient and the impact this stands to have on a health care provider's capacity to engage in evidence-based decision-making. Specifically, in a chapter written by James et al. (2004, p. 67), brief attention is given to the case of an Asian woman 'Sufia' who has suffered from the loss of her mother (living in Bangladesh) and who, because of her grief, is neglecting the care of her young son. The chapter provides a brief overview of the 'evidence' a health visitor (not a nurse) drew on in regard to assisting the woman deal with her family crisis, notably:

- *national and local research studies in relation to the diet and nutrition of infants/children in Asian origin;*
- *knowledge of local experts such as the Asian support worker and the infant-feeding adviser;*

- *cultural awareness and sensitivity emanating from 15 years' experience working with the Bangladeshi community in [the] area,. And hence knowledge of the best ways of working with, and the likely beliefs, values and preferences of, local people;*
- *knowledge and trust of the community and its families built up over time, and of the antecedents and consequences of similar situations;*
- *visual evidence such as demeanour, dress and manner (James et al., 2004, pp. 43, 67-68).*

The omission of cultural considerations

In considering the issue of evidence-based nursing, it is important to remember that science and research are not neutral processes. They take place within a given social, political and cultural context and are informed and influenced by the underlying values, beliefs and experiences of people located within those contexts. To put this another way, all knowledge (including scientific knowledge) is socially and culturally constructed and can only be meaningfully understood from within the context in which it has been produced. If nursing and midwifery wish to provide services and nursing and midwifery care to the population of the world and to their own particular communities, then they have to practice cross-cultural or transcultural evidence based nursing and midwifery. I define transcultural/cross-cultural nursing and midwifery evidence-based nursing as follows:

The process by which nurses select and produce "best" cross-cultural research and then relate and integrate that research with their own knowledge and clinical experiences and the knowledge, views, preferences and values of culturally diverse patients/ clients and their families, and use this dynamically synthesized knowledge in their clinical practice

Nursing is concerned with the whole person and as such is not just about taking care of a physical body; nursing is also about providing care to individuals who are a part of a particular family, community, society and culture. Nursing research therefore needs to not only reflect the physical 'quantifiable' aspects of what it is to be human, but must also investigate the complex subjectivity of human beings (including their health-illness experiences, care needs, and care and healing practices as culturally constructed and mediated).

Conclusion and Recommedations

Nurses are often involved in providing essential nursing care and related services to people of diverse cultural and linguistic backgrounds. Providing care that is cultural safe, appropriate, ethical and therapeutically effective, however, requires nurses to have a sound culturally grounded evidential basis for the their practice. An evidential basis for the effective practice of cross-cultural (transcultural) nursing care, however, is still in development. In order to progress this development, members of the nursing profession need to give sustained attention to the following:

- *providing a systematic review of the literature to identify 'warranted practices' in caring for people of diverse cultural and linguistics backgrounds;*
- *conducting an evidence-based practice 'cultural knowledge gap analysis' and undertaking research to address the practice gaps identified;*
- *developing and implementing guidelines on 'best cross-cultural nursing practice' (i.e., how to go about the most appropriate/effective way to provide nursing care for people of diverse cultural and linguistic backgrounds);*
- *identifying ineffective, useless and harmful cultural nursing practices and abandoning these; and*
- *exploiting the evidence-based nursing movement to demonstrate the effectiveness of nursing (innovation and evaluation) in promoting and protecting the health and wellbeing of people from diverse cultural backgrounds.*

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degree of satisfaction towards marriage, sex life, interchange between husband and wife, etc, of the Olson ENRICH questionnaire to investigate on cases regarding 54 married women who are under 60 years of age and who have undergone surgical treatment of breast cancer for over two months. Result: The two factors including degree of satisfaction towards marriage and sex life scored distinctly below the norm whereas there was no significant difference between the norm and the subjects in the interchange between husband and wife; average income, prosthetics fitting and educational level did not show significant influence on the marital quality of the subjects (P>0.05). Conclusion: The marital quality of Macau women who have undergone surgical treatment of breast cancer was lower than that of the normal population.

Key words Post-surgical treatment Breast cancer Marital quality