THE PRECARIOUS POSITION OF NURSING EDUCATION IN THE KNOWLEDGE ECONOMY: A LITERATURE REVIEW AND COMMENTARY

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ABSTRACT

Nursing is a practice-based discipline, a recent profession to transfer its workforce preparation to the higher education sector. This discussion paper explores the perceptions of key stakeholders as to what nursing is and what nurses do, and how nurses are best educated to meet all stakeholders' unique needs.

KEYWORDS

Nursing, higher education, knowledge economy, communities of practice, leadership

INTRODUCTION

> *Precarious: 'To be dependent on circumstances beyond one's control; not stable or secure' Macquarie Dictionary (2005)*

To describe nursing's position in the knowledge economy so boldly is to alert the reader to the position of nursing education within the rapidly globalising, knowledge driven economy and to the need for nursing to value it's contribution. The sentiments expressed in the paper apply equally to other practice disciplines.

Nursing is a latecomer to the higher education sector in Australia with the transfer of registered nurse education from workplace apprenticeship training to graduate level studies throughout the 1980's. This shift met with considerable resistance from within the nursing profession itself, from other health professionals, from consumers and the community. A university trained educated nurse did not seem to fit with the traditional image of what nurses were and what they did (Liaschenko 2002; Takase, Kershaw and Burt 2001).

The primary driver for the education change for nursing was the need to improve the professionalism of the discipline. It was viewed as an opportunity to expand the knowledge platform from which practice develops and to facilitate a curriculum that promised improved critical thinking and problem solving capabilities of the nursing workforce as care delivery became more complex (Purkis and Bjorndottier 2006; Hardy, Drury, Frotjold, Brown and Croswell 2003). The role of a registered nurse is multifaceted and the level of ability and depth of knowledge required by a registered nurse to competently care for clients of varying acuity, with a broad range of health care needs, and from diverse backgrounds, is often misunderstood by anyone other than nurses themselves (Bonner 2007; Billay, Myrick, Luhanga and Yonge 2007; Purkis and Bjornsdottir 2006; Hallam 2002).

The overall impetus to support improved education opportunities for nurses was, as it is now, to be better able to prepare nurses for the roles they are required to undertake for the public good. The paper explores responses to the changes in the way nurses are educated in the context of a contemporary health care delivery system that is constrained by limited resources. It describes the attitudes of stakeholders that create tension within the profession and have the potential to undermine the progress made to date. The paper considers the role of professional lifelong learning by advocating for the initiation and development of communities of interest, communities of practice and communities of purpose that contribute to the leadership capacity of the nursing profession and enable it to compete for recognition in relation to productivity based disciplines. It challenges the nursing profession to adopt a clear position in the knowledge driven economy or risk being ignored as having a valuable part to play in the growth of contemporary Australian society.

Defining nursing knowledge

Nursing knowledge extends across two knowledge spaces. According to Parker (1997), one space is

> *"the decontextualised space of evidence-based practice and the other is the personalised space of the patient" (p.16)*

It is the combination of the two spaces that provide a different care delivery context for every individual. The spaces are absolutely superimposed over one another; in that, anything that occurs in one space affects the alternate space equally.

Purkis and Bjorndottier (2006) suggest that evidence based practice is founded in scientific research, logic, clinical reasoning, and is the result of education and the availability of reliable sources of information. This is predominantly information that is widely disseminated through

clinical reports, in academic journals or held in validated clinical evidence repositories to assist clinical decision making by all health professionals. The decontextualised dimension of nursing practice houses the appropriate skill sets for the safe performance of clinical procedures and routine care management. The elements necessary for performance at this level can be learned through formal education preparation.
Evidence based practice clinical decision making is further enhanced by tacit knowledge and intuition that result from clinical experience. The importance of these elements is not only acknowledged in the education of health providers (Sackett, Straus, Richardson, Rosenberg and Haynes 2000; Jennings and Loan 2001; Kim 1999) but it has become the basis for reflective learning in curricula for many practice disciplines. Kim (1999) refers to this phenomena as 'critical reflective inquiry', Purkis and Bjorndottir (2006) describe it as 'intelligent nursing', Billay et al. (2007) use the phrase 'intuitive knowledge' and Myrick (2005) coins the phase 'intellectual curiosity' embodying the spirit of inquiry.

Billay et al. (2007) cites Benner, Tanner and Chesla (1992) and findings from a research study of 105 intensive care (ICU) nurses at different stages of expertise that found that nurses with more than 5 years experience in the ICU context relied heavily on intuitive judgement. They responded to patient problems more quickly, more appropriately and with higher levels of confidence, 'without wasting precious time contemplating other possibilities' (p.154).

Hanley and Fenton (2007) suggest that 'creative care' is the result of expert nursing practice that is characterised by improvised response when 'routine or standardised care is not applicable and the solution demands creative, perhaps intuitive, often never used before solutions' (p.126). Much of this nursing work is invisible to the patient, to other health professionals and to the organisation.

The second knowledge space is that of ‘the personal space of the patient’ (Purkis and Bjornsdottir 2006 p.250). Working as a professional within this space requires another specialised set of skills entirely. The patient’s personalised space is created from the nurse’s interpretation of the patients 'circumstances of daily living' and is only as good as the value it may hold in relation to the client's health beliefs, behaviours and perceptions. Appropriate nursing response to client care needs must reflect client expectations and preferences. This is a function of the insight into the patient's personal space that is elicited by the nurse at interview and from recurrent inter-personal contact. According to Purkis and Bjorndottir (2006) the skill set required in this knowledge space includes communication skills, empathy, authenticity, respect for others, mutuality and openness. Liaschenko (2002) reminds us that these social transactions and emotional work is also invisible. The counter-argument to this construct is that nurses all too often assume that they know what is best for the patient using evidence based practice as a guide for interventions. The dilemma for post-modern nursing is to balance the science with the art.

Measuring the value of nursing knowledge

> *'In the new knowledge based economy, individuals and firms must focus on maintaining and enhancing their biggest asset; their knowledge capital.' (Burton-Jones 2001, p.225)*

Assuming that the above statement is true, nursing is in a strong position to claim that it contributes value to society. Nursing provides a unique service and its' value is embodied in its' knowledge workers. Perhaps, however, nursing as a profession does not understand the strong bargaining position it has in being recognised as contributing to productivity. Again, this suggests that much of nursing work is invisible. For example, if productivity is measured in outcomes and dollar values, then any lost workday is lost production, and nursing can reduce lost production. But surely, nursing is more valuable than that.

According to Shorten (2006), knowledge workers account for nearly 40 percent of the Australian workforce. This is an upward trend. Shorten argues that knowledge workers lead innovation in production and process and that service industry employees contribute by providing system support within which 'innovators' perform. Clarke (2001) explains that knowledge workers that offer support expertise (such as nurses) must first recognise that they do so and understand the role that they play or they may be overlooked. Once they have recognised their contribution they must manage their knowledge contribution by developing a comprehensive knowledge strategy at the professional level. He suggests communities of interest, communities of practice and communities of purpose in education and research to promote creativity and innovation (Lave and Wenger, 1991; Wenger 2000).

Communities of practice are identified as the means for the transference of information or

knowledge between disciplines to enhance the overall quality and evidence base for quality outcomes (Lesser and Storck 2001; Davis, Evans, Jadad, Perrier, Rath, Ryan, Sibbald, Straus, Rappolt, Wowk and Zwarenstein 2003; Noles 2000; Smith 2000; Wenger 1998; Murchú and Korsgaard-Sorenson 2004). Communities of practice promote joint problem solving and consensus in the decision making that underpins effective practice change, particularly in health care. Nurses belong to communities of practice within their own discipline (Hara and Hew 2006) but are only occasionally heard as part of the multi-disciplinary health care team, if at all (Conner 2005; Pakenham-Walsh 2007; Lathlean and LeMay 2002).

Nursing, at best, offers unique expertise, that should be encouraged and protected by organisations in hostile economic conditions. The nursing profession itself needs to agitate for increased recognition and together with the higher education sector needs to empower the nursing academics that impart nursing knowledge and expertise to students. Freshwater (2004) calls for nurse leaders to act and to strategically locate nursing in the global knowledge economy. She argues that nursing influences society's well-being at the highest level and that service professions are the ones that have the potential to direct cultural and social change that create participatory social policy. This may be the true value of these professions. She does qualify her argument by challenging professional leaders to make a difference or social values are likely to be diminished overall.

By comparison, teaching takes a strong position as it sees itself responsible for the development of the future workforce (Hargreaves 2004) and more. Hargreaves argues that teachers also have a responsibility to influence social policy in an effort to offset some of the negatives of the knowledge economy. As well as educating young people in readiness for their engagement with the knowledge economy, he cautions:

> *'Along with other public institutions, our schools must therefore also foster the compassion, community and cosmopolitan identity that will offset the knowledge economy's most destructive effects. The knowledge economy primarily serves the private good. The knowledge society also encompasses the public good. Our schools have to prepare young people for both of them'. (p.11)*

It appears that teaching understands its' value in the knowledge economy. If, in the case of nursing, its knowledge and contribution is hidden and it has not adopted a clear stance in relation to it's' value, then it needs to make sure it is, at least, noticed. Social action is one way to be noticed and is available to all who choose to act.

The pressures on nursing in the knowledge economy

What do academics say?

Wood (2003) makes no excuses for the poor performance of the Australian higher education sector in relation to other developed countries, as we continue to lose our 'best brains' overseas. He argues that the situation is driven by poor vision from Canberra that retains a focus on primary industry and raw materials. He identifies that there are problems with adequate resourcing of the higher education sector with declines in total funding that have resulted in reduced academic salaries, significant drops in domestic student numbers and poor retention rates of over 15 year olds at both the secondary school and tertiary levels. His account of the current situation is not encouraging in light of the push to embrace the global knowledge economy.

In parallel with the contraction of funds available for the higher education sector overall, enrolments in the service professions are reducing. According to the Association of Professional Engineers, Scientists and Managers Australia (2007) university enrolments in teaching decreased by 12% and in nursing by 24% during the period between 2001 and 2005. The prospect of guaranteed employment, particularly in the areas of health and welfare, seems to have had no effect on these trends. Resources have been significantly reduced in all areas of education and academics cite this as negatively affecting their ability to provide quality programs. When nursing academics are struggling to provide the foundational knowledge to support beginning level practice it is unlikely that they will be able to effectively develop in their students that 'spirit of inquiry' that Myrick (2005) suggests is a key element to nursing's survival.

What do nurses and nursing students say?

First year undergraduate nursing students want to care for the sick and to help people (Liaschenko 2002; Cook, Gilmer and Bess 2003; Erikson, Holm, Chelminak and Ditomassi 2005; Whitehead, Mason and Ellis 2007). Given the global shortage of nurses, the reality for the new nurse is likely to be much more administrative and less 'hands-on'. Liaschenko (2002) states that nurses 'profoundly resent' the shift away from bedside care. Reality shock is a primary cause of attrition from the nursing workforce in the first year following registration (Cowin and

Hengst-Berger Sims 2006). Nursing curricula respond by devoting entire subjects to the management of reality shock (Smithers and Bircumshaw, 1988). Nurses say they do not feel valued by employers. There are such dire shortages that overtime and double shifts have become the norm and the nurses' life-work balance is being compromised. Individual workers and their families are suffering. In these conditions, the personal values of the nurse are under threat and the social values held by the community that, at least, recognize the nurse's commitment to helping other humans have been diluted to accommodate the needs of administrative structures and systems.

Registered nurses continue to leave the profession in droves (Blakely and Ribeiro 2008). The workforce pressures of fifteen years ago are worse today. Models of care have changed to adjust to reduced availability of registered nurses (Fowler, Hardy and Howarth 2006). It is argued that replacing registered nurses with second level health professionals in all care delivery settings is long overdue just to ensure that some care is delivered. The consequence of this change in the aged care sector is that health outcomes and quality of care are diminished (Jackson, Mannix and Daly 2003). Apparently, the community is ready to accept these changes but nurses should not and this situation presents as an opportunity for the nursing profession to affect a positive social change.

Historically, nurses have allowed themselves to be undervalued by employees by accepting poor working conditions and low pay (National Review of Nursing Education 2002). There have been recent moves in all states and at the Federal level to significantly increase wages (hourly rates) in an effort to bolster retention rates and to attract retired nurses back to the workplace. For example, in 2006 the Queensland Health services nurses received a 15% increase in wages (over three years), one-off bonuses and additional funding for professional development as incentives to stay in practice (QHealth 2008). Unfortunately, it may have been a case of 'too little - too late' as many nurses were already exhausted from coping with chronic understaffing for over ten years and chose to reduce their availability for shifts using the increased wages to compensate for the hours of work lost. Given the gravity of the workforce situation, it is doubtful that nurses will have the capacity to do any more than cover the minimum shifts required in hospitals. They will not want to lead procedural and policy change, let alone have the energy to experiment with innovative improvements in patient care.

Nursing is not as attractive to school leavers as it has been in the past. The drawbacks include shift work, the image of nursing as 'dirty work' (Liaschenko 2002), of nursing as second rate work (Hallam 2002), women's work (Whitehead et al. 2007), the risk of injury (Hess 2005) and limited career paths. Skilled generation X workers are fast, mobile and in demand (Bogdanowicz and Bailey 2002). They are interested in committing to themselves as knowledge workers rather than committing to any organisation or even to a single career in one discipline. According to Harari (1998) generation X'ers:

> *'value self-advancement over corporate advancement. They view their human capital as personal, not corporate assets' (p.128)*

This is just as the knowledge economy would have them do. In their defence, generation X appear to have a higher level of loyalty to people they work with rather than to the organisation that they work for (Mensik 2007) and can be retained and nurtured with effective management.

The skill set that a registered nurse develops over time, covering the 'spaces' of evidence based practice and the personalised space of the patient, equips them for diverse future employment opportunities in positions ranging from pure science to the coordination of high quality customer care and, most advantageously, the effective management of service delivery to individuals, groups and communities. This humanist expertise is incalculable in any job that contributes service to society.

Fortunately, many students do engage with nursing for all the 'right' reasons: caring for people, healing the sick, helping people (Cook et al. 2003; Whitehead et al. 2007). These caring attributes are fundamental for the development of competency in the personalised space of the patient (Raholm 2008). The patient outcomes that are facilitated as a result of caring nurses are clearly the product of the nursing profession. As yet, this product is not quantifiable.

What does industry say?

Workforce is the highest cost for employers in health care (Duckett 2007). In the past, changes to models of care delivery have followed a cost-cutting agenda. With the critical shortage of nurses now the cost becomes less important as the skill shortage impacts on service capability. The requirement of industry from the higher education sector is more nurses – quicker – better. The productivity pressures on health care are also changing (Duckett 2007; Productivity

Commission 2005) with increased patient acuity, resource constraints, throughput and performance standards, bed-day funding models and severe workforce shortages in all areas of operation. Industry understands that it needs to provide incentives to retain experienced nursing staff. Much of the published literature explores the needs of nurses and concludes that conditions of employment such as wages, flexibility of shifts, availability of family leave (Editorial ANJ 2007; Fitzgerald 2007; Hogan 2007) will influence retention rates and they have acted to provide these workplace conditions. And yet nurses continue to leave.

Despite strategies that foster retention of new and existing care professionals, many health organisations are in crisis. Industry hard times are reflected in the internal work culture of the facility (Anderson and Pulich 2001). Nurses cite organizational culture as a primary reason for 'burn-out', absenteeism, extended leave and, finally, resignation from the workforce entirely (Myers and Dreachslin 2006). Other studies reveal that nurses are under degrees of stress that permeate their commitment to the profession by undermining their ability to provide the quality care that they feel they need to deliver (Nogueras 2006).

The exodus of experienced nurses from the workforce has a negative impact on the knowledge reserve. Industry needs to be mindful that the intellectual capital they have accrued in the expertise of their employees is only of 'real' value to them when it is reflected in health care systems and policies (Kerfoot 2002). Nurses must, therefore, be empowered within systems to influence policy.

Industry provides an environment that threatens nursing professionals and restricts their capability to be innovative. Yet, innovation is considered to be integral in the role of the nurse (Freshwater 2004; Snyder-Halpern, Corcoran-Perry and Narayan 2001). This is demonstrated in their ability to adapt systems and procedures to meet the unique needs of the client. These are the needs that infiltrate the patient's personalized space described previously as a fundamental knowledge space for the nurse (Purkis and Bjornsdottir 2006 p.250). Bonner (2007) states this as simply 'knowing the patient'. If the ability to personalize care is restricted then it follows that patient outcomes are reduced. Similarly, if time does not permit the implementation of evidence-based best practice then patient outcomes are also diminished (Purkis and Bjorndottier 2006; Myrick 2005; Jennings and Loan 2001)

Industry would claim that its' hands are tied, that there are not enough registered nurses to deliver the best possible care with a predicted shortfall in Australia of, in excess of, 40,000 by 2020 (Karmel and Li 2002). Industry argues that it is the responsibility of the higher education sector to produce more nurses who can 'hit the ground running'. They also make claim that 'industry is student ready' despite the chronic shortage of experienced nurses to mentor new nursing graduates. Effective mentoring is the learning space in which practice consolidation occurs in conjunction with knowledge transfer from the expert to the novice (Benner, 1984; Billay et al. 2007) and is critical in the retention of nurses in the first few years of practice. The precarious nature of the nursing profession becomes a reality at this point.

What do consumers say?

A common 'catch cry' from this quarter is that:

> *'The training of nurses must come back to the hospitals where they (the trainees) would receive the maximum practical experience. This would put more nurses back into the hospitals immediately' (CWA NSW 2001)*

The call is for more nursing time at the bedside. The consumer perspective seems to focus on immediate personalised need for something other than evidence based practice and reflects the value that consumers (and society) place on nurses being there to care for them when they or their loved ones are ill. In fact, consumers appreciate that when all that can be done has been done from an evidence based perspective then it is the nurse to whom they can turn for support. End of life care is a special caring space that is, almost exclusively, the privilege of palliative care nurses (LaPorte and Sherman 2005).

It is the caring side of nursing that most engages the consumer. They are the ones who, perhaps, least understand the complexity of the contemporary nursing role and who attribute the more traditional caring function to nurses at the exclusion of other aspects (Walker 2002). Ironically, consumers are the first to acknowledge that 'if it hadn't been for the nursing staff' important medical needs of the patient may have been missed or overlooked by other professionals. This is shaky ground in relation to the evidence based practice health care environment that centres on knowledge when that knowledge is shared across professional disciplines.

Nursing is not credited with the extensive knowledge base that it has and this lack of understanding underpins the consumers' conviction that the transfer of registered nurse education to the higher education sector was a mistake (CWA NSW 2001). This attitude contributes to the pressure on both the nursing profession to justify its unique contribution to health care and to nurses personally, as it devalues their expertise in the delivery of high quality evidence based patient care. Patient perceptions are within the scope of influence of the nursing profession. The Oncology Nursing Society suggest that nurses should use every patient encounter as an opportunity to inform the patients that nurses are committed to evidence based practice and are directly responsible for the high quality care that the patient receives (ONS News 2006).

OPPORTUNITIES FOR DISCIPLINE LEADERS

> *'The key to nursing's survival in a knowledge economy is nurse educators' abilities to cultivate a spirit of inquiry in nursing programs.' (Myrick 2005, p.5)*

And so the task, rightfully, falls to nursing academics to lead the way in establishing a strong position for the nursing profession in the knowledge economy. By extension, universities are charged with the recruitment and development of nursing academics that have the drive and capacity to demonstrate leadership in the critical areas of quality teaching, in developing opportunities to transform the way nursing care is delivered without losing the 'art' of the profession. Academics must instil in the graduate the motivation and political awareness that enables them to influence health care practice and policy.

Successful leadership in the clinical area is also fundamental to maximizing the capital held in the collective knowledge of the nursing workforce. Nurse leaders must provide the culture that promotes the sharing of expertise throughout the organization and allows theory to convert to practice changes that improve patient outcomes. The environment must be open to trial new procedures and practices that are supported by the latest evidence as well as encouraging improvisation by nurses in circumstances that are exceptional. Knowledge management adds a new dimension to the nurse leaders' role.

Bogdanowicz and Bailey (2002) send a clear message to leaders that until knowledge 'is acted upon, it has no real value' (p.126). Clarke (2001) suggests leaders should develop comprehensive knowledge management strategies with a focus on what he refers to as 'communities of interest', 'communities of purpose' and 'communities of practice' that support creativity and innovation.

Communities of practice are emerging as the panacea for busy professionals who must engage in life-long learning. Communities are informal learning spaces that provide opportunity for discourse and learning by mutual engagement in professional activities (Lave and Wenger in Smith 2003). Wenger argues that communities of practice will define themselves by determining their unique function, capability, purpose, and life expectancy. Some communities will be informal while other will be more formal with some rules of engagement, but all must have ongoing interaction between the members to be effective.

The key difference between communities of practice and interest groups is that the community consists of stakeholders from diverse backgrounds who interact in the practice environment and who collaboratively develop new practice knowledge and innovative practice methods to address common issues. Members of the community of practice then champion the improved practice across the disciplines which leads to behaviour change at all levels and influences organisational effectiveness and profitability (Lesser and Storck 2001). Unlike a community of purpose it will not disband after completion of a task or project (Noles 2000).

Lathlean and LeMay (2002) describe the push towards communities of practice in health care in the United Kingdom that improve interagency collaboration that affects local health service delivery. They argue that communities of practice are effective in developing the evidence base for practice change as they encourage transdisciplinary activity and facilitate multi-professional decision making. Strategies such as these will require an overhaul of current clinical practice environments and systems.

The nursing profession stands poised on the brink of reformation from simply knowledge based to a knowledge sharing discipline. The framework for nursing to reaffirm itself as a unique contributor is at hand with the current global trend towards the knowledge economy, but nurse leaders must capitalize on the moment.

Nursing academics will be key contributors through the development of nurse leaders who can transform nursing practice by inspiring others and by providing environments that challenge the 'status quo'. Nurses should aim not only to make a difference to the patient in

care but also to influence social policy. If nursing work cannot be valued, there is a real risk that the light from Nightingale's lamp will be permanently snuffed out and society will be a poorer place as the bearers of the 'caring knowledge' perish. If the profession is to make a valid claim for not only recognition but appreciation, then the work that nurses do must no longer remain invisible.

CONCLUSION

Nursing knowledge can be defined as extending across two knowledge spaces described as the space of evidence-based practice and the personalised space of the patient. The nature of these knowledge spaces enables the profession to claim unique knowledge capital. Nursing provides a service, the value of which is embodied in its' knowledge workers. Economic pressures on the health care industry are shifting nurses away from bedside care. Nurses resent this shift and say they do not feel valued by employers. The patient outcomes that are facilitated as a result of caring nurses are clearly the product of the nursing profession. The position of nursing is heavily influenced by the perceptions of the role of nurses held by employers and consumers of health care services. The nursing profession itself needs to agitate for increased recognition and together with the higher education sector needs to empower nursing academics to cultivate a spirit of inquiry in nursing programs. Nurses must actively engage with communities of practice to ensure they maintain a legitimate place in the framework for learning and practice innovation and to feature in the global knowledge economy

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