Knowledge production and reproduction: What are the implications for nursing practice?

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Summary Research, teaching and practice are easy words to say and at first glance seem to be relatively simple to understand. The aim of research is to produce knowledge, teaching to reproduce it and practice to apply it. But a closer look at these terms reveals complex, competing, often contradictory sets of meanings which are embedded in differences in cultures, individuals and work practices. This paper examines some crucial issues surrounding ways of thinking about research, teaching and practice in nursing, drawing upon one of the stories in Homer’s Odyssey as an organising framework. It argues for the importance of mentorship in navigating the multifaceted, intricate and personally confronting terrain that is nursing.

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Introduction

My premise is that as individual nurses and as a profession we deal on a day to day basis with problems we regard as everyday and ordinary that can also be thought of as life and death issues of mythic significance. We surround ourselves with protective devices and activities; we engage in rituals, we make ourselves invisible, we become sheep, we lose our tongues; such activities have been well described in myth and fable. We also engage in acts of extraordinary heroism. We gaze unblinking into the horror of putrefaction and bodily decay while we offer tender and compassionate care. We preserve the dignity and save the face of the ill and infirm as they battle with the indignities of their condition. We intervene using precise knowledge and finely honed skills as we restore health and well being to shattered lives and bodies.

This is the essence of nursing through the ages. Each age however, faces its particular challenges and hurdles. This is an age of increasingly refined forms of rationality; of information and advanced technologies which, linked to scientific enquiry and applied to health care, have resulted in increased longevity and improved health for many people, particularly in wealthy countries. It is undoubtedly something for which we are all

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grateful and to which we contribute in the various roles we play in seeking to improve health outcomes. However, we are all equally aware of the downside of these global rationalising impulses; the threats to the environment, global warming, increased pollution, and loss of diversity in plant and animal life. There are increasing concerns about the very viability of our planet. So how can we in our individual working lives and collectively as a profession draw upon rationalities wisely and judiciously and recognise their limitations and the dangers inherent within these processes?

**Odysseus and nursing**

In this paper I draw upon one of the stories in Homer’s Odyssey (Armitage, 2007) as an organising framework for my argument. Odysseus is celebrated as one of the first Greek mythic heroes and is renowned as a person of intelligence, ability and bravery. In the face of temptations, follies and dangers he drew upon his courage, wits, and endurance which enabled him, supported by the Goddess Pallas Athena, to come through many ordeals and difficulties, survive everything that happened to him and finally arrive home after a 10 years journey. James Joyce’s monumental modern novel Ulysses (1993) has many parallels with the Odyssey and his protagonist, Harold Bloom, with Odysseus. But Harold Bloom is an ordinary man, living an ordinary life beset by the dilemmas and difficulties of such an ordinary existence. Joyce’s novel therefore enables us to respond to the literary conceit that the everyday person living their everyday lives and dealing with what confronts them on a moment to moment basis can also be thought of as a being of heroic stature dealing with problems of mythic importance.

In one of his adventures, Odysseus had to steer his ship through a narrow strait which had a monster on either side. One was a six headed people eater, Scylla, who dwelt on a jagged rock, and the other was Charybdis, a monster who lived in the water and had a huge gaping mouth which sucked in water and created dangerous whirlpools. Odysseus’ task was to navigate his ship so that it avoided being rent asunder by these dangerous monstrous forces.

I think of nursing and nurses, i.e., the profession as a whole and each of us as individuals, as being like Odysseus, having to steer ourselves through extremely treacherous waters, inhabited by creatures seeking to destroy us, and beset by fierce and unexpected currents while we try to maintain a pathway that will prevent us being consumed by the rock of rationalities or destroyed by the whirlpool of forces resistant to rationalization. I think of nursing and nurses as occupying uneasy space within and between a range of complex, competing and contradictory forces. I find this episode in the Odyssey can help to identify where the dangers lie so we can use our skills to avoid them. I believe that, whatever our role, we need to seek to sustain some sort of balance, albeit precariously, between the forces of rationality and resistance.

Some examples of how easy it is to swing too closely to one side or the other spring to mind. In research we often prefer to opt for the rock of method so as to avoid the messy complex whirlpool of real life issues that are not easily reducible to investigation. As a result we might produce methodologically sound research that is in fact not very useful to improving health in the real world of health needs. In teaching undergraduates, we may opt for the rock of principles, theories and ideal practice rather than the messy whirlpool of everyday dirty, smelly and personally confronting nursing practice. As a result our students are ill prepared for the realities of practice and we are accused of living in an ivory tower, out of touch with the real world. In practice we are beset by issues surrounding how we can provide compassionate care without getting swept into the whirlpool of over-involvement, or in fear of this, selecting the rocky place of detached care.

Like Odysseus, we usually settle for moving closer to the rock as the lesser of two evils as we try to manoeuvre our professional lives. However, if we are not at least touched by the whirlpool as we guide our little craft through treacherous waters, we cannot begin to comprehend, let alone deal with, the privilege of our position in bearing witness to the whirlpool that is the passion, suffering and pain of our patients and clients and our role in making a difference to their health and well being. But we cannot do this without being affected ourselves and we in turn, like Odysseus, need support if we are to survive the tempests and storms of our everyday working lives. Odysseus would not have survived to complete his journey without Pallas Athena, goddess of wisdom, and neither can we without the support of mentors, teachers, clinical supervisors or coaches. So with these ideas in mind, let us turn to a deeper consideration of the dangers posed for us by the polarities of the rock and the whirlpool; of rationality and resistance, in research, teaching and practice.
Producing knowledge

Knowledge is produced in a number of ways but the most powerful and influential form in academic communities is codified knowledge stemming from research and theories. For practice based professions such as nursing the focus is upon producing knowledge that is useful to practice and the nursing academy’s quest of recent times has been to produce a greater evidential base for nursing practices. Influenced by the significant work of Cochrane (1972) and the subsequent Cochrane collaboration which supports the use of current best evidence in health care, the practice of evidence based nursing entails decision making based on the integration of clinical expertise and best available external clinical evidence from systematic research.

This move towards evidence based practice is an important one made necessary not only by the culture of the academy, but also by the changing work practices of health care (Parker, 2002). Nurses need to be able to justify and account for their decisions on the grounds of best available evidence, communicate with other researchers and health professionals in a common language and seek cost effective solutions to the pressing health problems confronting them.

Over the years I have advocated strongly for evidence based nursing and have been closely involved with programs directed at improving the skills of practising nurses in this area. I have written elsewhere about nurses who undertook an evidence based nursing program:

"I have noted their increasing sense of confidence as they search bibliographic data bases and journals and learn to make judgments about the quality of research through critically appraising the evidence for validity and generalisability. …I have heard them tell of going back to their practice units and speaking authoritatively about lack of evidence for certain current practices and calling for investigation into them." (2002:139)

More recently, there has been a shift towards translational research which seeks to develop, test, evaluate and apply new interventions in practice, a move which suggests a much more research driven approach to clinical practice. Nursing interventions that demonstrate the link between nursing actions and patient outcomes have become a high priority for nursing research (Hinshaw, 2000).

As Winch et al. (2002) note, this move indicates the emergence of social practices which manipulate nursing practices according to predetermined identifiable routines drawn from scientific codes. Practices then become skewed towards knowledge that is statistically verifiable, rupturing the methodological pluralism that the nursing community has previously accepted as suitable for the production of nursing knowledge (p. 160).

Thus it can be seen that the evidence based movement, while valuable and necessary, is pushing nurses and nursing towards an increasingly rationalised approach to nursing care. In giving centrality to this approach, other methods of investigating phenomena of interest may be seen to lack credibility. Additionally, nurse researchers may become so concerned about the need for evidence that they will seek to measure and codify intangible aspects of the human condition in sickness and suffering not amenable to empirical investigation.

My concern is that in shifting too close to the rationalising rocks of Scylla with their questions of interest, researchers may ignore cultural, structural, contextual and situational variability as well as philosophical and theoretical complexity as they seek to make solid and rocklike, important aspects of nursing that are and should remain elusive, subtle, and indefinable.

A recent article by Lipscomb (2007) suggests that evidence is often erroneously conflated or confused with research evidence, resulting in the undervaluing of scholarship and non-experimental forms of evidence. He offered a critique of attempts to study the concept of hope empirically. He noted the body of literature in nursing asserting that maintaining patient hopefulness should be a central nursing duty which is generally presented in an unproblematic way as a "good thing".

However, much of the research on the topic of hope: "is confounded by the dilemma of presenting a construct (hope) that is neither a real definition nor a good scientific theory' (p. 335). He suggests that its multiplicity of definitions may be an indication that it cannot sustain a real or technical definition. This suggests that hope may only be able to be understood in relation to the local and particular, possibly transient and fleeting, maybe contradictory, ways in which it finds expression in specific situations. This indicates that hope resides, if at all, in the puzzling, mysterious and confounding recesses of complex life histories that change from moment to moment. In this way of thinking, hope belongs in the realm of the shifting forces of the whirlpool and it behoves the nurse to pay respect to the elemental force of this mystery rather than to seek to quantify it and shift it towards that which is measurable; the rationalising rock of Scylla.

There is a great deal in nursing that is amenable to rigorous scientific investigation which will
produce evidence contributing to enhanced patient care and health outcomes. However, there is also much that lends itself to contemplation, to reflection upon experience and to a reading of literature and philosophy, each of which will contribute to a deeper understanding of the whirlpool of lives shattered and made chaotic through pain, indignity and suffering.

Further education and broad reading, research and learning from experience can assist nurses in navigating their way through these complex matters. But in my view what is required above all is wise mentorship.

Reproducing knowledge

The growing move in the academy toward drawing upon best available evidence in teaching and learning is an important development that encourages students to be critical research consumers and to understand the importance of using evidence in practice. However, mindful of the arguments made above in relation to research, equal consideration needs to be given to other factors in the process of teaching and learning. If we think about teaching as simply the reproduction of codified knowledge from research and scholarly endeavours, we cover over and unduly simplify many of the complexities that surround the acquisition and transfer of knowledge.

In their professional formation as nurses, students are taught various types of codified knowledge including relevant sciences, conceptual frameworks for nursing practice as well as other forms of knowledge handed on by teachers (Eraut, 2007). Students are also exposed to the clinical realities of practice where they are influenced not only by their absorption of the relevant literature, but also by a range of other pressures and authorities. One is that of the common discourse of practitioners, another, the personal theories of various practitioners who may encourage students or be seen as role models and figures worthy of emulation (Eraut, 2007). Students also absorb the routines of practice which enable activities that might in other situations be bizarre, gross or simply unbelievable to become routine and taken for granted (Eraut, 2004).

As Eraut (2007) has pointed out, it is personal knowledge that people bring to situations and it is personal knowledge that enables them to think and act in those situations. He suggests that the ingredients of personal knowledge include a mixture of codified knowledge, know-how in the form of skills and practices, personal understandings of people and situations, practical wisdom and tacit knowledge as well as self knowledge, attitudes, values and emotions.

I think it is helpful for those of us who are charged with the responsibility of producing nurses to serve the community to realise that much of what students learn does not flow directly from the rationalising practices of the codified knowledge they absorb in the academy. Neither does it flow directly from the clinical environment where they pick up rationalising routines and recipes for care. Students will also bring their personal understandings and experiences to their practice.

I believe it is important to encourage students throughout their program to understand that while they are being equipped with a professional skill set, they also bring a strongly personal dimension to their practice. The life jacket of their professional skill set will protect them as they sail their craft into the dangerous waters of practice with the tools, rationalisations and routines of Scylla on the one side of the strait and the terror of being immersed in and drowned by the realities of the whirlpool Charybdis on the other.

They need their life jacket. It is there for a purpose, so they can venture close to the whirlpool without being drowned in the enormity of their experiences. But they need to be touched by Charybdis so they can respond personally in their care of the sick and suffering. It is only here, on the edge, that they can learn empathy and compassion, and gain a deep understanding of human courage and endurance in suffering and pain. It is crucial that they are bolstered in this position by the astuteness, intelligence and understanding of their clinical mentors, so that they can return to the middle strengthened by their experience.

Application of knowledge in practice

So let us now turn to a consideration of nursing practice as much more than the direct application of empirically and theoretically derived knowledge. I am continuing to draw heavily on Eraut (2007) who also writes about professional performance and to consider further some of the ideas I have already discussed in relation to research.

Eraut points out that knowledge of practice integrates a range of different types of knowledge and the transfer of knowledge between education and workplace contexts is much more difficult than is commonly assumed. He notes, for example, the complexities that lie within the tacit dimension of performance. Thus, in undertaking their practice, nurses will have an implicit understanding of the
situations they find themselves in that stems from pattern recognition, implicit learning, and impressions they have gained and sensed. Their skills will be routinised and involve many non-verbal processes, intuitive monitoring and sensing of emotions and moods. Their knowledge use will involve transforming and resituated knowledge gained in the classroom, remembering, and recognising when and how to use knowledge.

This is a very different order of knowledge from the codified knowledge valued by academic communities. The criteria for evaluating accomplishment in the two areas are also unlike. The academic community has processes such as the Research Assessment Exercise (however, named) against which individuals can make judgements about their level of performance. But, criteria for judging professional practice are much more difficult. Performance may be judged on whether or not what was done works, but it is often difficult to attribute outcomes. To what extent can a nursing intervention be claimed as the key factor in a patient’s improvement in health status, particularly when many nurses may participate in the intervention and their practices may differ quite markedly? It is here that we can see the relevance of research in intervention development, design and testing (Aranda, 2008) to enable greater rigour and consistency in decision making in nursing practice.

However, this may be more easily said than done. A number of barriers to implementation of research findings into practice have been identified and there is now a substantial literature on the topic. Barriers identified have been lack of resources and lack of co-operation particularly from medical colleagues, inadequate authority to make changes and negative views of the benefits of research for practice (Carter, 1996).

In noting the difficulties in actually shifting evidence into practice, May et al. (2007) has drawn attention to the fact that while there is an abundance of reports on the clinical effectiveness of various interventions, they have little hope of being implemented in healthcare settings unless due account is given to existing patterns of service organisation, professional practice and professional patient interaction.

In this vein Drummond (2004) has noted that because the emphasis in academic nursing is about managing research and knowledge, and nursing practice is about managing people, there are important differences between the culture and working practices of the two areas. He notes that the governance of nursing practice remains managerially oriented. In the practice areas nurse managers manage people but do not manage knowledge or the research agenda. Conversely, those who manage knowledge and the research agenda do not manage people. As a consequence there is a significant difference in culture and work practices between what goes on in the practice domain and what goes on in academia. The relationship between the two is more of a contractual partnership than a form of symbiosis resulting in the creation of two separate spheres; one a managerial hierarchy, the other a hierarchy of knowledge.

These hierarchies of management and knowledge can each be thought of as rationalising forces confronted by nurses. Each is very important, but if each hierarchy holds firmly to its mission of either knowledge or people management, then there is no space to enable the creative endeavour of research informed practice and practice informed research. Each has to enter the terrain of the other for developments to occur in clinically based research, in translating research into practice and in implementing research based innovations in practice. This is certainly occurring in pockets as nurses take up joint positions between the academy and practice and seek to overcome some of the barriers that have been identified. But it is a very slow process.

Concluding thoughts

It is worth recognising that nursing as a profession is characterised by very different sets of interests and agendas. It is grounded in practices derived from centuries of witnessing the human condition in its frailties and vulnerabilities and is inhabited by practitioners of varied backgrounds, different levels of education and diverse scope of practice responsibilities. It is therefore likely to resist either a fully managerialised or a totally research driven agenda for practice. Individual nurses, whether in research, teaching or practice will make their decisions based on their own interests, priorities and imperatives.

But nursing, wherever it is located, lies in a complex, messy and at times dangerous terrain. Thus, every nurse, like Odysseus, has to be thoughtful, careful, brave and tender-hearted as they guide their little craft through the narrow straits to ensure they do not succumb entirely to either the rigid rules of rationalisation or the swirling chaos of that which resists rationalisation. It is worth recalling that Odysseus’ mentor and helper throughout his journeys, from the beginning of the Trojan War until he finally returned to Ithaca to reclaim his throne was Pallas Athena the goddess of wisdom.

Each of us in our various roles can at times be Odysseus, at times Pallas Athena. We need to be
brave and resourceful as we navigate our path through life but we cannot do this successfully without recourse to a mentor or coach. We need someone like Pallas Athena who can help us to have the courage to act thoughtfully and wisely, to know when to embrace the forces of rationalisation and when to resist them as we focus our endeavours in research, teaching and practice in undertaking our social mandate to improve the health and well being of vulnerable populations and individuals.

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References
