Veterinary nursing research: types, importance and dissemination

Abstract
As with other practice-based professions, research is vitally important to the field of veterinary nursing. Professions have a responsibility to provide high-quality services that are beneficial to their clients, whether human or animal, based on systematic and ongoing research, providing evidence-based principles. Even though veterinary nurses work as members of a healthcare team, there are areas of their professional practice that are exclusively their domain, which warrant scientific investigation. Veterinary nursing research will not only assist veterinary patients and clients through improving nursing practices, but will also advance the development of veterinary nursing as a profession. Generating a unique body of knowledge is one of the criteria by which a profession is defined. This article examines what is research in veterinary nursing, why research is important to veterinary nursing professional practice and how scientific research can promote the development of the veterinary nursing profession.

Key words: veterinary nursing research, development of the profession, clinical research, professional practice, veterinary nursing knowledge

With the rapid rise in the standards of veterinary practice driven by advances in technology, a knowledge explosion and the increasing expectations of clients, veterinary nurses, like other professionals, require a higher level of knowledge and clinical expertise to practise (Abu-Saad, 1993; Brown and Silverman, 1999). This philosophy is supported in the professional literature, such as the Royal College of Veterinary Surgeons’ Guide to Professional Conduct for Veterinary Nurses (Royal College of Veterinary Surgeons, 2010) and the new draft code (Royal College of Veterinary Surgeons, 2011). Both reports advocate that veterinary nurses must ‘maintain and continue to develop professional knowledge and skills’ (Royal College of Veterinary Surgeons, 2010: 5) by undertaking a minimum of 45 hours of continuing professional development (CPD) over 3 years to satisfy regulatory requirements. As such, CPD is an essential element of the veterinary nurse’s professionalism, representing their commitment to excellence in the field and lifelong learning (Hilton, 2004). This commitment to excellence and currency of competency needs to be based on a body of knowledge developed through veterinary nursing research, as veterinary nurses require evidence to underpin what they are doing in caring for patients and their owners.

‘Without the development of a research base to refine and provide evidence about the value of practice...[it] simply will not survive, much less thrive as a profession’ (Kielhofner, 2006).

Similar to human nursing and other practice-based professions, veterinary nursing knowledge would have been originally established through wisdom passed down and by trial and error (Roberts, 1999). However, as these professions have evolved, their professional knowledge has been verified through research and disseminated in journals, making it accessible to all (Roberts, 1999). Veterinary nursing is now developing its own research, and it is clear that clinical or practice-based research is a priority for veterinary nurses in terms of improving patient care and producing desirable outcomes. However, there is significant scope in this developing profession for a broadening of the current research base in both quantity and quality. As well as clinical research, veterinary nurse education and professional status both need further investigation.

To be effective, research also needs to be shared among the profession, thus the dialogue about research must continue through its dissemination in veterinary nursing journals (Cacchione, 2007), including publications of international standing as seen in other professions (Fricke, 2004). When examining the peer-reviewed veterinary nursing literature, there is a limited but growing body of knowledge being disseminated, such as through the Veterinary Nurse. This augurs well for the future when coupled with the increasing emergence of higher education programmes, supporting faculty and producing graduates with research capability. This trend should lead to the establishment of a veterinary nursing research community with members who will not only be consumers of research, but also creators of scientific evidence (Banks, 2010; Arena et al, 2011), thus contributing to the growing body of veterinary nursing knowledge. This body of knowledge is pivotal to the development of veterinary nursing as a profes-
Another important factor in considering the necessity of research in veterinary nursing is and justifies its importance in terms of providing evidence for veterinary nursing professional practice and for the development of the veterinary nursing profession. Implications for veterinary nursing education, including CPD, are also outlined.

What is veterinary nursing research?

Based on human nursing models, veterinary nursing research can be defined as ‘research led by [veterinary] nurses with the purpose of developing knowledge relevant to the [veterinary] nursing profession’ (Forbes, 2009: 558). Veterinary nursing research has also recently been summarized by Bloor (2011) in the veterinary nursing literature as the systematic search for new information and ideas to guide practice. Both are accurate and appropriate definitions. We can also expand on these by reviewing research conducted in allied health professions that would be relevant to veterinary nursing. Based on research from these professions, it can be extrapolated that veterinary nurses could be involved in clinical research, translational research (laboratory research translated into clinical practice), outcomes research or comparative effectiveness research (Arena et al, 2011); the focus of this article is primarily on clinical research, which is of high importance to the practice-based profession of veterinary nursing.

Looking to human nursing for inspiration, a broad range of research has evolved to inform nursing practice, including patient self management of chronic disease, emergency nursing care skills, nursing values and attitudes, pain management and infection control (Buelow, 2008). It would appear that there is significant scope for some of these models to be translated into veterinary nursing interventions or treatments in a range of practice areas. This would undoubtedly expand veterinary nursing’s research base and evidence for practice.

Why is research necessary in veterinary nursing?

Research is of great importance to the veterinary nursing profession; Bloor (2011) clearly articulates its
The importance of research in an applied discipline is to enhance and refine the knowledge base underpinning practice so that clients receive optimum care (Ottenbacher, 1987).

This supports Bloor’s (2011) claim of the importance of research as a means of improving the quality of veterinary nursing care. Thus, similar to other applied disciplines, the veterinary nursing profession is obliged to conduct research that validates its knowledge and provides evidence for practice (Kielhofner, 2006) in conducting clinical research, veterinary nurses can improve the quality of nursing care through challenging or clarifying current practices (Cacchione, 2007), ensuring that these cause no harm and produce good patient outcomes (Forbes, 2009). Additionally, clinical research is required to contribute to the development of a veterinary nursing body of knowledge that is to be shared among the profession.

There are a number of ways in which clinical research can generate knowledge reflecting the broad range of expertise within the profession, such as evaluating the efficacy of veterinary nursing interventions, their safety, their cost-effectiveness or comparing veterinary nursing interventions (Nathan and Wilson, 2004; Forbes, 2009). Veterinary nursing practices suitable for further research could be found in the nursing-specific domains of clinical nutrition, client education, pain assessment, patient positioning, physical therapy and clinical procedures, such as intravenous catheter care and wound care. The stimulus for research would be that the veterinary nurse has a strong motivation to resolve a clinical care problem experienced in practice; through questioning this practice and its outcomes, the veterinary nurse can contribute to the veterinary nursing body of knowledge. In practicing evidence-based nursing, veterinary nurses need to continually ask questions of themselves about their professional practice, such as:

- What is the difference in pain management outcomes for orthopaedic cases, using two different types of pain management assessment scoring models?
- Do owner visitations result in reduced pain in hospitalized veterinary patients?
- Do methods ‘X, Y and Z’ of securing intravenous catheters in dogs prolong the average survival time of such catheters?

Another important reason for conducting veterinary nurse research is the necessity for evidence-based practice to ensure patient care is optimized. In occupational therapy, Holm (2000) and Kielhofner (2006) have referred to the obligation of individuals to engage in evidence-based practice, integrating their own expertise with the latest quality research to support a high standard of practice. This need for research to support evidence-based practice has also been raised in the veterinary nursing literature by Banks (2010), urging veterinary nurses to conduct research and publish in peer-reviewed journals for that purpose.

The link between evidence-based practice and veterinary nursing research is also integral to maintaining professional standards and credibility. Veterinary nurses have accountability to their professional bodies, such as the RCVS, to follow a code of professional conduct and be accountable for their professional practice. In fact, professional misconduct by a registered veterinary nurse in the UK could lead to disciplinary action by the RCVS (Royal College of Veterinary Surgeons, 2010; 2011). The use of evidence-based practice also has implications for the relationship of veterinary nurses with their professional indemnity insurance companies. In an era of increasing litigation, the experiences of other allied health professions validate the importance of veterinary nursing...
research as a means of providing evidence of efficacy of practice for insurers (Gutman, 2009). This could become a significant issue with the increasing autonomy and accountability that will evolve with the development of the veterinary nursing profession, again emphasizing the importance of research to provide an evidence base to inform clinical nursing practice.

**Research and the veterinary nursing profession**

Professional status is another significant reason for advocating veterinary nursing research as it is intrinsically linked to the development of the profession. This can be illustrated by a statement from the social work profession espousing that ‘the single most critical difference between the professional and the lay person is the basis on which they claim the legitimacy of their ideas; verifiable by methods that can withstand repeated scrutiny’ — that validation being necessary because of the accountability of professionals regarding their client’s wellbeing (Williams and Hopps, 1988). This importance of research to professional status in the human nursing field has been acknowledged through the need for a commitment to excellence, a unique and in-depth body of knowledge, cutting-edge studies, replication of studies and interdisciplinary research collaborations (Abu-Saad, 1993). Thus it can be extrapolated from these statements that to advance its professional status, veterinary nursing must aspire to meet these criteria by further developing the quality and quantity of its research endeavours. Furthermore, in developing veterinary nursing research it will become more apparent where veterinary nursing interests and expertise lie, creating a unique body of knowledge that is essential to defining the veterinary nursing profession.

As a profession, veterinary nursing’s obligations lie not only in conducting research to develop its own knowledge base, but also with an obligation to engage in evidence-based practice. In human nursing, the need for an evidence-based framework for practice has resulted in national competency standards mandating that all registered nurses use ‘relevant literature and research findings to improve current practice’ (Australian Nursing and Midwifery Council, 2006). Could this be the way forward for veterinary nursing in cementing the value of its research and meeting its obligations as a profession, by incorporating an evidence-based framework into its competency standards?
Key Points
- An important reason for conducting veterinary nurse research is the necessity for evidence-based practice to optimize patient care, improve client satisfaction and produce good outcomes.
- Clinical or practice-based research is considered to be the primary focus of veterinary nursing research, creating a unique body of knowledge essential to defining the veterinary nursing profession.
- Continuing professional development enables nurses to meet obligatory regulations and keep up-to-date with latest evidence-based practice, furthering their knowledge, skills and professionalism.

Research and veterinary nursing education
As well as disseminating nursing knowledge through publications in journals and in conference presentations, it is also important that the creation of new knowledge is reflected in change to [veterinary nursing] curricula (Happell et al, 2008). Veterinary nurse educators must stay abreast of the latest research in their field and across disciplines to inform their teaching and develop in graduates the capacity for excellence in practice founded on the best available evidence; they must inspire the profession’s future researchers in the classroom. Additionally, in agreement with Banks (2010), higher education programmes need to encourage their students to publish from their research projects to contribute to and share veterinary nursing knowledge.

The continuum of life-long learning is relevant to all veterinary nurses once qualified, hence the importance of CPD. CPD is important not only in allowing the veterinary nurse to meet regulatory obligations but also in maintaining the veterinary nurse’s knowledge, skills and professionalism. As discussed by Branscombe (2010), intuitive experience in veterinary nursing is valuable, but it cannot be relied on solely to inform practice once qualified. As a lifelong learning process, CPD aims to enhance and maintain professional competence, assist in maintaining high professional standards and promote self-directed learning (Branscombe, 2010). In meeting these aims, CPD has a role in acting as a platform for enhancing the research capability of all veterinary nurses by putting research capacity building of the profession on the CPD agenda. Although they are helpful, academic qualifications are not essential to being a credible author, and CPD can assist veterinary nurses in translating their clinical experiences into evidence for practice to be shared among the profession.

Conclusion and recommendations
This article has advocated that veterinary nursing research, which generates veterinary nursing knowledge, is vital to the professional practice of veterinary nurses, their education and the development of the veterinary nursing profession. Consequently, the veterinary nursing profession must continue to expand its research base and look to other professions, such as human nursing and the allied health professions, for models and collaborations. It is also suggested that CPD plays a pivotal role in not only keeping veterinary nurses abreast of the latest research in the field and but also in developing the research capability of all veterinary nurses.

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