

Case study: a critical reflection of implementing a nursing care plan for two hospitalized patients

Abstract

Through critical reflection of designing and implementing a nursing care plan (NCP), based on a nursing model of care, this case study seeks to contribute to veterinary nursing's body of knowledge with regards the implementation of NCPs by veterinary nurses in practice. The rationale for the selection of the model of nursing care and design of the NCP is considered. The results of implementing the NCP for two hospitalized patients are discussed, along with the possible wider implications of these outcomes for both the use of NCPs in practice and the veterinary nursing profession as a whole. Recommendations for further research in order to establish more substantially these conclusions are identified. It is proposed that while there may be some obstacles to the usage of nursing models of care and their subsequent NCPs in practice, overcoming these is likely to deliver many benefits.

Key words: critical reflection, models of nursing care, nursing care plans

Within human nursing, models of nursing care feature heavily, with many texts and research papers devoted to the subject. Pearson et al (2005) suggest an interesting trajectory in their use in practice, with the initial scepticism surrounding their introduction in the 1970s soon giving way to a widespread adoption of them in both practice and education during the 1980s. However, more recently, there have been attempts by the human nursing literature to critically evaluate models of nursing care in the pursuit of 'new perspectives on their use and implementation in practice, education and research' (Wimpenny, 2002: 346).

If it is assumed that models of nursing care within veterinary nursing might follow the same trajectory, at what point of this curve are we now on? A review of the literature would suggest a current gathering of momentum for veterinary nursing to

'use them as a way of taking practice forward' (Davis, 2007: 104). The Royal College of Veterinary Surgeons (RCVS) Awarding Body's Veterinary Nursing Professional Syllabus (2010a) includes several learning outcomes pertaining to models of nursing and numerous journal articles have extolled their potential benefits (Joiner, 2000; Davis, 2006; Jeffery, 2006; Orpet and Jeffery, 2006; Cory 2007).

However, there is much less focus in the veterinary nursing literature on critical analysis, discussion and evaluation of their implementation by veterinary nurses (VNs) in practice. The case study presented in this paper seeks to start to fill this gap in the veterinary nursing body of knowledge through critical reflection of designing and implementing a nursing care plan (NCP), based on a nursing model of care, in a veterinary referral hospital ward setting. The factors influencing the choice of this model will also be considered.

Selecting a model of nursing care

Fundamentally, a nursing model is 'a collection of ideas, beliefs and values about the nature and purpose of nursing, which influence the way in which nurses work with their patients' (Davis, 2007: 98). In selecting a

model of nursing care, the author felt it was important that the ideas, beliefs and values of the model closely resembled her own view of veterinary nursing. This is termed 'reality convergence' and is proposed by Stevens Barnum (1998) as one criterion to use in order to analyze and evaluate potential models for practice. The author selected the Orpet and Jeffery Ability Model (2007) on the basis that it particularly fulfilled this criterion (Orpet and Jeffery, 2007). This model was influenced by the work of prominent theorists Orem and Roper, Logan and Tierney (RLT) and to date is the only one designed specifically for veterinary use.

The author's concept of veterinary nursing is to make animal welfare the first consideration, which is essentially the first guiding principle for VNs (Royal College of Veterinary Surgeons, 2010b). The author felt that considering nursing care through the framework of the Orpet and Jeffery Ability model (2007), which identifies ten 'abilities' of animals that are necessary for their physical and mental wellbeing, would ensure that she was keeping animal welfare uppermost in her daily practice.

Designing the NCP

The NCP can be thought of as a written plan of action for patient care, the structure of which is largely provided by the model of nursing on which it is based (Mason, 1999). While Orpet and Jeffery provide templates for a NCP based on their model, it is also stated that adaptations can be made to them for use in practice (Orpet, 2008). Adaptations and inclusions to nursing models, and in particular their resulting NCPs, are encouraged in both the human and veterinary nursing literature. Davis (2007) asserts that models should never be employed in an inflexible manner, but instead must be regularly questioned and assessed. In addition, NCPs may be designed 'without the constraint of a nursing model as the necessary foundation' (Mason, 1999: 386),

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Figure 1. Nursing assessment form: owner questionnaire and summary of patient's usual routine and normal status

To be completed at time of admission or as soon as possible after start of hospitalization as possible and appropriate

Date of admission: 05/10/10

Date of nursing assessment: 07/10/10

VN: CJW

Case no.: xxxxxx

Patient and client name: xxxxx

Breed: Toy poodle

Sex (if FE state date of last season): M

Age: 9years

neonate

adult

geriatric

Clinical summary (reason for admission):

oesophageal hypomotility

Owner's perception of current problems:

not able to eat; getting thinner and thinner; concerned won't get better

Brief previous history:

cerebellar infarct; distichiasis; KC vaccine up to date; no allergies

Date last wormed and product used:

not known

Date last flea/tick product applied:

Frontline used every month

Current medication/supplements:

started metoclopramide syrup last month; normally syringed tid (doesn't enjoy, but tolerates)

Summary of patient's usual routine/normal status:

Ability

Patient's usual routine/normal status

Long-term goal

Eat adequate amounts

A picky eater who likes to have dry food ad lib

Develop a feeding routine that manages his condition as much as possible; address weight loss

Drink adequate amounts

Drinks regularly from stainless steel bowl

Develop a routine that manages his condition as much as possible

Urinate normally

Goes 5 times daily, grass or gravel, off the lead

Maintain normal urination habits during hospitalization

Defecate normally

Goes 3 times daily (small amounts)

Maintain normal defecation habits during hospitalization

Breathe normally

Normal = no problems

Maintain normothermia during stay

Maintain body temperature

Wears jumper/coat if weather cold

Keep coat clean and well groomed

Groom itself

Has regular baths as tends to urinate on self

Keep coat clean and well groomed

Mobilize adequately

Likes short frequent walks off the lead

Maintain normal routine during hospitalization

Sleep/rest

Enjoys curling up in own bed with lights off

Ensure can maintain normal sleeping patterns during stay

Express normal behaviour

Enjoys human interaction, especially cuddles on lap

Maintain nice nature during treatment in the clinic

Extra nursing considerations regarding external influencing factors (e.g. cultural, financial):

Insured; owner concerned how will manage dog's care alongside her job if the treatment becomes too intensive

thus leading to a wide range of practice-led formats.

As a result, the author made the decision to make adaptations to the Orpet and Jeffrey Ability Model (2007) NCP templates. Inclusions were driven by one of the model's guiding principles that 'detail in the care plan is important' (Orpet and Jeffrey, 2007). In order to clearly describe nursing interventions, for problem prevention as well as problem resolution, an actual and potential problem column was incorporated. Another addition was to have specific sections for each of the ten abilities. The aim of both of these changes was in line with Cory's (2007: 17) attitude that the provision of NCPs should 'ensure that all patients' needs are identified and catered for' and so preventing a 'subtle area of patient care

being overlooked in the presence of more obvious or immediate needs'. An element obtained from the RLT Activities of Living Model for Nursing source material (Roper, et al, 1990) — the dependence–independence continuum — was also included alongside each of the abilities. This is a useful way 'to see both improvements and setbacks easily' when reviewing a patient's NCPs (Davis (2006: 5). Finally, a prompt regarding pain management was added to the 'express normal behaviour' ability. Pain is not explicitly developed as a subject for assessment within RLT's model, meaning it may be overlooked (O'Connor, 1995); as specific reference to it is also absent from the Orpet and Jeffrey Ability Model (2007), the author felt VNs might require guidance as to where to include this important consideration.

Case studies: formulation of a care plan for two hospitalized patients

After gaining approval from the hospital's nursing managers, the author formulated a care plan for a canine patient admitted for investigation and treatment of oesophageal hypomotility. As per the Orpet and Jeffrey Ability Model's (2007) guidelines, this included an initial patient assessment in conjunction with the owner. An abridged version of this, and the NCP documentation from the second of the 3 days it was implemented, are included here as *Figures 1* and *2* respectively.

Following a preliminary reflection on the initial experiences, the author produced a revised template to be used with another case. Among the revisions, is the addition

of an extra 'ability', described as 'morbidity/clinical status.' Inspired by Davis (2006), this originates from RLT's reference to 'dying' as an activity of living (Roper, et al, 2000). The author chose to incorporate this, as during the first case study, when new clinical information was gained about the patient, there was nowhere to explicitly document it on the NCP. This was felt to be important and is in keeping with Orpet and Jeffery's (2006) assertion that any nurse picking up an NCP would know what the plan is for a patient.

This revised template was then used by two other nurses to formulate the NCP for a feline patient hospitalized over a 48-hour period in order to receive chemotherapy treatment.

Thematic analysis

Following the case studies, the author reflected on her experience of implementing the care plan, together with the observations of nursing colleagues within the hospital, to undertake a thematic analysis of the resulting issues.

Increased understanding of the individual needs of the patient

There was widespread agreement that use of the NCP was responsible for an increased understanding of the unique needs of the patient, resulting in appropriate individualized nursing interventions being devised. Case studies by Joiner (2000) and Davis (2006) both note a similar outcome as a result of an in-depth patient assessment guided by a model of care. In particular, Joiner (2000) concludes that as a result of an individual patient-based plan, she was able to offer nursing completely tailored to the patient's needs, rather than 'general procedural nursing.'

This outcome was attributed to the extensive initial patient assessment, carried out in conjunction with the owner, which is an element absent from the hospital's existing practice. This belief is supported by the veterinary nursing literature. Davis (2007) proposes that comprehensive data collection prior to formulating the NCP allows the VN to identify potential and actual problems 'specific to individual animals', suggesting 'a nursing care plan will only be as good as the quality and accuracy of the information that goes into it.'

Another outcome seen in some of the human nursing literature is that nurses gener-

ally believed that care plans hindered individualized care by operating as tick lists that discouraged considered assessment (Mason, 1999). Indeed, examination of documentation showed that 20 patients on a general surgical ward all had the same nursing action recorded for a universally identified problem.

However, like Mason (1999), who emphasizes that negative attitudes to care planning were not universal within her study, the author suggests that further research would need to be carried out to ascertain whether the positive outcome of the NCPs within her referral hospital could be consistently replicated.

Actual change in practice?

On reflection, the author has found that since the case study, she is considering the ten abilities while nursing all her patients; the model of nursing care not only changed her nursing practice at the time, but it continues to do so, resulting in improved holistic care being delivered to her patients.

These changes could be attributed to a move away from the medical model, essentially a disease-oriented approach, which Orpet and Jeffery (2006) assert is how VNs are often trained. If both the veterinary surgeon and the VN are maintaining a 'cure focus' to their work, consideration of the patient as 'an active subject with specific needs that may not be linked to the disease itself' may be lacking (Pullen, 2006). Moving away from a disease focus towards a patient focus means that VNs will be adopting a 'care focus', improving patient care. It is the author's opinion that adoption of the Orpet and Jeffery Ability Model (2007) achieved this change in focus.

However, during the second case study, the other nurses using the NCP, who were able to complete the documentation at the time, did not action the individualized nursing interventions that they identified as a result of the NCP. This appears to suggest that NCPs do not result in a change in practice. How can these two different outcomes be explained?

First the NCPs were solely instigated for the purpose of this case study. As such, the other nurses completed them only at the author's request, and may have viewed their completion purely as an exercise of interest. The outcome may have been different if the NCPs had been officially implemented.

Second, while the author studied models of nursing care prior to selecting the model of nursing care used to underpin the NCP documentation, the extent of her colleagues' prior knowledge of conceptual models was not ascertained. In human nursing much of the inadequate use of models originates from 'a lack of educational preparation' (Timmins and O'Shea, 2004: 163), which could have been the case here. This requires further research and discussion in the veterinary nursing context.

Excessive documentation

The most agreed on undesirable result of the NCP implementation was that it produced excessive documentation. Why is quantity of paperwork perceived as such a significant problem?

A possible answer is that it was felt the additional paperwork did not serve an adequate purpose. Timmins and Horan (2007: 33) state that the RLT Activities of Living Model for Nursing, which influenced the Orpet and Jeffery Ability Model (2007), is often criticised as 'synonymous with excessive documentation' and 'little more than a paper exercise.' Mason (1999) demonstrated that many human nurses believe NCPs are unnecessary, because bedside charts are more useful as important guides to practice. This may account for the attitudes towards the NCP during their implementation within this referral hospital, where the hospitalization sheets, written in enough detail, may already serve the purpose of NCPs (Chandler et al, 2007). A conclusion could be that the excessive documentation is due to the NCP not being sufficiently adapted to enable integration with the hospital's existing paperwork. Indeed, Mason (1999: 386) recommends that NCPs should be 'tailored to the requirements of the clinical area', avoiding duplication and collation of unnecessary data.

During this case study, the author was unable to complete the NCP until the end of her shift as due to work demands a choice similar to that reported by Mason (1999) had to be made: either direct patient care was provided or the NCP was written. Mason (1999: 385) argues that this inadequate implementation of NCPs as tools for retrospective reporting in place of planning may be due to 'their lack of fit with the demands of practice, and not with performance of staff.' Conflict between the time required for the completion of NCPs

Figure 2. Nursing Care Plan (NCP)

To be completed once daily or more often if dramatic changes in patient's status; evaluation to be completed prior to writing new NCP (date and initial separately)

Date: 09/10/10 **Time:** 10:00 **Initials:** CJW **Case no.:** xxxxx **Patient:** xxxxxxxxxx **Client:** xxxxxx

Ability	Actual problem	Potential problem	Short-term goal	Nursing intervention	Evaluation
Eat adequate amounts	Still NPO due to oesophageal hypomotility and history of regurgitation; no weight gain; has PEG tube	PEG tube displacement; infection re PEG tube; regurgitation despite PEG feeding	Check PEG tube with clinician; increase PEG tube amounts to total IER today; maintain weight	PEG tube care bid; discuss PEG tube with clinician; weigh daily (06:00 on feline scales)	Clinician happy with PEG tube (10:30 CJW); small amount regurgitation (just water) when a little anxious re PEG tube care — clinician informed (14:00 CJW)
Drink adequate amounts	NPO due to oesophageal hypomotility	Dehydration	Keep hydrated	Daily water requirement (50ml/kg) being added to PEG feeds (see sheet); oral care q 2 hours (use damp swab to wipe around lips/ mucous membranes)	Further regurgitation at 21:30 so concerned about fluid status — clinician informed and IVFT restarted (CJW)
Urinate normally	Occasionally urinates on self, especially forelimbs; soiling bed	Urine scald	Prevent urine scald	Continue increased take outs and regular coat/bed checks for urine – change bed and bath prn	Changing/checking bed while can't take out frequently due to dyspnoea; no baths re respiratory distress (21:30, CJW)
Defecate normally	Reduced frequency defecation	Constipation	Prevent constipation	Alert clinician if no faeces passed; continue regular take outs to promote gut motility	Monitor but reduced priority now that dyspnoeic (21:30, CJW)
Breathe normally	None	Could develop a problem during hospitalization	Maintain normal RR/breathing	RR recorded bid (06:00 and 18:00)	Concerns about newly developed inspiratory noise — clinician alerted and chest radiographs taken = aspiration pneumonia. Increased respiratory monitoring and oxygen supplementation implemented — see ICU sheet (21:30, CJW)
Maintain body temperature	None	Hypothermia	Maintain normothermia	Take temperature bid (6:00 and 18:00); jumper on if less than 37 degrees centigrade	Increased monitoring after radiographs as decreased temperature, but managed to maintain above 37 degrees centigrade (21:30, CJW)
Groom itself	Wearing Elizabethan collar so unable to groom self; getting urine on self at times; getting stressed when groomed	Urine scald; matted coat	Maintain good coat/skin condition	Continue to check bed and legs regularly for urine; groom little areas at a time for brief periods	Managing to prevent urine scald at present, but grooming discontinued as need to limit stress due to increased respiratory effort (21:30, CJW)
Mobilise adequately	Decreased exercise compared with normal due to hospitalization	Stiffness due to age and restricted exercise	Maintain mobility	Increased frequency take outs – see kennel sheet for times	Take outs discontinued while requiring oxygen supplementation to stabilize oxygen saturation; wait until more stable again (21:30, CJW)
Sleep/rest	Night staff concerned not sleeping well overnight	Continued inability to sleep during hospitalization	Ensure gets at least one rest period overnight	If unable to get lights off for a period overnight, put towel over front of kennel; record any rest/sleep	Need to balance increased monitoring with allowing time for rest (21:30, CJW)
Express normal behaviour (include pain check requirement here)	Seems anxious, especially when PEG tube care being performed	Pain due to PEG tube; subdued and/or altered temperament	Ensure is comfortable and has sufficient human contact and reassurance	Pain checks whenever carrying out other care; buprenorphine prn as directed by clinician. Fuss when take out; have 2 people for PEG tube care so one can reassure; allow owner to visit	Pleased to see owner (11:00, CJW). Buprenorphine given as uncomfortable during PEG tube care — clinician informed (12:00, CJW). Buprenorphine repeated as whining and unsettled despite reassurance (18:00, CJW)

and the time required for direct patient care seems to be given little to no consideration in the veterinary nursing literature.

Recommendations for future practice

The prominent human nursing theorist, Tierney (1998), maintains that the question 'What is nursing?' can only ever be answered by conceptualization. The veterinary literature is starting to echo this. Chandler et al (2007) contest that up-to-date evidence-based nursing practice should be achieved through the implementation of care plans and that this in turn is one of the first steps towards developing 'a defined professional role for nurses'. Davis (2007: 95) is in agreement, stating that:

'Through the use of the nursing process and nursing models, veterinary nurses will be better able to articulate and demonstrate the nature of their role and the unique skills and knowledge they bring to their practice.'

As a result of the thematic analysis, it seems there is tentative support for NCPs producing beneficial changes in practice, although this seems conditional on a comprehensive understanding of the underlying model and

not just mechanical completion of imposed documentation. While there is support for this theory in the human literature, it is unclear whether these can be generalized to veterinary practice, so more work in this regard needs to be done.

The issue of excessive documentation seems to be the biggest hurdle to the use of NCPs. A recommendation for future practice is extensive consultation with the whole nursing team and revisions of the NCP until an optimally integrated template is reached. Ultimately, difficulties with perfecting the documentation should not necessarily reflect badly on the underlying nursing model of care, which as is tentatively shown here, does have the potential to provide positive, tangible benefits to practice.

Further to this, it must be remembered that while care plans are undoubtedly fundamental to conceptual model-based practice, they represent only one small facet of the intervention (Timmins and O'Shea, 2004). Imposed use of NCP documentation alone does not guarantee the benefits derived from the universal implementation of a model of nursing care agreed on and explicitly understood by the whole veterinary nursing team. Conversely, it does not seem necessary to use what may have been seen as traditional NCP documentation in order for a nursing

model of care to bring about benefits to an individual's daily nursing practice. However, without documenting such practice fully, be that on an NCP, hospitalization sheet or a locally integrated version of the two, it will not be possible to work towards the body of knowledge that is required for a profession to practice from.

Conclusion

While there are some obstacles to the usage of nursing models of care in veterinary practice, overcoming these is likely to deliver many benefits.

So, if the trajectory of models of nursing care in veterinary nursing echo that of models of nursing care in human nursing, at what point of the journey from initial scepticism, to widespread adoption, to the present critical evaluation might we be on? The conclusion from this critical reflection, is that, in a much shorter space of time, veterinary nursing might have already reached the point of its sister profession, in requiring the new perspectives on the use and implementation of nursing models of nursing care in practice, education and research, in order to continue progression of the profession. It is hoped that this case study will encourage others to contribute to these new perspectives through further research and reflection. **VN**

References

- Chandler S, Seymour J, Jeffery A (2007) General nursing, the nursing process and nursing models. In: Lane D, Cooper B, Turner L eds. *BSAVA Textbook of Veterinary Nursing*. 4th edn. British Small Animal Veterinary Association, Gloucester: Ch 15
- Cory J (2007) Models and care plans. *Veterinary Nursing Journal* 22(5): 17-8
- Davis S (2006) The model answer? Using nursing plans in veterinary practice. *Veterinary Nursing Times* 6(7): 4-5
- Davis C (2007) The nursing process and nursing models. In: Jones M, Mullineaux E eds. *BSAVA Manual of Practical Veterinary Nursing*. British Small Animal Veterinary Association, Gloucester: 6
- Jeffery A (2006) Moving away from the medical model. *Veterinary Nursing Journal* 21(9): 13-6
- Joiner T (2000) An holistic approach to nursing. *Veterinary Nursing* 15(4): 142-8
- Mason C (1999) Guide to practice or 'load of rubbish'? The influence of care plans on nursing practice in five clinical areas in Northern Ireland. *J Adv Nurs* 29(2): 380-7
- O'Connor L (1995) Pain assessment by patients and nurses, and nurses' notes on it, in early acute myocardial infarction. *Part 1 Intensive and Critical Care Nursing* 11(4): 183-91
- Orpet H (2008) Advances in the Delivery of Practical Nursing Care - Practical Examples. [Online] Available at: <http://www.vin.com/proceedings/Proceedings.plx?CID=WSAVA2008&Category=3883&PID=24012&Print=1&O=Generic> [Accessed 10 December 2010]
- Orpet H, Jeffery A (2006) Moving towards a more holistic approach. *Veterinary Nursing Journal* 21(5): 19-22
- Orpet H, Jeffery A (2007) Implementing the Ability Model November 2010 ed. [Graduate Diploma in Professional and Clinical Veterinary Nursing course notes] The Royal Veterinary College, London
- Pearson A, Vaughan B, FitzGerald M (2005) *Nursing Models for Practice* 3rd edn. Elsevier, London
- Pullen S (2006) Veterinary nursing: the road to professionalism. In: Pullen S, Gray C eds. *Ethics, Law and the Veterinary Nurse*. Butterworth Heineman: Chapter 1
- Roper N, Logan W, Tierney A J (2000) *The Roper Logan Tierney Model of Nursing: Based on Activities of Living*. Churchill Livingstone, London
- Royal College of Veterinary Surgeons Awarding Body (2010a) Qualification Handbook and RCVS Professional Syllabus Level 3 Diploma in Veterinary Nursing and Level 3 Certificate in Animal Nursing Studies. [Online] Royal College of Veterinary Surgeons Awarding Body, London
- Royal College of Veterinary Surgeons (2010b) *Guide to Professional Conduct for Veterinary Nurses*. Royal College of Veterinary Surgeons, London
- Stevens Barnum B (1998) *Nursing Theory: Analysis, Application, Evaluation* 5th edn. Lippincott, New York, USA
- Tierney AJ (1998) Nursing models: extant or extinct? *Journal of Advanced Nursing* 28(1): 77-85
- Timmins F, Horan P (2007) A critical analysis of the potential contribution of Orem's (2001) self-care deficit nursing theory to contemporary coronary care nursing practice. *Eur J Cardiovasc Nurs* 6: 32-9
- Timmins F, O'Shea J (2004) The Roper-Logan-Tierney (1996) model of nursing as a tool for professional development in education. *Nurse Education in Practice* 4: 159-67
- Wimpenny P (2002) The meaning of models of nursing to practising nurses. *J Adv Nurs* 40(3): 346-54