Paper II

Assessing changes in a patient's condition – perspectives of intensive care nurses

Monica Kvande, Charlotte Delmar, Else Lykkeslet and Sissel Lisa Storli

ABSTRACT

Aim: To explore the phenomenon of assessing changes in patients' conditions in intensive care units from the perspectives of experienced intensive care nurses.

Background: Providing safe care for patients in intensive care units requires an awareness and perception of the signs that indicate changes in a patient's condition. Nurses in intensive care units play an essential role in preventing the deterioration of a patient's condition and in improving patient outcomes.

Design and methods: This hermeneutic phenomenological study conducted close observations and in-depth interviews with 11 intensive care nurses. The nurses' experience ranged from 7 to 28 years in the intensive care unit. Data were collected at two intensive care units in two Norwegian university hospitals. The analysis was performed using the reflective methods of van Manen.

Findings: An overarching theme of 'sensitive situational attention' was identified, in which the nurses were sensitive in relation to a patient and understood the significance of a given situation. This theme was further unfolded in four subthemes: (1) being sensitive and emotionally present, (2) being systematic and concentrating, (3) being physically close to the bedside and (4) being trained and familiar with the routines.

Conclusions: Nurses understand each patient's situation and foresee clinical eventualities through a sensitive and attentive way of thinking and working. This requires nurses to be present at the bedside with both their senses (sight, hearing, smell and touch) and emotions and to work in a concentrated and systematic manner. Knowledge about the unique patient exists in interplay with past experiences and medical knowledge, which are essential for nurses to understand the situation.

Relevance to clinical practice: Clinical practice should develop routines that enable nurses to be present at the bedside and to work in a concentrated and systematic manner. Furthermore, providing safe care requires nurses to be sensitive and attentive to each patient's unique situation.

Key words: Hermeneutic phenomenological study • ICU • Intensive care nursing • Patient assessment • Patient conditions • Sensation

INTRODUCTION

Providing safe care for patients in intensive care units (ICUs) requires an awareness and perception of the signs that may indicate changes in a patient's condition (Benner *et al.*, 2011, Coulter Smith *et al.*, 2014). Bedside nurses in ICUs play essential roles in ensuring patient safety and in preventing the deterioration of a patient's condition (Kelly and Vincent, 2011, Henneman *et al.*, 2012, Livesay, 2016). However, the nurse–patient ratio in ICUs varies. In a European survey on sedation practices, Egerod *et al.* (2013) found that a 1:1 nurse–patient ratio was more common in

Nordic ICUs than in non-Nordic European ICUs (75% versus 26%).

A study by Henneman *et al.* (2010) explored the strategies used by critical care nurses to identify, interpret and correct medical errors. Surveillance represents one such strategy and is a systematic and ongoing process that includes assessing both the patient and the patient's environment. Kelly and Vincent (2011) analyzed the concept of nursing surveillance and found that it involves the purposeful and ongoing collection, interpretation and synthesis of data, including subtle changes and signs from the patient. Additionally, Henneman

et al. (2012) reported that when surveillance is effective, nurses will recognize early changes in a patient's condition or omissions in the treatment plan and this recognition will improve patient outcomes. Knowing the patient is another important issue in ensuring patient safety and includes knowing both the particular patient's condition and the patient as a person, which enables the nurse to foresee potential crises, risks and vulnerabilities (Benner et al., 2011, Zolnierek, 2014). Additionally, Benner et al. (2011) reported that nurses must possess knowledge of and clinical experience with specific critical illnesses to be aware of

Authors: M Kvande, RN, MSc, ICN, PhD student, Department of Health and Care Sciences, Faculty of Health Sciences, University of Tromsø, The Arctic University of Norway, Tromsø, Norway; C Delmar, RN, MScN, PhD Professor, Section for Nursing, Department of Public Health, Health Faculty Aarhus University, DK & Faculty of Health Science, Aalborg University, DK & University College Diakonova, Oslo, Norway; E Lykkeslet, RN, ICN, MSc, PhD, Faculty of Health and Social Care, Molde University College, Molde, Norway; SL Storli, RN, ICN, MSc, PhD, Department of Health and Care Sciences, Faculty of Health Sciences, University of Tromsø, The Arctic University of Norway, Tromsø, Norway

Address for Correspondence: M Kvande, Department of Health and Care Sciences, Faculty of Health Sciences, University of Tromsø, The Arctic University of Norway N-9037, Tromsø. Norway

E-mail: monica.kvande@uit.no

key signs that can indicate physiological deterioration.

Laerkner *et al.* (2015) have investigated nurses' experiences caring for critically ill, non-sedated, mechanically ventilated patients in the ICU. These authors emphasized that the nurse's physical presence is essential because it allows the nurse to observe the patient and immediately react to changes. This proximity enables continuous attention to the patient's bodily and facial expressions.

Nurses' decision-making processes in the ICU are highly complex and incorporate multiple attributes. Aitken et al. (2009) found that the majority of attributes used by experienced critical care nurses when assessing and managing the sedation requirements of their patients were related to aspects of care, such as facial grimaces, responses to stimuli and discomfort. Nurses also use treatment and physiological attributes in their decision-making process. Sorensen et al. (2013) examined nurses' reasoning and actions in patients with acute respiratory failure and chronic obstructive pulmonary disease who were receiving non-invasive ventilation (NIV). These authors found 11 types of reasoning and actions that were essential in NIV care, including the nurses' use of perceptual attention, embodied understanding, ongoing data evaluation and clinical imagination.

However, few previous studies have illuminated in depth the ways in which nurses think and work when identifying signs of negative or positive development in a patient's condition.

AIM

From the perspective of intensive care nurses, the aim of this study was to explore the phenomenon of assessing changes in the conditions of critically ill patients in the ICU.

DESIGN AND METHODS

A hermeneutic phenomenological approach (Van Manen, 2007) involving close observation and individual interviews was chosen to describe and interpret nurses' everyday situations and activities in the ICU. This approach is considered phenomenological (descriptive) because it considers how the phenomenon in question appears, and it is considered hermeneutic (interpretive)

because uninterpreted phenomena do not exist (Van Manen, 2007). This approach is useful for creating a description of the structure of lived experiences of a specific phenomenon, and this structure is understood to be a description of the essence, i.e. 'that what makes a thing what it is' (Van Manen, 2007).

In close observation, the researcher is present when incidents occur, and this proximity gives the researcher first-hand knowledge of these anecdotes and second-hand experience of the settings and situations under study (Van Manen, 2007).

In-depth interviews explore and gather experiential narrative material in the form of stories and examples of experiences, which may serve as a resource for developing a richer and deeper understanding of the phenomenon under investigation (Van Manen, 2007).

Setting and participants

This study was conducted in two ICUs in two Norwegian university hospitals.

Eleven intensive care nurses, participated in this study, and their work experience ranged from 7 to 28 years in the same ICU. To meet the inclusion criteria, the nurses had to have a minimum of 5 years of practice in an actual ICU. The head of each ICU sent an e-mail to nurses who met the inclusion criteria (14 nurses in all) with information on the study and an invitation to participate. Those who agreed to participate returned the written consent in an envelope addressed to one of the researchers (M. K.).

Data collection and methods

Data were collected during a 10-month period from December 2012 to September 2013.

Close observations

Each nurse was observed for two or three shifts, resulting in a total of 29 field study days. Most of the observations occurred during day shifts and on weekdays, but some observations were conducted during the evening shifts. The active observation time lasted an average of 4–6 h per day for 2–3 days a week. During the observations, the researcher, who was an experienced ICU nurse, assisted in nursing care, which enabled her to more closely observe the nurses' everyday practices and interactions with the patient.

The focus of observation was on the nurses' verbal or physical interactions with or around patients anywhere within the ICU. Close observation enabled the researcher to focus on the meaning expressed by the nurses' entire body (van der Meide *et al.*, 2013).

Brief field notes were written during the observations, and more detailed descriptions of the observations were recorded immediately after each shift.

In-depth interviews

The nurses were interviewed at the end of the shift regarding situations that occurred during the shift. The interviews sought to clarify the activities that were observed and to prompt the nurses' recall of recently experienced situations by asking them to discuss excerpts from the field notes. The nurses were interviewed one to three times, with each interview lasting 20-70 min, resulting in a total of 24 interviews. All of the interviews occurred in the participant's workplace. The working day in the ICU is unpredictable, and patients' conditions can change. Therefore, during some shifts, interviews could not be conducted or had to be interrupted.

The interview had a narrative form (Van Manen, 2007) and began with the following question: 'Could you please tell me what you looked at when assessing this patient at the beginning and during the shift?' The following are examples of other questions asked in the interview: 'I heard you say ... can you tell me what happened?' and 'I saw that you ... can you tell me what happened?'

The interviews were tape-recorded and transcribed verbatim.

Analysis

The analysis was performed using the reflective methods of Van Manen (2007), including thematic reflections.

In our study, the purpose of phenomenological reflection was to identify and reflect on the various aspects and meanings of the phenomenon of assessing changes in a patient's condition from the perspectives of experienced ICU nurses. Thematic reflection refers to the process of recovering meaning structures that are embodied in nurses' experiences, as represented in a text (Van Manen, 2007, Van Manen, 2014).

First, the interview transcriptions and field notes were read several times to enable the researcher to obtain an overall impression. The text was then re-read, and a line-by-line reading of the text was employed for thematic exploration of the experiential descriptions. The first phase resulted in a preliminary and open systematization of texts that disclosed something about the nurses' experiences of assessing changes in the patients' conditions. The next phase led to a more focused interpretation performed by all of the authors and was characterized by a dialogue with the text that moved between the text itself and the different thematic meanings that began to emerge. In this phase, emerging meanings that appeared to be linked were clustered into a temporary pattern of meanings, which was followed by a process of identifying themes.

The findings led us to the phenomenology of sensation of the Danish philosopher K. E. Løgstrup (1995a, 1995b, 2013) and the teachings of the Norwegian nurse and philosopher K. Martinsen (2008, 2012), who placed Løgstrup in a clinical nursing context. Their perspectives were used to reflect on the themes with the goal of arriving at a comprehensive understanding of the phenomenon. Løgstrup stated that all thinking and all understanding is based on emotion and sensation, and sensation is our access to the world. We are without distance in sensation, tuned and moved by impressions, towards expressing these tuned impressions (Løgstrup, 1995a, 1995b).

In addition, we reflect on the themes by using the French philosopher Maurice Merleau-Ponty (1945/2009) phenomenology of the body. For Merleau-Ponty the lived body takes on a central position and that we have access to the world through our bodies.

Trustworthiness

Trustworthiness, self-reflection and self-awareness are important attributes for the phenomenological researcher (Dahlberg, 2006, Dahlberg et al., 2008). The researcher (M. K.) kept field notes, which included her thoughts, reflections and emotions. By recording personal experiences, the researcher became more aware of preconceptions and potential prejudices. To ensure the credibility of the results pre-understanding was also challenged through discussions among the authors.

ETHICAL CONSIDERATIONS

This study was approved by the Norwegian Social Science Data (NSD) Services.

The Regional Committee for Medical and Health Research Ethics (REK) granted dispensation to the project regarding health personnel's confidentiality of the patients who were present during the observation (2012/622-4). The patients' families received written and oral information on the research project and had the right to make requests on behalf of their relatives. All of the nurses provided their written, voluntary and informed consent.

During the observations, the researcher paid special attention to the patients and their families and continuously focused on not violating confidentiality and personal integrity.

Before commencing fieldwork, the research team agreed to certain patient safety principles, including how to handle anything untoward that occurred in the field.

FINDINGS – SENSITIVE SITUATIONAL ATTENTION

An overarching theme, sensitive situational attention, was identified and was further unfolded into four subthemes: (1) being sensitive and emotionally present, (2) being systematic and concentrating, (3) being physically close to the bedside and (4) being trained and familiar with the routines.

Quotations from the ICU nurses and the field notes in this study illuminate these themes; these nurses are identified by numbers (e.g. ICN1–ICN11). In the field notes, anonymity was ensured by replacing the nurses' names with pseudonyms.

Being sensitive and emotionally present

The nurses in this study had an intense awareness of a patient's situation that included both their senses (sight, hearing, smell and touch) and their emotions. This is illuminated in the following field notes:

It is morning and I am with Anna, the nurse caring for an elderly, mechanically ventilated patient. Shortly after the change-of-shift report, Anna starts with the morning care of the patient. She is attentive toward him, looking especially for his bodily movements, and says, "He has more tonus in his hands and I saw a little movement of his hand." Looking for signs of movement and also for signs of contact with the patient, Anna stops and

says: "I have a feeling that I have contact with him ... It's life in his eyes." (Field note ICN 5)

One nurse used the phrase 'to go in step with the body [patient]' to describe how she is sensitive to the unique patient's needs, in this case referring to the level of sedation and support from the ventilator:

... It is the individual needs of the patient that are important when trying to wake up patients. ... It is something about trying "to go in step with the body [patient]" ... (Interview ICN 4)

Being concentrated and systematic

The nurses showed that they were concentrating and working systematically at the bedside throughout the shift. These are illuminated in the following example with Susan, a nurse caring for a severely ill patient with a head injury:

Susan starts the shift by going to the bed. She starts assessing the patient using her senses by touching the patient's skin; listening to the stomach and the lungs; smelling the secretions; and observing the size and reactivity of the pupils. Susan says that she thought she could see an eyelid movement "but is not sure". She is concentrated and in continuous movement at the bedside, with her body directed toward the patient. At the end of the shift, the patient's condition is more stable. "I have a good feeling that he's making progress," Susan says. (Field notes ICN 8)

Being physically close to the bedside

The nurses stated that their physical presence at a patient's bedside was essential to identifying signs that indicate changes in a patient's condition:

Sara [the nurse] is caring for a patient who is in a life-threatening situation. "I have followed him [the patient] over time, and I feel I know him well. He has had several episodes with cardiac arrhythmias. I have seen over time that what affects his heart rate is increased wakefulness". After the change-of-shift report, Sara's priority is to start morning care. "Then, I see how he is reacting and if there is a change [more or less wakefulness]". (Field note ICN 9)

I always start the shift by going to the patient and greeting the patient. This gives me a response or no response and can tell me a little about the patient's wakefulness. I look at the bedside monitors while I am touching the patient. Is the patient's skin dry, hot, sweaty, cold, or clammy? Is the patient restless? (Interview ICN 3)

Being trained and familiar with the routine

All of the nurses highlighted the experience of frequently caring for patients who have the same or similar injuries and illnesses as crucial:

The patient does not just look past you, and you feel that there is a contact. If you are talking to the patient and, suddenly, he opens his eyes and looks at you and has not done that before. You must have seen enough patients with a serious head injury and who have been unconscious to be able to catch the change [wakefulness] early. (Interview ICN 6)

One of the nurses used the metaphors 'inside the box', 'outside the box' and 'to take a step back' to describe how she thinks and works when a patient's condition evolves in a different direction than expected:

That was "inside the box", comparing him [the patient] to my preconception of that group of patients [head injury]. In this case, he should have been over the crisis, but he still has unstable ICP and arrhythmias. I was beginning to think about whether we had overlooked something, and that is to think "outside the box". It is also important "to take a step back" and ask questions. Could it be something else? (Interview ICN 8)

The nurses also indicated that medical knowledge is important for becoming aware of changes in a patient's condition at an early stage:

I believe we [nurses] must know more of this [medical knowledge] in the ICU, because the patients are critically ill (...)It makes us better to foresee, knowing what to look for, what to think about ... (Field note ICN 4)

DISCUSSION

Our main finding was that assessing changes in a patient's condition requires nurses to be sensitive and attentive to each patient's unique situation.

The nurses stressed the importance of being present at the bedside with both their senses (sight, hearing, smell and touch) and their emotions when performing their initial observations and assessing changes in a patient's condition. Being sensitive and attentive to the unique patient gives nurses access to signs that may indicate changes in a patient's condition, such as feeling more tonus in the patient's hand, seeing an eyelid movement or a slight movement of the hand and listening to breath sounds. According to Løgstrup 1995a, 2013), 'with our senses we are emplaced in the universe'. Sensation connects us with others and the environment and gives us immediate access to the world surrounding us. Martinsen (2008) explains that, sensation involves the presence of and engagement with others, allowing nurses to listen to, look after and care for a patient. Other recent studies have reported that caring for a lightly sedated ICU patient requires the physical closeness of the nurses, and these studies found this closeness to be important for patient observation (Tingsvik et al., 2013, Laerkner et al., 2015). Our findings greatly emphasize the importance of nurses being physically present at a patient's bedside with both their senses and their

As Løgstrup (1995a) explained, the mind does not exist without being in tune with its surroundings. The mind is a sounding board for everything that exists and occurs in the world and in nature, in which we, with our senses, eyes and ears, are embedded (Løgstrup, 1995a). In relation to our study, this statement indicates that sensation tunes the nurse's mind, which is like a sounding board for what the nurse senses in relation to the patient and the patient's environment. In sensation, there is something about the patient that makes an impression on the nurse, such as a smell, body movements or the sound of the room. Sensation in emotional openness creates a specific mode, which could be positive or negative, indicating that a patient is making progress or is deteriorating.

For Merleau-Ponty (1945/2009), the lived body is central in being-to-the-world. The body is not considered an object ordered by the mind; instead, he emphasizes the body's

exposure to the world as a central experience. In relation to our study, these ideas imply that a nurse's embodied position in the world is significant in experiencing and interpreting what is at stake in the situation. We found that the nurses' body language, such as gestures, facial expressions and posture, changed with changes in a patient's condition. If a patient's condition became unstable or was unclear, the nurses moved closer to the patient's bedside and were in continuous motion with their bodies directed towards the patient and the monitors. The nurses were looking for what could potentially be the problem, were thinking aloud back and forth, and began to examine the patient through their senses and through monitoring.

One of the nurses used the metaphor 'to go in step with the body' to describe the importance of attunement and timing to be responsive to a patient's ever-changing condition. A meta-synthesis of Nordic studies of patient experiences in intensive care found that caring nursing, attuned caring and close relatives all play important roles in assisting the patient in the transition back to health (Egerod *et al.*, 2015). This finding highlights the importance of nurse sensitivity in encounters with patients.

According to Løgstrup (1995a, 1995b), all understanding is based on sensation. However, sensation and understanding are not independent from one another, and in our daily lives, they are tightly interwoven. Merleau-Ponty (1945/2009, p. 159-160) explained that the body is our general medium for having a world, and that consciousness is 'being-towards-the-thing through the intermediary of the body'. Nurses have an intense presence and work close to a patient's bedside. One of the nurses used the metaphor 'to take a step back' to describe how she created a distance and, in this way, attempted to understand what was sensed in relation to the unique patient. Løgstrup (1995a, 1995b) stated that understanding creates distance between the sensed and the sensing and creates an open space in which to move and think. In this space, a nurse is open and sensitive to the impression that moved her in relation to the patient and attempts to understand what has made an impression. In interpreting the impression, knowledge about the unique patient exists in an intense interplay with past experiences and medical knowledge, which can make it possible for a nurse to see new analogies and, according to Martinsen (2012), have flashes of insight that make it possible to see new aspects of a patient.

We also found that frequently caring for patients with the same or similar diagnoses greatly affected the nurses' abilities to notice changes in a patient's condition early. Similarly, Benner *et al.* (2011) demonstrated that experience with specific critical illnesses allowed nurses to be aware of signs indicating deterioration. According to Martinsen (2008), a situation can remind us of something else and can awaken memories of past experiences. In relation to our study, past experiences with similar patient care situations enabled the nurses to foresee how the patient's condition may progress.

However, patients are individuals and their conditions can rapidly change and evolve in a direction that is not expected. A nurse's openness and her attunement to the specific patient and to having her preconceptions changed are essential. The metaphors 'inside the box' and 'outside the box' were used by one nurse to explain how she thinks and acts in situations that are ambiguous, unexpected or different from previous experiences. This observation is consistent with that of Martinsen (2012) who stated that thinking that creates a space for a flash of insight to occur is open, movable and enquiring.

The nurses highlighted the value of following up with sensory and measurable signs and with a patient's response to stimulus within a shift or between shifts. This follow-up enables nurses to perceive signs indicating that a patient's condition is changed at an early stage, to foresee a course

of events and to take action to prevent complications in the situation. Similarly, Benner et al. (2011) and Zolnierek (2014) stated that knowing both the particular patient's condition and the patient as a person enables the nurse to foresee potential crises and vulnerabilities.

STRENGTHS AND LIMITATIONS

The combined use of the methods included in this study may provide more nuanced and complex insights of the phenomenon than are available from research using only one of the methods (Van Manen, 2007).

Our observations were based on field notes; it is difficult to obtain field notes that are sufficiently detailed. Content can be lost, for example, regarding the understanding of a nurse's body language. This possibility was specifically counterbalanced by the fact that the first author used what she had observed as a starting point for the questions in the interviews.

As a researcher, being an experienced ICU nurse and knowing the field may facilitate access to insights but may also limit perspectives during data collection and analysis. Pre-understanding was challenged in discourses among the other authors and with other nurses in clinical practice.

None of the observations occurred during night shifts or on weekends. Nurses' behaviours at these unobserved times may differ from those observed during day and evening shifts and on weekdays.

We are aware that the unique Norwegian context, with a 1:1 nurse-patient ratio, limits

the transferability of our findings, but this study serves to illustrate what is possible in clinical ICU practice.

CONCLUSION

Nurses understand each patient's unique situation and foresee clinical eventualities through a sensitive and attentive way of thinking and working. This requires nurses to be present at the bedside with both their senses (sight, hearing, smell and touch) and emotions and to work in a concentrated and systematic manner throughout the shift.

Our findings also revealed that knowledge about the unique patient exists in interplay between past experiences and medical knowledge, which are essential for nurses to understand the situation.

IMPLICATIONS FOR CLINICAL PRACTICE

Our findings highlight that nurses need to be in physical proximity of their patients to provide quality observations; in addition, they must work in a concentrated and systematic manner. Furthermore, providing safe and high-quality care requires nurses to be sensitive and attentive to each patient's unique situation.

ACKNOWLEDGMENTS

UIT, the Arctic University of Norway, and the Norwegian Nurses Organization funded this project.

CONFLICT OF INTEREST

The authors declare no conflicts of interest.

WHAT IS KNOWN ABOUT THE SUBJECT

- Safe and high-quality care requires nurses to be aware of signs that may indicate changes in a patient's clinical condition.
- Nurses' decision-making processes in the ICU are highly complex and incorporate multiple components.
- Knowing a particular patient's critical illness and prior experiential learning with a similar critical illness enable nurses to be aware of signs indicating deterioration.

WHAT THIS PAPER CONTRIBUTES

- Assessing changes in a patient's clinical condition requires nurses to be sensitive and attentive to each patient's unique situation.
- Safe care requires nurses to be attuned to the individual patient and his or her ever-changing clinical condition.
- This requires nurses to be present at the bedside with both their senses (sight, hearing, smell and touch) and emotions and to work in a concentrated and systematic manner throughout the shift.
- The application of philosophical ideas regarding sensation in this analysis contributes new knowledge to nursing practices.

REFERENCES

- Aitken LM, Marshall AP, Elliott R, McKinley S. (2009). Critical care nurses' decision making: sedation assessment and management in intensive care. *Journal of Clinical Nursing*; **18**: 36–45.
- Benner P, Hooper-Kyriakidis P, Stannard D. (2011). Clinical Wisdom and Interventions in Acute and Critical Care: A Thinking-in-Action Approach. New York: Springer.
- Coulter Smith MA, Smith P, Crow R. (2014). A critical review: a combined conceptual framework of severity of illness and clinical judgement for analysing diagnostic judgements in critical illness. *Journal of Clinical Nursing*; 23: 784–798.
- Dahlberg K. (2006). The essence of essences the search for meaning structures in phenomenological analysis of lifeworld phenomena. *International Journal of Qualitative Studies on Health and Well-being*; 1: 11–19.
- Dahlberg K, Dahlberg H, Nyström M. (2008). *Reflective Lifeworld Research*. Lund: Studentlitteratur.
- Egerod I, Albarran JW, Ring M, Blackwood B. (2013). Sedation practice in Nordic and non-Nordic ICUs: a European survey. Nursing in Critical Care; 18: 166–175.
- Egerod I, Bergbom I, Lindahl B, Henricson M, Granberg-Axell A, Storli SL. (2015). The patient experience of intensive care: a meta-synthesis of Nordic studies. *International Journal of Nursing Studies*; **52**: 1354–1361.

- Henneman EA, Gawlinski A, Blank FS, Henneman PL, Jordan D, McKenzie JB. (2010). Strategies used by critical care nurses to identify, interrupt, and correct medical errors. *American Journal of Criti*cal Care; 19: 500–509.
- Henneman EA, Gawlinski A, Giuliano KK. (2012). Surveillance: a strategy for improving patient safety in acute and critical care units. *Critical Care Nurse*; **32**: e9–e18.
- Kelly L, Vincent D. (2011). The dimensions of nursing surveillance: a concept analysis. *Journal of Advanced Nursing*; 67: 652–661.
- Laerkner E, Egerod I, Hansen HP. (2015). Nurses' experiences of caring for critically ill, non-sedated, mechanically ventilated patients in the intensive care unit: a qualitative study. *Intensive and Critical Care Nursing*; 31: 196–204.
- Livesay S. (2016). The bedside nurse: the foundation of multimodal neuromonitoring. Critical Care Nursing Clinics of North America; 28: 1–8.
- Løgstrup KE. (1995a). Metafysik: 2: Kunst og erkendelse: kunstfilosofiske betragtninger [Art and Apprehending. In: Metaphysics II]. Copenhagen: Gyldendal.
- Løgstrup KE. (1995b). Metaphysics, Volume 1. Milwaukee, WI: Marquette University Press.
- Løgstrup KE. (2013). Ophav og omgivelse: Metafysik III: betragtninger over historie og natur [Origin and Environment]. Klim: Aarhus.

- Martinsen K. (2008). Fra Marx til Løgstrup: om etikk og sanselighet i sykepleien [From Marx to Løgstrup: About Moral and Sensibility in Nursing]. Oslo: Universitetsforl.
- Martinsen K. (2012). *Løgstrup og sykepleien* [*Løgstrup and Nursing*]. Akribe: Oslo.
- Merleau-Ponty M. (1945/2009). *Phenomenology of Perception*. London: Routledge.
- Sorensen D, Frederiksen K, Grofte T, Lomborg K. (2013). Practical wisdom: a qualitative study of the care and management of non-invasive ventilation patients by experienced intensive care nurses. *Intensive and Critical Care Nursing*, **29**: 174–181.
- Tingsvik C, Bexell E, Andersson A-C, Henricson M. (2013). Meeting the challenge: ICU-nurses' experiences of lightly sedated patients. *Australian Critical Care*; **26**: 124–129.
- van der Meide H, Leget C, Olthuis G. (2013). Giving voice to vulnerable people: the value of shadowing for phenomenological healthcare research. *Medicine*, *Health Care*, *and Philosophy*; **16**: 731–737.
- Van Manen M. (2007). Researching Lived Experience: Human Science for an Action Sensitive Pedagogy. Albany: State University of New York Press.
- Van Manen M. (2014). Phenomenology of Practice: Meaning-Giving Methods in Phenomenological Research and Writing. Walnut Creek: Left Coast Press.
- Zolnierek CD. (2014). An integrative review of knowing the patient. *Journal of Nursing Scholarship*; **46**: 3–10.