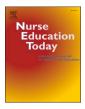


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Research article

Crossing Antarctica: Hospital nurses' experience of knowledge when providing palliative and end of life care



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ARTICLE INFO	A B S T R A C T		
<i>Keywords:</i> Nurses knowledge Nurses education Palliative care End of life care Practice education	Background: Hospitals can be challenging environments for nurses when providing palliative and end-of-life care. Understanding hospital nurses' experiences of their application of palliative and end-of-life knowledge could help direct future education to support such challenging care. Aim: To understand how hospital nurses use knowledge in palliative and end-of-life care situations. Method: Interpretive phenomenology was used to understand 10 hospital nurses' experiences and ability to apply palliative and end-of-life knowledge. Findings: The hospital nurses' experiences of knowledge in palliative and end-of-life care was like Crossing Antarctica: unpredictable due to the changing demands and life course leading to uncertainty with knowledge and feeling helpless. Two themes emerged; Knowledge and uncertainty describes feeling unprepared, lacking in knowledge; knowledge and empowerment describes the nurses experiences of applying their knowledge in clinical environments. Conclusion: The nurses' sense of uncertainly could be attributed to their palliative and end-of-life knowledge being systematic, making it difficult for them to manage uncertain situations. Some nurses were empowered to apply knowledge, others were disempowered, suggesting the ability to apply their palliative and end-of-life knowledge being is not determined by knowledge alone but also by the position they held.		

1. Introduction

Palliative care foundations are built on Dame Cicely Saunders' idea that "You matter because you are you and you matter to the last moment of your life. We will do all we can not only to help you die peacefully, but to live until you die" (Saunders, 1976, p. 1003). To achieve this, nurses should possess the relevant skills and knowledge to provide palliative and end-of-life care tailored to the individual, delivered to a high professional standard, "nothing less will do" (Leadership Alliance for the Care of Dying People, 2014).

In non-specialised palliative care settings, including hospitals, evidence implies patient's palliative and end-of-life care needs may not always be met with nurses reporting a lack of palliative and end-of-life knowledge and varying understanding of symptom recognition and management (Alshammari et al., 2022; Van Lanker et al., 2018). In hospitals uncertainty is reported among nurses around the conflicting and competing priorities of curative treatment and palliative and end-oflife care, as well as confusion as to what is palliative and end-of-life care (Wallerstedt et al., 2019; Van Lanker et al., 2018; Bergenholtz et al., 2016; Gott et al., 2011; Dahlborg-Lyckhage and Lidén, 2010). The Leadership Alliance for the Care of Dying People (2014) define end-oflife to mean patients are likely to die in the next 12 months including those whose death may be imminent. Palliative care is accepted to be an approach that improves the quality of life of patients and their families (WHO, 2003; GMC, 2022) (Fig. 1).

Clearly caring for the dying person in hospital can be challenging for nurses, whether they have palliative or end-of-life care needs. Consequently, both terms are used in this study. What is unclear is how hospital nurses manage these challenging care situations. This study aims to explore hospital nurses' experiences of palliative and end-of-life care knowledge to understand how education can be tailored to support hospital nurses when encountering the challenges of palliative and endof-life care.

2. Background

Much of the current literature evaluating nurse's palliative and endof life care education use terminology indicative of what Walter (1994)

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DEFINITION OF END-OF-LIFE CARE	DEFINITION OF PALLIATIVE CARE
Patients are 'approaching the end-of-life' when they are likely to die within the next 12 months. This includes patients whose death is imminent (expected within a few hours or days) and those with: (a) advanced, progressive, incurable conditions (b) general frailty and co-existing conditions that mean they are expected to die within 12 months (c) existing conditions if they are at risk of dying from a sudden acute crisis in their condition (d) life-threatening acute conditions caused by sudden catastrophic events.	The holistic care of patients with advanced, progressive, incurable illness, focused on the management of a patient's pain and other distressing symptoms and the provision of psychological, social and spiritual support to patients and their family. Palliative care is not dependent on diagnosis or prognosis and can be provided at any stage of a patient's illness, not only in the last few days of life. The objective is to support patients to live as well as possible until they die and to die with dignity.

General Medical Council (2010)

Fig. 1. Definition of palliative and end-of-life care.

terms a revivalist death. The person is aware of their death, personal conflict and unfinished business is resolved, it is a peaceful death, free of pain and suffering and follows the persons preferences (Lowerie et al., 2018; Cotterell and Duggleby, 2016; Walter, 1994). The knowledge embedded within this approach "to get it right" is assessing and managing pain and other symptoms, knowing, and respecting the individual's preferences and priorities of care and understand the required emotional, social and practical needs (NICE, 2015). Nurses' knowledge outside the non-specialised palliative and end-of-life setting is underresearched (Alshammari et al., 2022) and the treatment focused nature of the hospital setting may challenge the principles of palliative and end-of-life care and ideas of a good death, making hospital end-of-life care education worthy of wider study.

Several international studies have evaluated post registration palliative and end-of-life care education programmes delivered in the hospital setting (Menekli et al., 2021; Thavaraj and Gillett, 2019; Morgan et al., 2021; O'Shea and Mager, 2019; Weil et al., 2018). These used variations of a pre and post education knowledge test to evaluate an education intervention. The majority of these studies showed an improvement in knowledge test scores with the post intervention results (Menekli et al., 2021; Morgan et al., 2021, O'Shea and Mager, 2019). Overall, this is helpful in showing that the interventions have been successful regarding knowledge recall, but such methods may not evaluate if the knowledge has influenced behaviour and practice application (Kirkpatrick and Kayser, 2016; Raelin, 2008).

Other studies have explored hospital nurses' perception of need for palliative and end-of-life care education (Jors et al., 2015; White et al., 2001; Croxton et al., 2018; Arantzamendi et al., 2012; Wong and Kenner, 2018). The results ranked practical skills as a need such as responding to difficult questions, recognising dying and as well as physical care and symptom management (Jors et al., 2015; White et al., 2001; Croxton et al., 2018; Arantzamendi et al., 2012; Wong and Kenner, 2018). Bradshaw (1972) taxonomy of social need differentiates between felt, or perceived need, and normative need which is the need defined by the expert or the professional. Consequently, asking practitioners what they need is an important component of understanding educational need, but is limited by the perceptions of the individual and, according to Bradshaw's taxonomy of need, is an insufficient measure of need on its own.

The studies reviewed imply a form of education that is structured, evidence based, measured and clearly defined. Consequently, hospital nurses' knowledge can be described as professional or discipline-based professional knowledge derived from coherent and systematic knowledge (Hordern, 2018; Foucault, 1975). Similarly, Schon (1983) refers to professional knowledge as specialised, standardised, evidence-based, utilising a problem-solving approach of a logical selection of the best suited option. Fish and Coles (1998) refer to this as a technical rational approach to knowledge, viewing professional practice as delivering a service as a predetermined set of routines and behaviours., Nurses providing palliative and end-of-life care are doing so in a healthcare system that is service user driven, follows audits and national targets and regular inspections (Armstrong and Rustin, 2019). This form of increasing surveillance is suited to systematic knowledge with inspection and governance influencing control on nurses' professional practice and care management (Armstrong and Rustin, 2019; Allen, 2014). This suggests systematic knowledge may equip hospital nurses for the rigor and routines of curative care but questions the suitability for the uncertainty of palliative and end-of-life care.

Current evidence suggest hospital nurses can find meeting the palliative and end-of-life care needs of patients challenging. Existing education for hospital nurses may be beneficial regarding structured education. Additionally, it is suggested that hospital nurses' knowledge is systematic knowledge, which may not be appropriate for palliative and end-of-life care. What is not considered is the challenging care situations hospital nurses face and how these impact on the application and experience of their knowledge. Understanding this will help support hospital nurses more effectively with tailored education to better suit their environment. Consequently, a study was conducted to understand hospital nurses' experiences of providing palliative and end-of-life care. As part of the study the nurses discussed their experiences in relation to palliative and end-of-life care knowledge.

2.1. Research aim

To explore hospital nurses' experience of palliative and end-of-life care knowledge.

3. Method

3.1. Methodology

Individual nurses experience the phenomena of palliative and endof-life care differently which can be socially and experientially based and conflicting (Guba and Lincoln, 1994). Interpretive phenomenology is a methodology that recognises and uncovers the individuality of the lived experience of the phenomena (van Manen, 2017; Patton, 2020). While there are other methodological approaches that achieve this interpretative phenomenology recognises the researcher has presuppositional knowledge and enables the researcher to interpret, with caution, which is a valuable guide to the inquiry (Creswell and Poth, 2018; Van Manen, 2017; Patton, 2020). Interpretive phenomenology was used to understand the individual nurses lived experience and recognise the presuppositional knowledge of the researcher, both as a hospital nurse and specialist nurse relevant to the subject.

3.2. Ethical considerations

Ethical approval was gained from relevant Research Board before the study commenced. Written informed consent was acquired from all participants prior to them taking part. Once the recorded interviews had been transcribed, real names and identifying data was changed to pseudonyms to maintain confidentiality. Visual imagery was digitally recorded, identified by the same pseudonym only and stored digitally, with encryption, to support confidentiality.

3.3. Method and data collection

Discussing death and end-of-life can be difficult. Visual research methods offer ways of exploring emotions that language-based methods do not achieve, providing opportunities to express the unsayable and record meaning where verbally articulating a response is difficult (Manny, 2016; Kara, 2015; Gauntlett, 2015; Cheung et al., 2016). Collage as a method of data collection can provide an opportunity for participant to create visual representations of their worlds using pictures, including magazines (Manny, 2010). To facilitate this the

researcher at the beginning of each interview supplied the same range of image rich magazines to cut and paste from (Fig. 2). Participants were asked at the beginning of the interview question 1 (Fig. 3) by the researcher to select images that represented their palliative and end-of-life care experiences to build a collage. Participants were left alone to do this with no time constraint.

Manny (2010) makes the point that when viewing the image, the interpretation of the audience may not be the same as the image maker, emphasising the need for the participant to explain the image. Consequently, following the creation of the collages an elicitation interview, lasting 45–60 min, was conducted by the researcher and audio recorded with field notes to support reflexivity. A conversational approach was taken to the elicitation interviews to explore the meanings (Fig. 3).

The researcher had some previous interview experience and training and used this to maintain a neutral position by not expressing prejudice, opinion, or judgement on what was disclosed. To manage potential power issues with the data collection the researcher facilitated empowering actions by disclosing in advance their background and repeating this in the interview introductions. This was to present mutual understanding and interest in the topic. In addition, the participants determined the time needed for the creative activity, chose what images to explain, and the order giving participants some control of the pace and agenda. However, the location of the interview was not chosen by the participant which could have imbalanced power relations.

3.4. Sampling and participants

Following phenomenological principles participants were recruited using purposive sampling, allowing selection based on their knowledge and experience of the phenomena (van Manen, 2014 pg 353). A targeted recruitment poster campaign in three acute English hospital trusts local to the researcher and nursing post graduate University mentoring courses to target practicing hospital nurses. An inclusion and exclusion criteria (Fig. 4) were applied to ensure participant held relevant experience. All the participants were registered general adult nurses with clinical experiences of providing palliative and end-of-life care in the acute hospital setting. A profile of the 10 nurses recruited is provided in Fig. 1. Pseudonyms are used to protect the participants identity. Most participants agreed to one event and consequently no follow-up interviews were conducted.

MAGAZINES USED Outdoor photography Homes and Garden BBC Wildlife Countryman Time Breathe. INTERVIEW SCHEDULE (prompt questions) Interview Question One: Thinking about when you are caring for someone who is considered to be in need of palliative or end-of-life care could you use the magazines to select images that are

representative of those experiences and feelings. Interview Prompt: Can you tell me about the decisions you make and the knowledge you use

when you to provide care for someone who is considered to be in need of palliative or end-of-life care?

Interview Prompt: When you make decisions about the care the person needs, what can influence those decisions?

Interview Prompt: How well equipped do you feel for caring for palliative and end of life patients in the hospital?

Fig. 3. Interview framework.

NAME	AGE	YEARS IN	CLINICAL SETTING
		PRACTICE	
VIRGINIA	59	39	Acute surgery, acute trauma, surgery.
JEAN	61	41	Coronary care, cardiac rehab.
EDITH	58	37	Rapid response, critical care, ICU, HDU,
NANCY	52	32	Surgery, A&E, ITU
HILDE	34	13	Emergency medicine, critical care, rapid
			response, heart failure nurse.
MARTHA	31	6	Surgery
BARBARA	66	45	A&E, Gastroenterology, care of the elderly,
			bereavement officer,
LOUISA	41	23	Critical care outreach, ITU, urology,
		105.03	medicine
EDNA	34	15	Oncology, general medicine
MARY	37	14	ACP urgent care and A&E. Senior nurse in
			A&E, ITU HND.

Fig. 4. Participant profile.

3.5. Data analysis

The transcribed interview data was analysed by the researcher following Ricoeur's hermeneutic approach to analysis. Thematic analysis could have provided descriptive and literal interpretations of the text with a focus on both the latent and literal meanings (Vaismoradi et al., 2013). The declaration and removal of the researcher's intentions and prejudice and preunderstanding are part of thematic analysis (Creswell and Poth, 2018). This reduces its appropriateness for this interpretive phenomenological study in which the researcher's presuppositional knowledge as a male hospital nurse and clinical nurse specialists in palliative care is a valuable component (Patton, 2020; Missel and Birkelund, 2020).

The nurses used visual metaphor to explain their experiences and Ricoeur explains the difficulty in understanding the intentionality of a metaphor can be when text is analysed according to syntax which gives a literal understanding (Ricoeur, 1974). Ricoeur explains the metaphor 'man is a wolf' when analysed literally is man to be of lupine construction and no new meaning comes from this (Ricoeur, 1974 pg101). Seeing the phrase as metaphor changes the meaning. To interpret the metaphor, text must be seen as more than linear sequencing of the sentences, it is a cumulative holistic process that cannot be derived from just understanding the sentence (Ricoeur, 1974). The text should be read in two ways with a reciprocal relation between the two, the first being explanation, the second interpretation. It is this interpretating that values the researcher's presuppositional knowledge, but Ricoeur argues that the researcher should not be wholly subjective in interpreting meaning but systematic. To support this Ricoeur's method uses structural analysis (Fig. 5), a process by which the researcher moves between different interpretations which are tried against the explanations and dismissed or accepted.

By following Ricoeur's approach to analysis a balance between interpretation and credibility was maintained. The researcher used their preunderstanding of the phenomena and began with this viewpoint in the interpretation of the text, taking notes on possible meanings and links to similarities with other's areas in the text to substantiate or

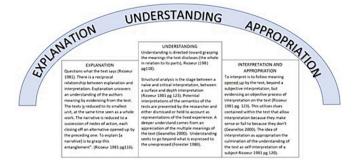


Fig. 5. Ricoeur's distanciation.

dismiss the meaning (example Fig. 6), facilitating a reasoned interpretation and understanding (Ricoeur, 1981, 1984). Fig. 7 shows the themes that emerged. There were many interpretations, some more probable than others and the researcher's preunderstanding provided the opportunity for meanings to be revealed (Missel and Birkelund, 2019). Reflexive notes were used to help the researcher to be aware of exposing their influences of their prejudices and assumptions in the analysis. For this reason, no other researchers were involved in the analysis.

3.6. Trustworthiness

Polit and Beck's (2017 pg 332) approach to enhancing quality in qualitative research was followed to maintain trustworthiness. Data collection was conducted over a long period of 18 months, as was data analysis. This prolonged engagement enabled the researcher to focus on the details of the descriptions as well as the emerging whole, aiding saturation of data. The application of interpretation and presupposition in the analysis of the text could threated trustworthiness but Ricoeur's structured approach balances the credibility by arbitrating between the possible interpretations (Missel and Birkelund, 2020).

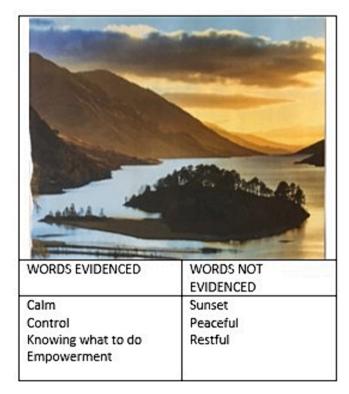


Fig. 6. Example of analysis.

It wasn't possible to obtain from participants feedback on draft findings to check interpretations, which influences trustworthiness. However external checks of working interpretations were provided by the researcher's supervisory team. The researcher's credibility was addressed by the researcher maintaining reflexive notes throughout the data collection and data analysis process.

4. Findings

The hospital nurses' experiences of knowledge in palliative and endof-life care was like Crossing Antarctica: unpredictable due to the changing demands and an unpredictable life course with the nurses describing uncertainty with knowledge and feeling helpless. Two themes emerged relevant to knowledge and palliative and end-of-life care in hospital. Knowledge and uncertainty describe feeling unprepared, lacking in knowledge and knowledge and empowerment describes the nurses' experiences of applying their knowledge in clinical environments.

4.1. Knowledge and uncertainty

For Mary, working in A&E, there was always an element of the unknown with end-of life patients. Mary used the image of the people walking across the Antarctic to illustrate this unpredictability (Fig. 8); "the challenge, the unknown with the weather changing at any moment of the journey, the path might change, they might need to adapt to what gets thrown at them". Both Mary and Hilde felt discomfort with not being in control due to this uncertainty. Mary attributed her discomfort to her lack of palliative and end-of-life knowledge. She liked to know what she was doing and portray that to her patients and their families, so they could trust and have confidence in her abilities: "*it becomes uncomfortable when you know you haven't got the correct knowledge and training to deal with making someone's journey better*". (Mary).

Nancy working in ITU also described *feeling* a lack of knowledge due to the unpredictability with palliative and end-of-life care. This left her feeling helpless and lacking control;

they would ask how long do you think ... I wanted to get it right, I knew how important it was. It never became easier; I never became comfortable ... it was still devastating for them to hear.

(Nancy)

Despite undertaking informal training Nancy believed she never reached a position of knowing what to do.

Edith also felt she lacked the necessary knowledge believing she was not "wise enough with life experience" to respond to patients' emotional and existential concerns:

I can't deal with this, and this is bigger than me. I've been a nurse for 15 years but...I just think I'm not an adult enough to know what to do.

(Edith)

Instead, Edith focused on the practical and technical (medication, syringe drivers) aspects of end-of-life care which she did have systematic knowledge of.

Jean, working in CCU, also described not having the skills for palliative and end-of-life care, using the image of 'forced rhubarb' explaining:

Sudden cardiac arrests are totally different to the set of skills than you use to help and support someone at the end-of-their life.

(Jean)

Jean described "having a set of tools but not knowing how to use them, being unprepared". Jean acknowledged her lack of knowledge to undertake end-of-life care, but unlike the other nurses in this study, believed nurses should not be "forced to do stuff we were not prepared HOSPITAL NURSES EXPERIENCES OF KNOWLDGE IN PALLIATIVE AND END-OF-LIFE CARE SITUATIONS:

Crossing Antarctica

KNOWLEDGE AND UNCERTAINTY

Crossing Antarctica: Uncertainty with knowledge, feeling helpless and uncertain.

Feeling not knowing what to do, say and difficulty with planning.

Forced Rhubarb: feeling unprepared, lacking knowledge.

KNOWLEDGE AND EMPOERMWENT

Good-bye: Empowered to use knowledge and facilitate calm. "The storm has passed and now is this time to say goodbye".

Removing the thorns from the rose: knowing what to do but battling against decisions to remove the thorns.

Fig. 7. Themes.



Fig. 8. Crossing Antarctica: unpredictable (Mary).

for". Jean felt:

unprepared, I did not have the education when it came to the death stuff, I explicitly had no education on end-of-life

(Jean)



Fig. 9. Good bye (Louisa).

4.2. Knowledge and empowerment

The nurses in this study described a desire to transition the patient from what was collectively described as the storm of treatment to the calm of palliative and end-of-life care. What differed among the nurses interviewed was their experiences of applying their knowledge to inform decision making and affect the transition for patients to the calm of endof-life care.

Louisa, working in critical care outreach, was empowered to utilise her palliative and end-of-life knowledge to facilitate her patients a sense of calm and a peaceful approach to say goodbye (Fig 9). Hilde, working with the rapid response team, expressed similar experiences of being empowered to be able to apply her knowledge, with proactive management, careful co-production of care plans and anticipatory prescribing. Additionally, Hilde described palliative and endof-life care as "messy", physically, and emotionally and planned to "address the physical bits that may be contributing to the emotional bits".

Nancy, working in ITU, was less empowered, and described incidents of palliative and end-of-life care where her experience and knowledge supported what she believed was the right care for the patient, but required her to 'battle against the wind':

[it's like] battling against the wind, you felt you know what was is the right thing to do and you were battling against the decisions... particularly if the hierarchy didn't want to listen.

(Nancy)

Virginia, working in surgical care, used the image of a rose to describe her care for palliative and end-of-life patients as removing the thorns. Virginia described the thorns as the suffering and, she believed she had the knowledge to remove the roses' thorns but there were problems that might be inhibiting removal. This involved the clinical decision that may impinge on creating calm. Similar to Nancy, she had to 'fight' for what she believed was the right thing to do for her patient:

Dare I say it if you are under the surgeons, still surgeons will fight to the bitter end and sometimes you have to fight for your patient.

(Virginia)

5. Discussion

Hospital nurses perceive power in situations where they bring knowledge, experience, and confidence together to influence decision making (Fackler et al., 2015). Hospital nurses also correlate knowledge with experience and confidence which contributes to their sense of power (Fackler et al., 2015). Some of the nurses in this study described discomfort with not having such confidence and control with palliative and end-of-life care, attributing these feelings to their lack of knowledge around managing palliative and end-of-life events for their patients, which may contribute to their sense of uncertainty.

This experience of uncertainty, not having "the correct knowledge" and the unpredictability of hospital palliative and end-of-life care represented as 'Crossing Antarctica'. The nurse's wish to control events in palliative and end-of-life situations that are uncertain may be indicative of systematic knowledge (Hordern, 2018). This view of knowledge has some resonance with 'technical rational knowledge' which highlights the importance of rules, schedules and prescriptions with an emphasis on diagnosis, analysis and systematic evidence (Hordern, 2018; Fish and Coles, 1998; Schon, 1983). A technical rational knowledge follows competencies and guidelines along with the knowledge that is required to understand and utilise these (Fish and Coles, 1998 pg 31–33). It is this standardised behaviour and systematic approach to knowledge that Jean asks for, Nancy tries to develop, and that Edith follows to avoid the uncomfortable activities that she believes she has no knowledge of.

Nurses are expected to know what to do (Willman et al., 2021; Kennedy, 2013). This culture is evident in nurse's expressed wish for control and certainty in their palliative and end-of-life practice and a technical rational view of knowledge may provide nurses with confidence in their knowledge and practice. However, the nurses in this study understand that control over palliative and end-of-life situations is not always possible due to the unpredictable nature of palliative and end-oflife care. Bergenholtz et al. (2016) also found the unpredictability of the patient trajectory problematic in hospital. However, nurses relied on a doctor led decision to initiate end-of-life. Bergenholtz et al. (2016) also identified knowledge and the end-of-life care provided was dependent on the interests of the individual providing the care. This differed slightly to this study were describing not having sufficient knowledge, or the right knowledge and authority in the decisions making process were factors that contributed to unpredictability and uncertainty in palliative and end-of-life situations. These actions are indicative of a technical rational approach to knowledge by seeking a defined set of behaviours that they can deliver (Fish and Coles, 1998). Consequently, it could be argued that such systematic knowledge may not be helpful for palliative and end-of-life care situations. In contrast to a technical rational approach to knowledge, professional artistry sees practice as complex, messy, requiring an understanding of the component parts, as opposed to the individual tasks (Fish and Coles, 1998). In part Hilde's idea that death is messy recognises this view. She then seeks to find ways of dealing with that mess.

Professional artistry utilises the application of frameworks and principles to deal with uncertainty in practice situations (Fish and Coles, 1998). Objective, technical knowledge alone may not be satisfactory for hospital palliative and end-of-life care due to the unpredictable and often 'devastating' situations which require adaptability and professional judgement. Mary and Nancy, reported difficulty with the uncertainty of palliative and end-of-life care, suggesting they need to operate outside the standardised and systematic knowledge base they hold when practising palliative and end-of-life care. Consequently, where hospital palliative and end-of-life nursing care is unpredictable a combination of objective, technical knowledge with knowledge based on principles, frameworks and reflection may be needed (Hordern, 2018; Springer and Clinton, 2015; Fish and Coles, 1998; Schon, 1983).

Nancy and Virginia describe knowing the right thing to do but needing to 'battle' to be heard, believing they had the knowledge but their contribution to patient's care was not being validated. Nurses need their voice to be validated by clinicians, as well as others, to feel powerful (Fackler et al., 2015). Nancy and Virginia's experiences of having knowledge but "battling against the decisions" and a "hierarchy that didn't want to listen" supports this. In such a situation Tillich (1954 pg89) suggests authorities exercise power by the place they hold in the institution, referring to this as 'authority-in-principal' which is a repressive authority by disregarding the intrinsic power of individuals. Nancy and Virginia's experiences are indicative of the effect of an 'authority-inprincipal' and is suggestive of a repressive authority. In the hospital environment professional status of doctors and hierarchies can inhibit knowledge sharing (Currie et al., 2015). Foucault refers to such lower ranking knowledge as disqualified or subjugated knowledge (Foucault, 1980 pg 82). The experience of the nurses in the study regarding hospital palliative and end-of-life decisions would suggest their subjugated knowledge may be given less value in the decision-making process than higher ranking knowledge. This is similar to Currie et al. (2015) results exploring knowledge brokering in Hospitals. Foucault entwines knowledge with power; "power produces knowledge and power and knowledge directly imply one another" (Foucault, 1975 p. 27). Foucault determines power is not held within a position, but with the knowledge the person holds. However not all the nurses' experiences were the same, Louisa and Hilde differed in being in positions that empowered them to utilise their palliative and end-of-life skills and knowledge. This suggest that the nurses' power to apply their palliative end-of-life knowledge is held in the position they hold as argued by Tillich.

5.1. Limitations

Interpretative phenomenology with the absence of epoché is open to the influence and bias of the researcher there is a risk that the researchers concealed meanings, undisclosed power influence in the interviews and self-interest could produce superficial outcomes (Grbich, 2012). Solutions are offered by providing structured processes to reflect the participants view and not the subjective view of the researcher (Creswell and Poth, 2018; van Manen, 2017; Grbich, 2012). While Ricoeur offers such a structured approach, the inability in this study to return to participants to check interpretation needs to be recognised.

6. Conclusion

The purpose of this study was to explore hospital nurses experience of palliative and end-of-life knowledge. The nurses explained providing palliative and end-of-life care to be like crossing Antarctica; unpredictable due to changing clinical situations and an unstable life course. Uncertainty with palliative and end-of-life care was related to the nurses' feelings being uncertain with their palliative and end-of-life skills and knowledge. This could be attributed to their palliative and end-of-life knowledge being systematic and technical rational knowledge, making it difficult for them to manage uncertain situations. The outcome may be for hospital palliative and end-of-life education to be provided as both technical, objective skills-based knowledge as well as professional artistry knowledge based on principles, frameworks and reflection that helps nurses recognise and manage the uncertainty of hospital palliative end-of-life care.

Some nurses were in positions that enabled them to apply their knowledge to provide palliative and end-of-life care. Others experienced conflict in the work environment which could be attributed to their knowledge being considered as subjugated and given less authority in the decision making. This suggest the power for hospital nurses to apply their palliative and end-of-life knowledge is not determined by knowledge alone but also by the position they hold. This awareness may help educators to facilitate a better understanding of hospital nurses' education requirements.

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CRediT authorship contribution statement

Peter Stuart: Writing – original draft, Validation, Methodology, Investigation, Formal analysis, Data curation, Conceptualization.

Declaration of competing interest

The author declares that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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