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Review paper

"Time and life is fragile": An integrative review of nurses' experiences after patient death in adult critical care



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ARTICLE INFORMATION

Article history:
Received 24 May 2022
Received in revised form
26 September 2022
Accepted 27 September 2022

Keywords:
Bereavement
Critical care
Critical care nursing
Death
Dying
End-of-life care
Grief
Intensive care
Review
Self-care

ABSTRACT

Introduction: Providing bereavement support and care to families is an aspect of critical care nursing practice that can be rewarding, yet emotionally and psychologically challenging. Whilst significant research has focused on end-of-life care in critical care, less is known about nurses' experiences after patient death.

Aim: The aim of this study was to synthesise research evidence on the experience of registered nurses after patient death in adult critical care.

Design: A structured integrative review of the empirical literature was undertaken. A combination of keywords, synonyms, and Medical Subject Headings were used across the Cumulative Index Nursing and Allied Health Literature (CINAHL) Complete, Ovid Medline, PsycInfo, Embase, and Emcare databases. Records were independently assessed against inclusion and exclusion criteria. A process of forward and backward chaining was used to identify additional papers. All papers were assessed for quality. Narrative synthesis was used to analyse and present the findings.

Results: From the 4643 records eligible for screening, 36 papers reporting 35 studies were included in this review, representing the voices of 1687 nurses from more than 20 countries. Narrative synthesis revealed three themes: (i) postmortem care, which encompassed demonstrating respect and dignity for the deceased, preparation of the deceased, and the concurrent death rituals performed by nurses; (ii) critical care nurses' support of bereaved families, including families of potential organ donors and the system pressures that impeded family support; and (iii) nurses' emotional response to patient death including coping mechanisms.

Conclusions: Whilst a focus on the provision of high-quality end-of-life care should always remain a priority in critical care nursing, recognising the importance of after-death care for the patient, family and self is equally important. Acknowledging their experience, access to formal education and experiential learning and formal and informal supports to aid self-care are imperative.

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1. Introduction

Death in critical care settings is common.¹ Mortality in patients admitted to adult critical care ranges from 10 to 29%.² The provision of end-of-life care is a core component of critical care nursing practice,³ with critical care nurses estimated to encounter an

average of two patient deaths each week.⁴ Importantly, care does not end at patient death.⁵ Rather, nursing care continues after death to include preparation of the body, supporting cultural and religious needs, facilitating wishes and customs, and providing practical guidance about the next steps.^{6,7}

The care provided to patients and their families during dying, death, and bereavement can be emotionally and psychologically demanding for critical care nurses. 8.9 The wider nursing literature demonstrates that not all nurses are adequately prepared to cope

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with patient death. Ocompeting clinical demands, workload pressures, and complex clinical environments contribute to concerns about the quality of bereavement support critical care nurses provide to families after a death. In addition, a lack of opportunities for experiential learning contributed to critical care nurses not being adequately prepared to provide immediate grief and bereavement support for family members after death. Although care of the deceased patient and their family remain the priority, in order to provide optimal care after a death, nurses must also priorities self-care.

Whilst guidelines and position statements are available to guide the provision of high-quality end-of-life care, ^{6,14} there is a paucity of research evidence or practice guidelines specific to postmortem nursing practice in critical care, including care of the family and self. Therefore, the aim of this integrative review was to synthesise research evidence on registered nurses' experiences after patient death in adult critical care.

2. Methods

2.1. Aim

The aim of this study was to synthesise research evidence on the experience of the nurse after the death of a patient in adult critical care.

2.2. Review question

The research question was 'What is the experience of the nurse after the death of a patient in adult critical care in relation to (i) postmortem care of the deceased person, (ii) communicating and documenting patient death, (iii) the breadth of family support provided by the nurse, (iv) nurses' response to patient death, and (v) coping and self-care?'

2.3. Design

An integrative review with narrative synthesis was selected to investigate the research question. A narrative synthesis approach¹⁵ was considered most appropriate due to the exploratory nature of the research question and the anticipated descriptive qualitative data. The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) statement was used to guide reporting of this review.¹⁶ A protocol was registered with PROSPERO (2021 CRD42021271521).¹⁷

2.3.1. Inclusion and exclusion criteria

Studies were considered for inclusion if they reported data about the experience of registered nurses after patient death in relation to (i) postmortem care, (ii) communicating and documenting patient death, (iii) family support, and (iv) nurses' emotional response to patient death, self-care strategies, and/or available supports in the adult critical care setting (Table 1). Peerreviewed qualitative, quantitative, and mixed-methods studies published in English language from inception to August 2021 were eligible for inclusion. Research related to neonatal and paediatric populations were excluded because they focus on involving, informing, and supporting parents, which is outside the scope of this review. Grey literature including theses and dissertations, nonresearch publications, and studies conducted in mixed settings where data could not be separated were excluded.

2.3.2. Search strategy and information sources

In August 2021, a systematic search of five databases was undertaken including Cumulative Index for Nursing and Allied Health

(CINAHL) Complete, Ovid Medline, APA PsycInfo, Embase, and Emcare. No publication date limits were applied to the searches to ensure all primary research evidence related to the research question was captured. All relevant words and synonyms for the concepts 'after death', 'critical care', and 'nurse' were searched to explore the topic as comprehensively as possible. Searches for each concept were run using OR with database-specific MeSH heading and synonyms and then combined using AND to identify papers describing the experience of nurses after patient death in critical care (Table 1). The search was limited to English language only. The CINAHL search is provided as an exemplar in Appendix 1.

2.4. Study selection

The citations of all retrieved studies were imported into Endnote, Version 20,¹⁸ followed by the removal of duplicate citations. In line with the aim and inclusion and exclusion criteria of this review, papers that contained the words 'paediatric', 'pediatric', 'neonat*', 'PICU', or 'NICU' in the title were excluded. The EndNote library was then exported into Covidence,¹⁹ where additional duplicate records were identified and removed.

Title and abstract screening was undertaken in Covidence¹⁹ by two members of the research team, independently. Adjudication of any discrepancies was undertaken by a third research team member. Double-blind full-text review was then undertaken, and any paper that did not match the eligibility criteria (Table 2) was excluded. In addition to the original database searching, forward and backward chaining of included papers, which involved reviewing papers cited by included papers and papers that cited included papers for other potential papers, was undertaken. Two additional papers were identified that met the inclusion criteria: one was included; however, a full text was not available for the second, so it was excluded. A PRISMA flowchart documenting the results of the search and screening process is provided in Fig. 1.

2.5. Data extraction and quality appraisal

Data were extracted from the included studies by two researchers using a standardised template developed by the review team, with 40% of papers independently checked for consistency. The quality of all included papers was independently assessed by two researchers using a tool suitable for qualitative and

Table 1 Search terms.

Term		MeSH		Keyword
"After death"	OR	"Social support" Bereavement "Psychosocial support system" "Self-care"	OR	"After-death care" "Post-mortem" "bereavement support" "Psych* support" "spiritual support" debrief* support* counsel*
AND "Critical care"	OR	"Intensive care"	OR	ICU CCU HDU TTU "intensive therapy unit" "high dependency unit"
AND Nurse	OR	"registered nurs*" "Nursing staffs" "Nurse clinicians" "health personnel" Caregiv*	OR	Nurs*

Table 2
Inclusion and exclusion criteria

Inclusion criteria

Determined by Title and Abstract:

- Study Designs: Primary qualitative, quantitative or mixed methods studies reporting peer-reviewed research
- Study Populations: Registered nurses working in adult critical care settings
- Study Settings: adult critical care, intensive care, or intensive therapy units
- Study Focus: experience of the nurse after the death of a patient Determined by Full Paper:

<u>Focus #1</u>: Data about the experience of nurses after patient death in critical care. Types of data may include, but are not limited to:

- Post-mortem care of the deceased person and family
- · Communicating and documenting patient death
- Practical, social, emotional, or spiritual support provided to family and clinicians

AND/OR

<u>Focus #2</u>: Data about nurses' emotional/psychological response to patient death and self-care, including, but not limited to:

- Self-care strategies such as exercise, debriefing, seeking comfort from others
- Availability of and use of workplace supports e.g., debriefing programs, counselling or informal supports, and self-care

Language: English

Publication year: Inception - August 2021

Exclusion criteria

- Studies conducted in neonatal or paediatric settings.
- Studies conducted in mixed (adult/paediatric/neonatal) settings where the data cannot be separated.
- Reviews: Systematic, literature, scoping reviews.
- Nonresearch publication: Abstracts, conference papers, letters to the editor, commentary, and opinion pieces.
- Grey literature: Theses and dissertations.

quantitative research.²⁰ An *a priori* decision was made to not exclude papers based on quality appraisal scores but instead to use the quality assessments to describe the quality of the research evidence.

2.6. Data analysis

Narrative synthesis, an approach that relies primarily on the use of words to explain and summarise synthesis findings, ¹⁵ was used to summarise heterogenous findings across study types, using text to emphasise similarities within and differences between the studies. Synthesis was initially undertaken by one researcher, then reviewed by a second researcher, with differences and disagreements discussed until the final synthesised findings were determined.

3. Results

This integrative review included 36 papers reporting 35 studies, published between 1994 and 2021; 28 were qualitative studies, 9,12,21–46 five were quantitative, 47–51 and the remaining two were mixed-method studies. 52,53 Seven studies were conducted in Canada; 24,28,32,36,40,46,52 four in Australia; 12,29,42,51 four in the United States of America (USA); 30,34,37,38 three in the United Kingdom; 9,43,53 two in Norway, 33,44 South Africa, 26,35 and Turkey; 25,54 one each in Denmark, 49 Egypt, 47 England, 53 Europe, 48 Indonesia, 23 Iran, 31 Kurdistan, 41 New Zealand, 21 Singapore, 39 Spain, 45 and Sweden; 27 and one study across Europe and the Middle East (Table 3). 22 Three of the included studies focused on organ donation. 27,32,40 Two papers report findings from the one study. 32,40 Collectively, the included studies represent the voices and perspectives of 1687 nurses. Quality appraisal scores for the included studies ranged from 4 to 11 (maximum score: 11) (Table 4). There was some variation in methodological quality of the 36 papers; most papers articulated a clear aim and purpose and reported an appropriate methodology. Potential ethical issues, including as an overt description of ethical priorities in research, such as minimising the risk of coercion and protecting participants'

anonymity, were not identified or addressed in several papers, ^{22,26,28,30,31,33,34,37,42,43,47,49–52,54} a finding potentially attributed to the brevity of writing and journal word limits for publications. Findings were synthesised into three categories: postmortem care, supporting bereaved families, and nurse coping with patient death. These categories represented nurses' experiences after patient death in adult critical care (Fig. 2).

3.1. Postmortem care

A total of five studies described postmortem care of the deceased. ^{22,25–27,33} Postmortem care encompassed demonstrating respect and dignity for the deceased, preparation of the deceased, and the concurrent death rituals performed by nurses.

3.1.1. Demonstrating respect and dignity

Demonstrating respect and dignity for the deceased was detailed in six studies. ^{22,26,27,31,33,36} Nurses reported providing care that mimicked the respectful care provided to living patients ^{22,36} and talking to the deceased to "... bid him farewell, wishing him a safe journey ... telling him he did good in this world". ²²

"Although there is no life you must care for your patient in many ways; psychologically, physically, emotionally Although there is no life there is still the body and those parts [nursing care] you still have to go through". ²⁶

Respect for the deceased was also demonstrated by handling the body "in a correct way" ²⁶ such as taking care with turning as if the deceased could have felt pain. ²² There was a desire to make the deceased "look like they did before" by removing lines ³⁶ and covering the body. ³¹ Other nurses controlled the immediate environment using subdued lighting, modulating noise, ³⁶ and speaking in low voices. ²² Music was described as being able to bring "some more solemnity ... and a little dignity ...". ³³ Music also had negative connotations, with a nurse describing how she advocated for a respectful and dignified environment during postmortem care for an organ donor, by asking that music be turned off:

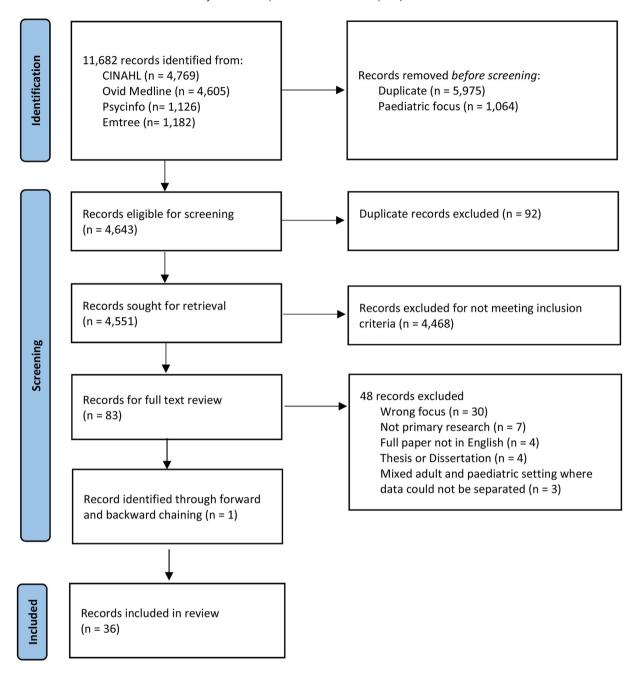


Fig. 1. PRISMA flow diagram Reproduced from Moher, Liberati, Tetzlaff, and Altman, The PRISMA Group (2009) [Colour figure can be viewed at wileyonlinelibrary.com].

"Sometimes you have to go to radiology for an angiography. Every now and then they have a commercial radio on through speakers in the room. You have perhaps been working with your patient for a whole afternoon or perhaps been comforting the relatives and you hear that overpowering music and you ask them to turn that radio off, but they have no idea what it's all about". ²⁷

3.1.2. Preparation of the deceased

Preparation of the deceased was described in four studies and encompassed practical aspects of preparing the body so that the family could say goodbye. ^{22,25,26,54} In two studies, nurses expressed a lack of clarity in what postmortem care entailed, ^{25,26} such as "How do I know that I am doing the 'right thing'?" ²⁶ yet in another, a

standard protocol was available to guide care of the deceased.⁵⁴ Preparation of the deceased was also described in one study as a task to "*get over and done with*".²² In three studies, family members had the option to be present when the body was prepared.^{22,25,54} Postmortem care was considered easier and more comfortable when two nurses performed this care together.²⁶ Preparation of the deceased included separating the deceased patient from all others by closing the curtain or using a screen,⁵⁴ removal of tubes and lines and washing the body,^{22,25,26,54} closing the eyes, dressing wounds, combing the deceased's hair, shaving male patients, inserting dentures, dressing the deceased in a clean gown, placing a rolled towel under the chin,^{25,54} and placing clean sheets on the bed.^{22,25} Nurses described laying the deceased flat, with arms straight^{25,26} so that "... the patient looks comfortable ...".²⁶ The sur-

Table 3 Summary of included papers (n = 36).

Authors, year of publication	Country, setting & context	Aim and/or research question/s	Sample & sample size	Methodology & method	Primary outcome
Andrew 1998	New Zealand. Two ICUs in a major teaching hospital	To explain the phenomenon of optimising the human experience when nursing the families of people who die in the ICU	Registered nurses (N = 7)	Phenomenology; individual interview	Three domains are described that contribute to optimising the human experience. These were (i) nurse as person, (ii) nurse as practitioner and (iii) nurse as colleague. These three domains are enabled by a) being there, b) sharing, c) supporting, d) involving, e) interpreting,
Attia et al. 2013	Egypt. Four ICUs:- (i) Oncology ICU; (ii) Coronary Care Unit; (iii) Hepatic ICU; and (iv) Surgical ICU	To assess nurses' perceptions of barriers and supportive behaviours in providing EOL care to dying patients and their families in ICU	Critical care nurses $(N=70)$	Descriptive quantitative; structured interview using a previously published tool, translated into Arabic	and f) advocating. Perceptions of barriers to providing EOL care according to five categories (i) environmental barriers, (iii) family barriers, (iii) nurses' knowledge and skills, (iv) physicians' attitudes, and (v) treatment policy barriers. Top supportive behaviours for providing EOL care were (i) nurses' support, (ii) patient & family-centred care, (iii) families' support after patient's death. ICU type was associated with the level of barriers to providing EOL care. No association between critical care nurse characteristics and level of
Benbenishty et al. 2020	Europe and the Middle East (16 countries); ICUs	To describe European and Middle Eastern nursing ceremonies and rituals surrounding care provided to patients after death	Critical care nurses $(N=23)$	Qualitative study; face- to-face interviews	barriers. Two main themes and five sub-themes were reported. (i) Sacredness includes (a) caring practice rituals and (b) care for the dying and deceased. (ii) Dignity includes (c) support for relatives and (d) effectiveness in
Betriana et al. 2020	Indonesia; ICU in a public hospital	To describe the grief reactions and coping strategies of Muslim nurses in dealing with the death of patients	Registered nurses $(N=14)$	Qualitative phenomenological study; individual interviews	contrast to dignified care. Four grief reactions: crying, feeling sad, disappointed & feeling guilt. Four factors influencing grief: circumstances of the patients, nurses' expectation, relationship with the patient, reaction to patient's family. Three coping strategies: sharing with colleagues, avoiding the dying & circumstances of death, & relying on constitual strength
Bloomer et al. 2013	Australia. Two ICUs from two hospitals in metropolitan Melbourne, Australia: (i) 14 bed medical/surgical combined ICU and HDU; and (ii) 21 bed general medical/surgical ICU and HDU	(i) To describe the way nurses ICU care for family members through the patient's dying and after death; (ii) To explore nurses' perspectives on their preparedness & ability to provide care for the family; (iii) to identify organisational processes & environmental factors that may exist in the ICU, that either facilitate or limit this nursing care	Registered nurses $(N=12)$	Qualitative exploratory descriptive study; Two focus group interviews	spiritual strength Four main themes emerged from the focus group data that represented the ways by which nurses endeavoured to ensure the experience of families was of as good a death as possible in the ICU environment, and the constraints on these roles. These themes included Time, Place, Presence and Culture.

Table 3 (continued)

Authors, year of publication	Country, setting & context	Aim and/or research question/s	Sample & sample size	Methodology & method	Primary outcome
Bone et al. 2018	Canada. 21 bed medical- surgical ICU in a teaching hospital	To explore the effect of spiritual care on nurses and how nurses understand the role of spiritual care	Registered nurses $(N=25)$	Qualitative descriptive study; semistructured interviews	Central theme that emerged was 'presence', described through three main categories: (i) present in the ICU and their role, (ii) nurses' experiences working with chaplains, (iii) nurses' experiences providing spiritual care
Celik et al. 2008	Turkey. Adult neurosurgery, coronary, cardiovascular, surgical, post-anaesthesia and emergency surgery ICUs in Istanbul	To determine ICU nurses' knowledge about activities for patients after they have died	Registered nurses $(N=61)$	Quantitative descriptive study; self- administered questionnaire	The majority of nurses stated they removed instruments catheters, tubes, dressings from the body and cleaned drainage and secretions, but only 8.1% reported they dressed the patient in a clean gown and combed their hair. 24.5% did not provide emotional support to the individual's family.
Celik et al. 2009	Turkey. Cardiovascular surgical and surgical ICUs in Istanbul	To determine nursing care activities for deceased patients in the ICU. Research Questions: 1. What does a nurse do to care for deceased patients in the ICU? 2. What are the factors that influence nursing care activities for the deceased patient?	Intensive care nurses $(N=20)$	Prospective, observational study, survey	Descriptions of post- mortem care were provided. There was no statistical difference in post-mortem care activities according to nurse characteristics. Nurses provided an environment suitable for families to say goodbye, but few described allowing families to participate in care
de Swardt et al. 2017	South Africa. A hospital from a consortium of private healthcare institutions in Cape Town	Question: How do we better understand ICU nurses' experiences of performing post mortem care on patients who have died in an intensive care unit?	ICU nurses (N = 6)	Qualitative research; (i) semistructured interview, (ii) participant questionnaire and (iii) reflective journaling	Safeguarding the integrity and physical appearance of the dead body was the major finding and of the utmost priority for the nurses in this study. Regardless of how the nurses felt about death, providing professional and quality care to the dead body and the family was seen as significantly important. The nurses, whilst performing postmortem care, experienced detachment from various relationships. This comprised of the nurse detaching him/herself professionally and emotionally from the dead patient, the family and him/herself from the death experience. This 'unspoken' experience of thanatophobia became apparent when the nurses were confronted by the reality of their own deaths. Three main themes: (i) care of the dead body, (ii) detachment, (iii) thanatophobia
Egerod, Kaldan, Albarran et al. 2019	Europe. 48 cities in 18 European countries.	To explore elements, organisation, and evaluation of ICU bereavement services in European countries. Objectives were to	Registered nurses $(N=85)$	Survey; sross-sectional self-administered, paper and pen survey	Bereavement follow up existed for between 1 and 15 years. Important follow up elements were viewing the deceased in the unit, (continued on next page)

Table 3 (continued)

Authors, year of publication	Country, setting & context	Aim and/or research question/s	Sample & sample size	Methodology & method	Primary outcome
		investigate (i) the model of bereavement follow-up services (elements of support), (ii) the workforce model (organisation of staff), and (iii) the evaluation model			providing follow up information, sending a letter of sympathy, calling the family to arrange a meeting.
Egerod, Kaldan, Coombs & Mitchell 2018	Denmark. 48 ICUs	(evaluation strategies) (i) To gain an overview of interventions offered to family of deceased patients in ICUs; to describe characteristics of bereavement support; and (iii) to identify the role of ICU staff participating in these services	Registered nurses $(N=46)$	Survey; self- administered computerised cross- sectional nation-wide survey	Bereavement care at the time of patient death included viewing the patient in ICU and in the hospital mortuary. Information about hospital-based follow-up for the family was provided in 72% of units, whereas only one unit provided information on community-based bereavement follow-up. Bereavement follow-up services after hospitalization were offered to families in 59% of ICUs and included an ICU visit, meeting with the staff present at the time of death, a letter of condolence, a phone call to the family, referral to a priest or clergy-man, or referral to other counselling.
Forsberg et al. 2014	Sweden; ICU	To investigate how intensive and critical care nurses experience and deal with after death care i.e. the period from notification of a possible brain dead person, and thereby possible organ donor, to the time of postmortem farewell	Critical care nurses $(N=29)$	Grounded theory; open-ended interviews	The core category was 'achieving a basis for organ donation through dignified and respectful care of the deceased person and the close relatives. Four main areas: (i) safeguarding the dignity of the deceased person, (ii) respecting the relatives, (iii) dignified and respectful care, and (iv) enabling a dignified
Gelinas et al. 2012	Canada. Variety of hospitals in Quebec in terms of location (rural or urban), organisation (presence of intensivists and a palliative care team, and status (teaching or non-teaching)	To better understand the stressors experienced by nurses providing EOL or palliative care in Canadian ICUs; To describe the stressors related to the provision of EOL or palliative care from the perspective of nurses in different settings in the province of Quebec	Registered nurses $(N=42)$	Descriptive qualitative design; focus groups	farewell Stressors clustered according to three categories: organisational, professional and emotional. Organisational stressors were a lack of palliative care approach, interprofessional difficulty, lack of continuity in life- support and treatment plans, and conflicting demands. Professional stressors were lack of EOL/ PC competencies and difficulty communicating with families and collaborating with the medical team. Emotional stressors were described as value conflicts, lack of emotional support, and dealing with patient and familie sufforing
Halcomb et al. 2004	Australia. General ICUs	To investigate the experiences of nurses caring for clients in the ICU	Registered nurses $(N=10)$	Phenomenology; conversational interviews	family suffering Five major themes emerged from the data (i) comfort and care, (ii)

Table 3 (continued)

Authors, year of publication	Country, setting & context	Aim and/or research question/s	Sample & sample size	Methodology & method	Primary outcome
		having treatment withdrawn or withheld			tension and conflict, (iii) do no harm, (iv) nurse-family relationships, and (v) invisibility of grief and suffering
Hall et al. 2020	USA. Critical Care Units or Intensive Care Units in the mid-Atlantic and west coast regions	Question: What are critical care registered nurses' perceptions of preparedness in the provision of EOL care?	Critical care registered nurses (N = 14)	Qualitative interpretive description	To be prepared to provide EOL care, the nurses need to understand their personal beliefs about death and dying, be able to provide care to both patient and family, combine knowledge based on education, personal and professional experience, and support measures balance the ongoing dialogue between their professional and personal role as a registered nurse, and find ways to make sense of the dying experience, specifically through closure
Heidari et al. 2014	Iran	To determine the Iranian nurses' experience of supporting families in EOL care	(Not specified)	Grounded theory; semistructured interviews	Family support, dividing into 5 categories: death with dignity, facilitate visitation, value orientation, preparing, and distress
^a Hibbert 1995	Canada. Neurological ICUs in two hospitals in eastern Canada	To identify nurses' appraisal of stressors associated with providing care to organ donors and their families during the organ donation process	Registered nurses $(N=17)$	Retrospective, exploratory, descriptive study; individual semistructured interviews	The threat of patient dying, the inconsistent commitment of physicians to organ donation, and returning to an empty space were frequently mentioned stressors. All nurses felt positive about being involved in the organ donation process
Holm et al. 2012	Norway. One ICU in a 1400-bed university hospital	(i) to explore the experiences and attitudes of nurses towards the use of music played during after-death care and (ii) to describe the feedback nurses received from relatives when music was used as part of the viewing	Registered nurses $(N=15)$	Qualitative study; focus groups	six main categories of attitudes emerged from the analysis: (i) different attitudes among nurses towards the use of music, (ii music affects the atmosphere, (iii) music affects emotions, (iv) use of music was situational, (v) special choice of music and (vi) positive feedback from the bereaved
Kalocsai et al. 2020	Canada. Nine adult medical-surgical ICUs within a university- affiliated hospital in Ontario and Alberta	To explore how clinicians support bereaved families, identify factors that facilitate and hinder support and understand their interest and needs for follow-up.	Nurses (N = 290) and physicians (N = 42)	Mixed-methods exploratory study; interviews & surveys	Both physicians and nurses perceived that they provided empathetic support to bereaved families. Emotional engagement was a crucial element of support, but clinicians were not always able to engage with
Kirchhoff et al. 2000	USA. 8 ICUs at 2 teaching hospitals in the intermountain West	To describe EOL care in the ICU as perceived by critical care nurses who have taken care of dying patients. Research questions: (i) What do ICU nurses consider "good" EOL care? (ii) How do nurses describe their experiences of shifting from curative nursing interventions to	Registered nurses $(N=21)$	Cross-sectional descriptive design; focus group (semistructured interview guide) and questionnaire	families "Good" EOL care in the ICU was described as ensuring that the patient is as pain- free as possible and that the patient's comfort and dignity are maintained. Involvement of the patient's family is critical. A clear, accurate prognosis and continuity of care also are important. Switching

(continued on next page)

Table 3 (continued)

Authors, year of publication	Country, setting & context	Aim and/or research question/s	Sample & sample size	Methodology & method	Primary outcome
Kisorio et al. 2016	South Africa. General (medical-surgical), trauma and cardiothoracic ICUs at three academic affiliated tertiary (referral) hospitals in Johannesburg and Pretoria regions	EOL care? and (iii) What are ICU nurses' perceptions of care dilemmas and barriers to providing quality EOL care? To explore South African intensive care nurses' experiences of EOL care in order to provide a basis for the development of interventions and support systems in the provision of quality EOL care	ICU nurses; (N = 24)	Exploratory, descriptive qualitative design; focus groups and semistructured interviews	from curative to comfort care is awkward. Five major themes related to nurses' experiences of EOL care included: difficulties we experience, discussion and decision making, support for patients, support for families and support for
McClement et al. 1995	Canada. Tertiary centre ICUs in community based hospital	To identify expert nursing behaviours in care of the dying adult in the ICU	ICU nurses; (N = 10)	Descriptive exploratory	nurses. Behaviours identified included: responding after death has occurred; responding to the family; responding to anger; responding to colleagues; providing comfort care; and enhancing personal
McMeekin 2017	USA. Subscribers to American Association of Critical Care Nurses weekly eNewsline, or followers of Facebook or Twitter	To explore the relationships among post-code stress, coping behaviours, and PTSD symptom severity in critical care nurses after experiencing unsuccessful cardiopulmonary resuscitations.	Critical care nurses (N = 490)	Descriptive correlational study; electronic survey	growth Postcode stress and PTSD symptom severity were weakly associated (r = 0.20, P = .01). No significant associations between coping behaviours and postcode stress were found. Four coping behaviours (denial, self-distraction, self- blame, and behavioural disengagement) were significant predictors of PTSD symptom severity. Severity of postcode stress and PTSD symptoms varied with the availability of institutional support.
Omran 2021	USA; Setting specifics not provided	To explore the lived experience of critical care nurses who are on the frontlines, managing critically ill patients who may be at EOL or experience sudden death. Questions:- (i) What are the bereavement needs of critical care nurses after experiencing the death of a patient? and (ii) From their lived experiences, how do nurses perceive how they process and cope with the death of a patient?	Critical care nurses (N = 10)	Qualitative, phenomenological study; focus group	Results: Seven themes emerged: (a) emotional distress, leading to compassion fatigue, burnout, and moral distress, (b) empathy, (c) resurfacing personal loss leading to secondary traumatic stress in the workplace, (d) unrealistic expectations placed on the nurse, (e) detachment leading to compartmentalization, (f) lack of formal education, and (g) self-care and
Ong 2018	Singapore. 20-bed medical ICU	To explore the perceptions of critical care nurses in Singapore towards providing EOL care	Registered nurses $(N=10)$	Qualitative, descriptive research using interviews	available resources. Four themes including (1) culture of care; (2) tension, (3) meaning of life and death, and (4) coming to
^a Pelletier-Hibbert 1998	Canada. Neurological ICUs in two hospitals in eastern Canada	To identify the different types and numbers of coping strategies used by nurses who care for organ donors and their families	Registered nurses $(N=17)$	Qualitative study; face- to-face interview	terms The coping strategies that were used changed in number and type as the 3 stages of the organ donation process unfolded (anticipation, confrontation, preconfrontation). Six major categories of coping strategies: exercising

Table 3 (continued)

Authors, year of publication	Country, setting & context	Aim and/or research question/s	Sample & sample size	Methodology & method	Primary outcome
Rafii et al. 2016	Kurdistan. ICUs in Erbil City	To explore the meaning of caring for terminally ill patients from the perspective of Kurdish ICU nurses	Registered nurses $(N=10)$	Hermeneutic phenomenology; interviews	control, distancing, maintaining normality, seeking emotional support, taking time- out, and positive reappraisal Four major themes including emotional labour, death as a positive dimension, optimistic rather than futile care and
Ranse et al. 2012	Australia. 14-bed ICU at an Australian tertiary hospital	To explore the EOL care beliefs and practices of intensive care nurses	$\begin{array}{l} \text{Registered nurses} \\ (N=5) \end{array}$	Descriptive exploratory; interviews	working within constraints. Three major categories emerged from analysis of the interviews: beliefs about EOL care, EOL care in the ICU context and
Riegel et al. 2021	Australia. 13-bed general ICU, 4-bed HDU at a tertiary referral centre in Sydney	To explore, through survey, provisions of EOL care for ICU healthcare professionals	Registered nurses $(N=75)$, medical practitioners $(N=19)$ and social workers $(N=2)$	Cross-sectional study design: survey (paper and online)	facilitating EOL care. Compared to registered nurses, medical practitioners reported lower emotional and instrumental support after a death, including colleagues asking if OK, lower availability of counselling services, perceived insufficient time to spend with families, less in-service education for end-of-life topics and symptom management. Registered nurses reported lower scores related to knowing what to say to the family in end-of-life care scenarios
Shorter et al. 2010	United Kingdom. ICU of a large teaching hospital	To explore critical care nurses' experiences of grief and their coping mechanisms when a patient dies	Registered nurses (sample size not reported)	Heideggarian phenomenology; semistructured interviews	Themes: The death experience, incorporating expectedness, Control and good nursing care, Striking a chord and meaningful engagement, The death thereafter including formal and informal support, Normalization of death and Emotional
Spencer et al. 1994	England. ICU in the north of England	(i) How do nurses deal with their grief at present, following the death of a patient in an ICU? (ii) Is any support given to nurses by their peer group? (iii) Is any support given to nurses by their managers to help them overcome their grief? (iv) Do nurses feel that more information about how to deal with their grief, given during their training, would have been helpful? (v) Is more support wanted by nurses, in what form would they find it most beneficial?	Trained nurses. Questionnaire (N = 72) and interview (N = 10)	Mixed-method; questionnaire and semistructured interviews	Dissociation The qualitative data "shows how nurses deal with their grief, and that many, but not all, felt that the informal support network already present was sufficient. Some nurses, however, felt that a support group would also be helpful and some felt the availability of a counsellor would be useful. All nurses felt that more training about how to deal with their own grief was needed.
Stayt 2009	United Kingdom. Seven- bed ICU of a large teaching hospital	To explore the emotional labour nurses face when caring for relatives of the critically ill in the ICU	Registered nurses $(N=12)$	Heideggarian phenomenology; In- depth open-ended interviews	Themes: Significance of death, establishing trust, information giving, empathy, intimacy and self-preservation
Taylor et al. 2020	Norway. Four different adult ICUs (general,	To explore the experiences of ICU nurses when	ICU nurses (N = 9)		Three categories are described: (1) ICU nurses' (continued on next page)

Table 3 (continued)

Authors, year of publication	Country, setting & context	Aim and/or research question/s	Sample & sample size	Methodology & method	Primary outcome
	surgical, medical and trauma)	participating in withdrawal of life- sustaining treatment		Qualitative descriptive and exploratory design; interviews	experiences of stress in the process of treatment withdrawal; (2) a requirement for interdisciplinary support and cooperation; and (3) elements to achieve a dignified treatment withdrawal process.
Valks et al. 2005	Australia. Adult ICUs	To describe the bereavement services currently provided within general ICUs in Australia	Senior nurses (N = 99)	Survey; hard copy questionnaire	withdrawal process. It was identified that most surveyed units offer minimal components of bereavement programs, such as viewing of the deceased and communicating with family members. Less than one third (n = 26) provide additional follow-up services in the form of telephone calls and sympathy cards or referral to additional services. Ten units employ some form of program evaluation. Verbal feedback from staff and families is the primary assessment method. Over half of responding ICUs indicated they are considering or interested in providing a bereavement program in their unit.
Velarde-Garcia et al. 2016	Spain. Post-reanimation, general, cardiac postsurgical, and cardiac ICUs within a University Hospital in Madrid;	To describe the lived experiences of Spanish nurses working in ICUs regarding how they face the death of their patients.	Nurses (N = 22)	Qualitative phenomenology; individual unstructured or semistructured interviews	Three themes were identified: 1) dealing with expectations of recovery, 2) accepting the age of death, and 3) experiencing emotional attachment.
Wu et al. 2015	Canada. Two British Colombian ICUs at urban care hospitals	To describe the connections between masculinities and male ICU nurses' experiences of caring for dying patients and their families	ICU nurses (N = 15)	Interpretive descriptive interviews	The thematic findings - (a) ensuring a dignified death, (b) changing the focus from patient to family, and (c) being emotionally attached, though interconnected

EOL, end of life; HDU, high-dependency unit; ICU, intensive care unit.

roundings were prepared by removing excess equipment, the room was cleaned, and chairs were arranged 26 so that family members could say goodbye. 25,54 Prior to sending the deceased to the mortuary, the body was wrapped in a sheet or shroud, labelled and/or tagged with identifying details, and the death documented as required. 25

3.1.3. Death rituals

Death rituals were important for acknowledging and respecting cultural and religious needs of the deceased and the nurse and were founded on nursing tradition passed down through the generations^{22,26,33}: "... it is my responsibility to pass this ritual art of nursing practice on to the next generation of nurses". ²² Typically performed synonymously with postmortem care, ^{22,25,26,33} death rituals were considered important to honouring the death "... and legitimised it [death] as an honour in respect and as a farewell", ²² but the ritual was seldom shared with family. Although nurses believed their rituals

were personal and unique, there were similarities across participants, countries, and religions.²²

A participant from a Middle Eastern context described the use of a cart containing artefacts for use during after-death care, such as the Bible, the Koran, amulet beads, holy water, a book of hymns and prayers, and a head covering for the deceased.²² Others described how they chose to play music during postmortem care because music made "... the feeling stronger about what we are really doing" and enhanced "... a feeling of peace"; 33 yet for others, there was a preference for quiet.³³ The use of a clean sheet to cover the body was described as signifying the purity of death,²⁶ and opening a window allowed the deceased's soul to fly or escape to "the other side".²² Nurses described holding the deceased patient's hand,²⁵ crossing themselves or the deceased person's body, or both, or blessing the body by touching the forehead or chest.²² Prayers and/ hymns were used as part of a blessing,²² sometimes shared with family because "The soul is going to God now and we have to pray and let them go". 26 Respecting religion was seen as a sign of respect for

^a Two papers representing one study.

Table 4 Quality appraisal.

Author/s, year	Quality appraisal (out of 11)	Critical appraisal comments
Andrew, 1998	8	Title and content not consistent. Tool not tested.
Attia et al., 2013	8	*Potential ethical issues not identified or addressed.
Benbenishty et al., 2020	9	Details of ethical approval not clear. Methodological detail missing, such as recruitment, interview length, and transcription.
Betriana et al., 2020	11	
Bloomer et al., 2013	11	
Bone et al., 2018	7	No detail of ethical approval. Rationale for method not provided. No recommendations for further research or implications for practice.
Celik et al., 2008	4	Incongruence between aim and focus of questionnaire. Tool not tested. Limited detail about survey or analysis. Inconsistent detail re nurse sample. Conclusion brief.
Celik et al., 2009	6	Abstract does not describe the full scope of findings. Literature review is brief. *Potential ethical issues not identified or addressed. Methodology not justified.
de Swardt et al., 2017	8	*Potential ethical issues not identified or addressed.
Egerod et al., 2019	9	Conclusion is brief.
Egerod et al., 2018	10	Sparse detail re ethical issues.
Forsberg et al., 2014	10	Minimal references to literature in Introduction
Gelinas et al., 2012	8	*Potential ethical issues not identified or addressed.
Halcomb et al., 2004	11	
Hall. 2020	9	Rationale for study not clearly outlined. #Potential ethical issues not identified or addressed.
Heidari et al., 2014	7	Methodology not justified. *Potential ethical issues not adequately identified or addressed. No recommendations for future research or practice.
^a Hibbert, 1995	8	Aim not specifically stated. No specific con
Holm et al., 2012	10	*Potential ethical issues not identified or addressed.
Kalocsai et al., 2020	10	*Potential ethical issues not identified or addressed.
Kirchhoff et al., 2000	9	*Potential ethical issues not identified or addressed. Conclusion is brief.
Kisorio et al., 2016	10	Method brief and not justified
McClement et al., 1995	9	Literature review is brief. #Potential ethical issues not identified or addressed.
McMeekin 2017	9	*Potential ethical issues not identified or addressed. Discussion is brief.
Omran 2021	9	Method and discussion brief and lacking detail.
Ong 2018	10	Study rationale not provided.
^a Pelletier-Hibbert 1998	8	Literature review brief. No evidence of ethical approval. Methodology not justified.
Rafii et al., 2016	11	
Ranse et al., 2012	10	*Potential ethical issues not identified or addressed.
Riegel et al., 2021	10	*Potential ethical issues not identified or addressed.
Shorter et al., 2020	10	*Potential ethical issues not identified or addressed.
Spencer, 1994	9	*Potential ethical issues not identified or addressed. Conclusion brief.
Stayt, 2009	11	
Taylor et al., 2020	10	Discussion not comprehensive.
Valks et al., 2005	8	Aim not clearly stated. "Potential ethical issues not identified or addressed. Discussion not comprehensive
Velarde-Garcia et al., 2016	10	Methodology not justified.
Wu et al., 2015	11	

^a Two papers reported findings from the one study.[#]

the patient and family, acknowledging that "It just depends on the religion of the patient that passed away". ²⁶

3.2. Supporting bereaved families

Eighteen studies provided data on the provision of immediate grief and bereavement support after death of the patient, and across time. ^{12,21,22,24,25,27,32,34,36,38,42,44,48–52,54} Importantly, not all nurses were comfortable supporting bereaved families ⁵² or felt adequately prepared or skilled: "They just look petrified … they just can't wait to get out … they don't know the answers … and they're probably confronted by it". ¹² As a result, nurses were often allocated to dying patients because they demonstrated the right qualities:

"There are certain nurses ... they're always allocated to those patients 'cause [because] they've got a track record of being communicators ... empathetic, caring, listening, they can listen to relatives ... and they know what to say ... you can't be taught those things". 12

Supporting bereaved families was thought to be based on a desire to reach out to other human beings facing difficult times, in a profoundly human way.²¹ Demonstrating empathy^{38,44} and caring through displays of emotion were also described and linked to the

importance of acknowledging the death: ³⁶ "You are not lessened in their eyes if you shed tears with them ... it validates the family grief and loss". ³⁴

Knowing the family allowed some nurses to more holistically support them after death. ¹² Nurses described spending time at the bedside with the family ¹² and attempting to ensure family wishes were accommodated. ⁴⁴ Allowing families time to spend alone with the deceased was considered important. ^{22,25,44,50,54} One nurse encouraged family to reduce potential future regret by talking to the deceased:

"I always tell the family ... if there's something that you need to say to them that hasn't been said, this is the time to do it. You never know what kind of burdens people are carrying with them, but at least they get a chance to say it, you know?".³⁶

Several studies also detailed how nurses provided information to families of the deceased. The nurses' role was described as guiding families on the practicalities because "... a lot of families turn around and go 'What do I do now, do we call the funeral home ...". Prochures and handouts were used to provide practical information on what families need to do^{22,48} and sources of emotional and spiritual support such as the hospital chaplain or priest and external/community support services such as

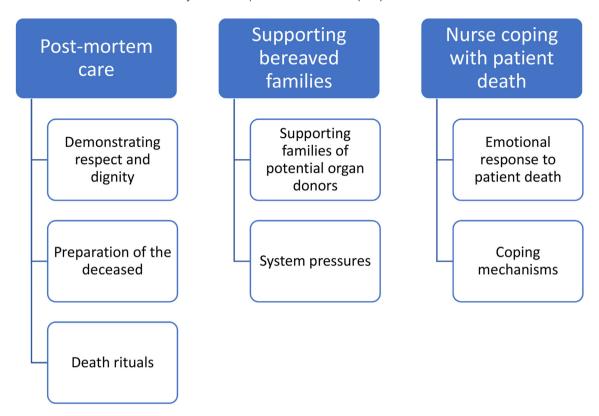


Fig. 2. Visual representation of findings.

counselling.^{49,51} One study described how nurses used mementos to support family grieving, such as a hand print, a lock of the patient's hair, or the hospital identification band.⁴² Similarly, patient diaries compiled over the course of the patient's admission⁴⁸ were provided to families in another study as keepsakes.

Bereavement support for families could continue after the family leave the unit, but it was not a universal practice. Whilst some nurses reported their units did not offer any bereavement services, ^{48,52} in other studies, bereavement support and follow-up included a telephone call, letter, or sympathy card sent to the family, ^{48,49,51} an invitation to a follow-up meeting with member of the intensive care unit team; ^{22,48} and/or an invitation to read through a patient diary in person. ⁴⁸

3.2.1. Supporting families of potential organ donors

When a patient was declared brain dead, the approach to bereavement support was distinctly different because care for the body continued, as described in two studies.^{27,32} A clear shift was described in how nurses talk to families "... to speaking about the person in the past tense",²⁷ where the goal was to be sympathetic and respectful. In order to emphasise that the patient was dead, to aid families to come to terms with the diagnosis and the option of organ donation:

"We usually start by asking the relative after the patient is diagnosed as brain dead if they have any idea what the patient thought about the idea of organ donation ... I do not want to influence them one way or another because I'm afraid they may later regret their decision and will be unhappy about my behaviour. I want it to be their decision regardless of what they decide, my thoughts must never play any part in their decision making".²⁷

The focus of bereavement support was on guiding donor families through their shock and grief to a state of acceptance and hope, experiencing a sense of meaning in an otherwise devastating and senseless situation.²⁷ Postmortem close contact with families was maintained until the donor left the unit, and relatives were debriefed for a final time.²⁷ Nonetheless, there was a profound sense of helplessness in attempting to ease family members' pain.³²

3.2.2. System pressures

In four studies, system pressures impacted the support provided to bereaved families. 12,35,36,52 The time and workload associated with helping and supporting families after a patient death was not recognised, 12 nor was the importance of ensuring families were able to spend time with the body. In three studies, nurses reported pressure to hasten the process or remove the deceased so that the bed space could be utilised for another patient. 12,36,52 A nurse described what occurred as she supported a son to grieve at his deceased father's bedside:

"... we had an admission in emergency waiting to come into that bed. Everyone was getting annoyed with me because I was letting this fellow stay so long. One nurse suggested that I just call security. That made me really angry. I suppose I was being very indulgent but his father had just died, when shouldn't you be indulgent?".³⁶

A lack of support from social workers and pastoral care outside of normal business hours was raised as a concern, as demonstrated in this example about the spouse of an older patient who had died overnight:

"... Wife passes away and then [the husband] goes 'I don't know what to do now? I've no idea what to do from here on, what

happens?' starts crying ... being a weekend no social worker was available. [I call the] on-call social worker and she goes 'I'm not very sure if I should come in or should I just talk to him over the phone?... I'm not very sure if he needs me I think he should just google those things up on the internet and I'm pretty sure that he will be able to find something'". 12

3.3. Nurse coping with patient death

Nurses' emotional response to patient death and coping strategies were described in almost all the included studies, synonymous with the caring relationship and a sense of connection. Coping mechanisms included formal and informal supports, normalising death, and recognising the fragility of life and strategies for self-care.

3.3.1. Emotional response to patient death

Sixteen studies described nurses' emotional response to patient death. 9,12,21–23,28,32,34,35,37–39,41,43,45,53 In six studies, a strong sense of connection with the deceased patient's family influenced nurses' emotional responses. 9,12,21,38,43,45 For example:

"I felt that I really shared in their painful experience ... I felt really close to the family because I had been there since the moment he was admitted to the moment he died. I'd been there through it all and really felt as though I was going through it with them". 9

Connection was also attributed to sharing the patient's experience where "you really feel like you have been on that journey with them".⁴³ Identifying with patient characteristics such as age or their personal history, being able to communicate with the patient prior to their deterioration and death, ^{43,45} and building rapport with the family also impacted a nurse's response to patient death. ^{21,38} Whilst these studies suggest an openness to connecting with families, in doing so "you are exposing yourself to the relatives, it's a vulnerable situation". ¹² One nurse explained " ... I would like to put a barrier there, for a little self-defence, but it is very difficult ..." ⁴⁵

Feelings such as sadness, anger, guilt, shock, and relief⁵³ and terms such as "used to it" and "desensitized" demonstrated the scope of nurses' emotional responses.³⁹ If the nurse knew the family intimately, if the nurse had spent a lot of time talking with the family, ⁵³ or if family were hopeful the patient would get better, the nurses' emotional response to patient death was more intense.² Similarly, the death of a pregnant or recently postpartum or a younger patient was thought to be more distressing^{23,37}: "... the young ones touch me as they still have a future". ³⁵ Conversely, the death of an older patient was described as more acceptable and nurses were able to more readily rationalise the death as an inevitable and normal part of life,³⁹ as one nurse explained "... in an elderly patient, death is more normal, it gives him rest, it is the law of life that an elderly patient must die". 45 When the death was expected, the experience was thought to be less traumatic for nurses.43

In the case of patients who were brain dead, who were potential organ donors, there was a sense of having "... failed the family", and the time spent waiting for the deceased to be taken to theatre for organ retrieval was described as "unbearable".³² When a donor's organs could not be retrieved, there was a sense of disappointment and frustration because "neither the donor family or the patient waiting for an organ transplantation benefits ... What a waste! ... totally senseless".³²

When families displayed a dramatic emotional response to patient death, this influenced nurses' ability to cope with emotions. ^{12,23,39} Patient death was also described as capable of eliciting a visceral response "When my patients die, my whole body is covered

by sweat and I get paled ...". ⁴¹ Nurses in two studies felt responsible and experienced heightened emotions when they were present for the withdrawal of life support; ^{28,53} " ... that burden, of the family standing around, looking at you ... what they remember is that you made them die ...". ²⁸

3.3.2. Coping mechanisms

The way in which nurses coped with patient death varied and was represented in 19 studies. ^{22–24,29,30,32,34–40,42,43,46,50,52,53} In reflecting on coping, nurses reported that maintaining a focus on personal values irrespective of the outcome was shared ³⁴; similarly, normalising death as a natural part of life ⁴³ and realising that "... you have a job to do ... so you kind of get used to that" ³⁰ helped. Focusing on the satisfaction that can come from helping and supporting a family, ³⁴ helping family in their grief, ⁴⁶ contributing to a successful organ donation, ⁴⁰ and acknowledging the benefit of organ donation to others ³² were also described as ways of coping. Learning from their own past experiences and by watching other nurses helped in the development of coping skills. ³⁸

Whilst some nurses spoke of 'leaving work at work', ⁴⁰ findings from multiple studies suggested that support received from colleagues was what made this possible. ^{22–24,28,34–36,38,39,46,53} An emphasis on nurse-to-nurse relationships and the 'team' helped build camaraderie and led to nurses supporting each other ⁴³ and checking in with each other at the right time. ^{24,36,38} Findings from a survey of critical care nurses in the UK indicated that just over 80% of nurses received support from colleagues in the form of informal discussions, mutual and moral support, and supportive listening, ⁵³ a finding also reflected across multiple statements in an Australian survey. ⁵⁰ As one nurse explained:

"The support you give each other, the other colleagues you work with, know exactly what you're going through, so quite often an informal chat in the coffee room is just as therapeutic" 43

Collegial support was also evident in awareness of who recently experienced a patient death and careful consideration when allocating care for the next dying patient.³⁵ But not all nurses felt supported, with one describing her experience after death of a young pregnant patient: "No one said anything. It was like okay, let us get on with our daily lives. Who cares a 27-year-old just died?… I do not think there is like enough support".³⁰

More formal supports were described and included clinical suppervision and formal debriefing. Whilst some nurses reported feeling as though they were just expected to cope with grief and dying, 42 others expressed a desire for formal debriefing as a way to "... sit together and vent your feelings of fear, anger or frustration" and to be supported after a tough situation in a way that allowed participants in the debrief to discuss their particular struggles. 44 Yet others felt that "if you make it a formal setting ... by the pure nature of doing that, people [will] feel more inhibited". 43 Nurses in one study felt counselling may help by providing an opportunity to talk with someone, 35 but nurses in some studies reported counselling services were not readily available 29,50 and that nurses did not want to use formal services. 38,42

Outside of the critical care unit, strategies to aid coping included time alone to process the death, ^{32,40} reflect^{28,30,46} remember the deceased for who they were, ⁴⁶ and some reported attending the funeral to say goodbye. ⁵² Expressions of appreciation from families helped some nurses to achieve closure after patient death. ^{40,42} Some sought strength from their faith by praying ^{23,46} and holding to the belief that the death was ordained. ²³ Others used humour, ³⁹ focused on activities they enjoyed such as spending time with family, ^{46,53} drinking with friends, ³⁸ participating in leisure activities, exercise and sleeping. ⁴⁶ Whilst some expressed a desire to

receive greater recognition and support at home, nurses in the included studies described how the experience of patient death and its impact was not understood by friends and family. You go home to talk to people who don't want to hear about it²⁸ or don't understand:

"Your family doesn't understand, your partner ... doesn't understand, they don't get it. You say, I've had a really horrible day. [They say] 'Oh, mine too. Column A wouldn't add up to column B and that made column C all out of whack'. No, someone's died. No one gets it except for the people that are here".⁴²

Nurses' coping capabilities decreased in certain situations. For example, a sample of critical care nurses in the USA had moderate levels of psychological stress associated with death after cardio-pulmonary resuscitation and associated symptoms of post-traumatic stress disorder.³⁷ Acceptance of brain death was also described as exceptionally taxing. In this context, one nurse high-lighted that "... time and life is fragile".³² The tragedy of a traumatic death could be long lasting with examples of intrusive thoughts "Every time I closed my eyes for about like 3 or 4 weeks I saw his heart beating, spraying blood out of his ventricle", ³⁰ inhibiting closure and coping. Several studies suggested nurses depersonalised death, ⁴⁶ compartmentalised their grief ^{38,43,53} and detached emotionally as a form of self-preservation, ^{38,43} using a professional mode to "... keep a distance in a way, because death happens so often ...". ⁴³ These nurses felt it better not to feel as a way of coping.

4. Discussion

A number of important points are highlighted in these findings. First, the use of narrative synthesis is a strength, allowing rich insight into the experience of the nurse after patient death in adult critical care, which as these findings demonstrate, had clinical, professional, and profoundly personal impacts. These findings demonstrate that critical care nurses understand the fragility of human life. Concordant with previous research. 21,41 nurses prioritised care activities and behaviours that emphasised the importance of the life of the deceased, the significance of the loss, and the emotional nature of their role. The importance of assessing and communicating cultural and religious preferences, and their relevance to family care before and after a death has been highlighted in recent research.⁵⁵ In this review, an openness to and acceptance of cultural and religious difference was demonstrated in how critical care nurses tailored care for the deceased and their families, how they acknowledged death, and used personalised rituals to demonstrate respect. The way nurses sought to protect the importance and sacredness of cultural diversity as part of their after-death care demonstrates how death transcends traditional cultural boundaries.²²

Whilst there is no disputing that care of the deceased and their family is a core part of critical care nursing practice, these findings also demonstrate the depths to which grief can also pervade the critical care nurses' experience. In the case of potential organ donors, despite clear evidence that critical care nurses demonstrate favourable attitudes towards organ donation, ^{56,57} competing priorities associated with organ retrieval and family care create additional tensions. These findings demonstrated that when simultaneously maintaining organ viability in preparation for donation, caring for the deceased, and supporting bereaved families, nurses' emotions were amplified. These findings support previous claims that the implications of organ donation on nurses' emotional fatigue and overall mental health needs further attention. ⁵⁹

Whilst previous research has already acknowledged how family were central to the death experience for critical care nurses, ⁶⁰ these findings demonstrate how grief is not just about bearing witness to family grief but also how nurses experience their own grief in response to patient death. The pace and complexity of care, unpredictable dying trajectories, and nurses' frequent exposure to death are already linked to concerns about the emotional burden of caring at the end of life¹³ and the need to switch off and emotionally disconnect from the reality of death. ⁶⁰ Acknowledging that nurses' emotional response and grief can be situational and influenced by multiple workplace and personal factors is an essential first step. 61 The various mechanisms through which nurses managed their grief, their coping mechanisms, and their sources of support exemplify how a one-size-fits-all approach to workplace grief and loss is not possible. Thus, actions that encourage and promote nurses to strike a balance between supporting grieving families and managing their own psychological wellbeing are essential.

5. Strengths and limitations

This integrative review has several strengths. First, it addresses a gap in research knowledge about the critical care nurses' experience after patient death. A comprehensive and transparent search was undertaken to identify relevant articles. The screening and quality appraisal processes were blinded and completed by two independent researchers. Extraction was also a completed by two researchers. The PRISMA guidelines were used to guide reporting. The exclusion of grey literature including theses and dissertations and articles published in a language other than English may have resulted in a publication and language bias. However, the inclusion of 36 papers from 19 countries supports the generalisability of our findings across diverse cultures and models of healthcare. Finally, only views of nurses were reported; studies reporting views of family members or other health professionals may result in different findings.

6. Recommendations

Whilst practice recommendations are already available to guide end-of-life care in critical care in Australia and elsewhere, 62 a greater focus on predeath nursing care, such as the nursing management associated with withdrawal and withholding of lifesustaining treatment is evident, and the less tangible aspects of nurses' care associated with honouring death, bereavement support and nurse grief are comparatively overlooked. Given that these findings describe nurses' recognition of the fragility of life and significance of death, greater recognition of the professional and personal impact of this on nurses would be beneficial. Providing opportunities for critical care nurses to receive formal education to guide their practice and understanding, and to learn experientially from others is vital. Whilst formal debriefing, clinical supervision and counselling services may serve a purpose in supporting critical care nurses and the wider team, other informal support mechanisms are equally helpful. Therefore, it is important that critical care nurses are supported and encouraged to seek support, to reflect on their experience, and to manage their grief in the manner that suits them. Ensuring nurses can take time away from the clinical area after a patient death, providing a quiet space for reflection, and considering the nurses' next patient allocation are simple steps that may signify the significance of death, honour the nurses' contribution, and aid nurse coping.

Given that this review has demonstrated that patient death had clinical, professional and profoundly personal impacts on critical care nurses, further research that provides rich descriptions of the human experience of patient death in critical care, as it is experienced by all, including critical care nurses is warranted. The number of included papers that did not identify or address actual or potential ethical issues, suggests a great focus on the reporting on the ethical conduct of research is required, not just because it is expected, but also to negate any doubt.

7. Conclusion

Time and life is fragile. Even with access to advanced technology designed to support life, death in critical care settings is common. Whilst a focus on the provision of high-quality end-of-life care should always remain a priority in critical care nursing, recognising the importance of after-death care for the patient, family and self is equally important. It is a privilege to care for the dying and deceased, and with this comes an obligation to acknowledge the personal impact this aspect of critical care nursing can and does have on nurses, and to ensure all nurses are able to acknowledge their experiences, access formal supports in the workplace and outside to aid coping and self-care.

Funding

None.

CRediT author contribution statement

Melissa J Bloomer contributed to the conceptualisation, methodology, search conduct, screening quality appraisal, and data extraction and synthesis and led the writing. Kristen Ranse contributed to conceptualisation, methodology, screening, quality appraisal, data checking, and writing. Leah Adams contributed to conceptualisation, screening, quality appraisal, and writing. Laura Brooks contributed to conceptualisation, methodology, screening, quality appraisal, and writing. Alysia Coventry contributed to conceptualisation, methodology, screening, quality appraisal, data extraction and synthesis, and writing.

Conflict of interest

None.

Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.aucc.2022.09.008.

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