Factors contributing to moral distress among intensive care nurses: A scoping review [version 1; peer review: awaiting peer review]

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Abstract

Background: The intensive care unit (ICU) is a busy and complex workplace, and several work-related and personal factors are known to make ICU nurses more vulnerable to moral distress than other healthcare professionals. It is crucial to identify these factors to guide future studies and preventive strategies. This scoping review explores such factors to present current knowledge on the factors that trigger moral distress and to guide future research by reviewing studies to explore and summarize factors that trigger moral distress in ICU nurses.

Methods: The PubMed, EBSCO, and CINAHL Plus databases were searched to identify potentially relevant studies published between 2011 to 2022. Inclusion criteria: peer-reviewed studies published in English that provided results regarding factors causes or correlated to moral distress in ICU nurses. After removing 63 duplicates, 371 papers were excluded after title and abstract screening, leaving 47 articles for full-text screening. A further 30 articles were excluded as their outcomes did not include factors that caused moral distress, or were not specific to ICU nurses, so 17 studies were eventually analysed using qualitative content analysis through an inductive approach. The findings of the articles were extracted and coded independently by two authors, and data were grouped and categorized.

Results: The content categories of factors contributing to ICU nurses’ moral distress were organized into themes and subthemes. Four major themes were identified: Powerlessness, end-of-life care, ineffective teamwork, and personal characteristics of ICU nurses.

Conclusions: This review highlights the factors that contribute to moral distress in critical care nurses, which are mainly attributable to the organizational climate and the nature of the ICU clinical environment. Descriptive and intervention studies (experimental or action research) must investigate causality between identified variables to inform management strategies to improve support for ICU nurses’ coping relative to moral distress.
Introduction

The intensive care unit (ICU) is a complex, unpredictable, and inherently stressful environment in which patient health status, clinical situations, and basic dynamics of the course of care can all change rapidly (Johnson-Coyle et al., 2016). Factors such as nurse shortages (i.e., low nurse-to-patient ratios), patient populations with high acuity, significant technological advancement, inexperienced nurses with insufficient training, and poor healthcare systems make ICU nurses particularly vulnerable to moral distress in the discharge of their duties (Wenwen et al., 2018). Moral distress is experienced frequently by all healthcare professionals, including nurses (Chiafery et al., 2018; Wenwen et al., 2018). It is a phenomenon experienced when a healthcare professional knows the ethically appropriate course of action, but finds themselves unable to pursue that action, due to internal or other external constraints (Hamric et al., 2012). It occurs when conflict exits between knowledge of the ethically right course of action and institutional, departmental, interpersonal, or legal constraints, and the ability of healthcare providers to change the situation or take a course of action (Vincent et al., 2020). In particular, moral distress is linked with alleged violations of the core values and duties of the individual healthcare professional (Colville et al., 2019).

In ICUs it is typically difficult to predict the survival chances of critically ill patients, and nurses caring for such patients face far more morally distressing situations than those caring for patients with more stable conditions in other departments. ICU nurses face the twin demands of highly critical and complex biomedical service deliver alongside end-of-life issues such as sudden death, and they face moral dilemmas relating to aggressive and/or futile end-of-life interventions (Wenwen et al., 2018).

In such work environments, nurses run the risk of being involved in decisions that might be considered morally wrong (Babamohamadi et al., 2021), such as invasive interventions on patients with terminal illnesses, requesting pointless tests or examinations, inadequate and ineffective treatment by colleagues, a lack of organizational support, and absence of balance of power among healthcare professionals, all of which have been identified as causative factors in moral distress among nurses (Berhie et al., 2020; Emple et al., 2021; Heydari et al., 2018; Robaee et al., 2018). Other factors include giving life-supporting treatments that prolong the process of dying, and adhering to relatives’ directions to proceed with life-supporting medicines that may not be in the best interests of patients themselves (Wenwen et al., 2018). All of these factors lead to inability of healthcare team to reach consensus regarding to the plan of care for patients, resulting in team conflict and morally distressing situations (Vincent et al., 2020).

Furthermore, the unpredictable progress of diseases and the fear of infection to self and family members are additional factors contributing to moral distress among ICU nurses, which was starkly revealed during the COVID-19 pandemic (Romero-García et al., 2022). In such demanding environments, burnout and low morale affects ICU nurses’ mental and physical well-being, as well as their relationships with friends and family, and patient care (Witter et al., 2020).

The consequences of moral distress in ICU nurses can include sensations of rage, dissatisfaction, powerlessness, and guilt, which are associated with discouragement, burnout, anxiety, depression, deteriorating morale and teamwork, diminishing quality of care (QoC), and difficulties associated with patient safety, all of which relate to emotional and psychological reactions correlated with moral distress (Romero-García et al., 2022). Negative personal symptoms reported by ICU nurses include nightmares, insomnia, palpitations, and neck pain (Bani Issa et al., 2021; Soleimani et al., 2019). If nurses’ moral distress remains unresolved, they may become emotionally exhausted, which consecutively reduces the QoC they deliver to patients, and increases their intension to leave the profession (McAndrew et al., 2018).

As a significant issue in healthcare environments, moral distress requires prompt and rapid actions because of the danger it poses to ICU nurses’ capacity to deliver competent and ethical care, the wellbeing of service users, and the QoC provided to patients (Almutairi et al., 2019), so healthcare organizations should recognize related factors and devise solutions to prevent and resolve moral distress (Saleh et al., 2019). Nurse managers, administrators, and policy makers should implement evidence-based strategies to lower and eliminate nurse moral distress. A high-priority recommendation is for nursing leadership to provide rigorous supports such as structured debriefings, as well as a supportive environment for counselling services and staff education, with an emphasis on addressing moral distress and coping strategies (Dacar et al., 2019). Several interventional studies aimed at reducing moral distress provided insufficient evidence on the effectiveness of related interventions to reduce the level or frequency of moral distress (Dacar et al., 2019).

Decades of research have shown that moral distress is high; however, there is little evidence of effective interventions (Altaker et al., 2018). Gaining insight into the moral distress that nurses face is the first step toward deciding actions that can provide guidance and nurse retention, which is fundamentally important for the sustainability of healthcare systems (Karakachian and Colbert, 2019). A preliminary search of various databases such as PubMed, EBSCO, MEDLINE, and CINAHL in addition to textbooks and the Cochrane Library, revealed that several studies have been conducted to identify
factors that might contribute to moral distress in healthcare professionals working in ICUs, but relatively few have explored the factors that cause moral distress among ICU nurses per se.

Given the impact of moral distress among ICU nurses, patient safety, and QoC (Hou et al., 2021; Wenwen et al., 2018), it is crucial first to identify the factors that contribute to ICU nurses’ moral distress to guide healthcare organizations in developing resilience strategies to help ICU nurses cope with moral distress, and to pave the way for future research on practical interventions to address risk factors. Therefore, the aim of this scoping review is to present current knowledge on the factors that trigger moral distress and to guide future research by reviewing related studies to explore and summarize various factors that trigger moral distress in ICU nurses. The specific research questions that this scoping review seeks to address are:

1. What are the general characteristics of studies on factors contributing or correlated to moral distress among ICU nurses?

2. What are the factors contributing to moral distress among ICU nurses?

Methods
Scoping review methods
This scoping review presents the direction of existing and future studies by analysing the characteristics and contents of related research using the methodological framework of Arksey and O’Malley (2005) to review the factors that lead to moral distress. This method was chosen as a way for mapping the literature in this area, examining the breadth, scope, and nature of research activity, and identifying gaps in existing knowledge (Harris et al., 2015). The Preferred Reporting Items for Systematic Reviews and Meta-Analyses Extension for Scoping Reviews (PRISMA-ScR) checklist was used to report the present study (Ahmad et al., 2022).

Search methods
A comprehensive search was done in the academic research databases PubMed, EBSCO host, and CINAHL Plus to review articles published in the area under study. A recent systematic review on moral distress among healthcare professionals reported a steady increase in the volume of publications on the topic since 2010 (Lamiani et al., 2017). Therefore, the search in this study scope was limited to articles published in the period between January 2010 to July 2022, in order to be able to review the most recent and relevant available scientific evidence published in this field, and to have a comprehensive understanding of the area under study and identify gaps in recent literature.

Data were collected using the main keywords on moral distress, intensive care, and nurses.

Eligibility criteria
The inclusion and exclusion criteria are presented in Table 1. The inclusion criteria restricted the scope to peer-reviewed studies that provided results regarding factors identified as being causative in or correlated with moral distress among ICU nurses.

<table>
<thead>
<tr>
<th>Eligibility Criteria Following PCC</th>
<th>Inclusion</th>
<th>Exclusion</th>
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<tbody>
<tr>
<td>Participants</td>
<td>Intensive care nurses</td>
<td>Healthcare professional other than ICU nurses.</td>
</tr>
<tr>
<td>Concept</td>
<td>Factors that cause or contribute to moral distress</td>
<td>Concept</td>
</tr>
<tr>
<td>Context</td>
<td>1- Studies carried out in intensive care units</td>
<td>1- Studies on moral distress that does not include the factors that causes moral distress as outcome variable.</td>
</tr>
<tr>
<td></td>
<td>2- Adult, paediatric, and neonate patients</td>
<td>2- Studies that identify factors causes general psychological distress.</td>
</tr>
<tr>
<td></td>
<td>3- Peer-reviewed articles</td>
<td>Context</td>
</tr>
<tr>
<td></td>
<td>4- Published in English language</td>
<td>1- Studies carried out in clinical settings other than intensive care units.</td>
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</tbody>
</table>
nurses, published in English. Studies that identified factors causing general psychological distress, collection of the constructs from target groups other than ICU nurses, studies on moral distress that did not include factors causing moral distress as outcome variables, and articles published in languages other than English were excluded.

This scoping review considered both experimental and quasi-experimental study designs, along with analytical observational, descriptive observational, descriptive cross-sectional, and qualitative studies, focused on qualitative data including (but not limited to) designs such as phenomenology, grounded theory, ethnography, and qualitative description. In addition, systematic reviews that met the inclusion criteria were also considered.

Study selection
The search results were imported into EndNote X9 and were de-duplicated based on their titles, and the automatically identified duplicates were additionally double-checked manually. Two reviewers screened the results independently against the eligibility criteria. Discrepancies were resolved through discussions or asking a third reviewer.

Two reviewers also investigated the full texts of relevant search results against the same criteria (above) involving a third reviewer in cases of disagreement. At the full-text screening stage, the reference lists of the relevant studies were also analysed to identify potential additional relevant studies not gleaned from the database searching process. Since one study may be associated with multiple reports or publications, we kept a record and cited all the reports of a single study to provide a better overview of the new research evidence.

![Figure 1. PRISMA 2020 flow diagram for new systematic reviews in databases and registers.](image-url)
The initial search resulted in a total of 1,005 articles. After checking their titles and abstracts, 117 were excluded because the title of the study did not mention moral distress, 152 were excluded after reading the title (due to identifying non-eligibility factors), and 47 articles did not meet the eligibility criteria after reading their abstracts. Additionally, 618 articles were duplicates (and were removed), thus the remaining 71 articles were reviewed in full-text versions. This resulted in the exclusion of 54 articles due to their outcomes not including factors that caused moral distress or considering outcomes not specific to ICU nurses (e.g., those concerned with healthcare professionals in general or other specialties), thus 17 studies were eventually analysed (see Figure 1).

**Data analysis**

A data extraction form was created prior to data extraction to aid with the process (Ahmad *et al.*, 2022). The form included data about the year of publication, the objectives, the country, the study design, the author(s), the participants, the sample size, the tool used in the study, and the study’s findings. They were then divided into two categories for analysis, as follows: (1) general characteristics of the studies; and (2) outcome variables and findings, which demonstrated the main factors that contribute to moral distress among ICU nurses.

The general characteristics of the studies included country, measurement instrument, and study design, and results of the studies on factors contributing to moral distress were summarized, and the extracted data were documented with Microsoft Excel Version 2209 (Table 2).

Two reviewers read the included articles independently and repeatedly to gain an overall understanding of the factors contributing to moral distress. Each reviewer then independently constructed codes from the surface meaning of the text and collated it. The reviewers identified codes and themes from raw data using an inductive approach to organize the data, to reach consensus, a third reviewer resolved disagreements.

### Table 2. Summary review of included studies.

<table>
<thead>
<tr>
<th>Sample size</th>
<th>Country</th>
<th>Study design</th>
<th>Tool</th>
</tr>
</thead>
<tbody>
<tr>
<td>1- Prompahakul <em>et al.</em> (2021)</td>
<td>462 Thailand</td>
<td>Mixed-method</td>
<td>MMD-HP and interview</td>
</tr>
</tbody>
</table>

**Main findings**

(1) Powerlessness (at patients/family, team, and organizational-levels); (2) end-of-life issues, aggressive medical interventions at the terminal stage of life, futile actions, providing false hope to patients and families, unnecessary medical treatments; (3) poor team function

| 2- McAndrew *et al.* (2018) | 12 qualitative, 24 quantitative, and 6 mixed-methods studies | USA | Mixed-method review | Review paper |

**Main findings**

(1) Assisting incompetent physicians; (2) poor nurse/physician communication causing medication error; (3) unprofessional behaviour of physicians; (4) powerlessness in organizational context; (5) nursing autonomy; (6) organizational challenges; (7) communication problems; (8) moral decision-making and advocacy

| 3- Hiler *et al.* (2018) | 328 USA | Descriptive correlational | MDS-R |

**Main findings**

(1) Work environment; (2) futile care; (3) powerlessness at family level; (4) nurses’ personal characteristics

| 4- Altaker *et al.* (2018) | 238 USA | Descriptive correlational | Moral Distress Scale-Revised, Psychological Empowerment Index, Hospital Ethical Climate Survey, Palliative Care Delivery Questionnaire |

**Main findings**

(1) Lack of psychological empowerment; (2) negative ethical climate; (3) access to full palliative care team; (4) units size with more ICU beds
Table 2.  

<table>
<thead>
<tr>
<th>Sample size</th>
<th>Country</th>
<th>Study design</th>
<th>Tool</th>
</tr>
</thead>
<tbody>
<tr>
<td>5- Morley et al., 2022</td>
<td>21 UK</td>
<td>Qualitative</td>
<td>In-depth interview</td>
</tr>
</tbody>
</table>

Main findings

(1) Decision making hierarchy; (2) false reassurance; (3) ethical climate; (4) conflict between professional and personal responsibilities; (5) ability to advocate; (6) team dynamics

6- Browning (2013)

| 277 | Various (nurses on AACN's e-mail newsletter list) | Cross-sectional descriptive survey design | Moral Distress Scale, Psychological Empowerment Instrument |

Main findings

(1) Nurses' personal characteristics; (2) assisting incompetent physicians; (3) staff shortage; (4) aggressive treatment at end of life; (5) powerlessness at family level; (6) unnecessary medical treatment and tests; (7) false information to patient/family; (8) empowerment

7- Andersson et al. (2022)

| 71 | Swedish adult ICUs | Cross-sectional | Moral Distress Scale-Revised |

Main findings

(1) Futile care; (2) assisting physician or nurse who provided incompetent care; (3) ethical climate; (4) deceptive communication (false hope)

8- Shoorideh et al. (2012)

| 31 | Iran | Qualitative | Semi-structured, in-depth interviews of purposive sample |

Main findings

(1) Legal situations; (2) medical supervision (contradicting orders related to patient care among physicians); (3) accountability; (4) communication problems; (5) futile action, malpractice, and medical/care errors; (6) inappropriate responsibilities, resources, and competencies

9- Choe et al. (2015)

| 14 | South Korea | Qualitative | In-depth face-to-face interviews |

Main findings

(1) Ignoring patient autonomy; (2) unnecessary medical treatments; (3) compulsory application of restraints; (4) lack of ethical sensitivity; (5) nurses' limited autonomy; (6) conflicts with physicians; (7) conflicts with institutional policy

10- Sannino et al. (2019)

| 136 | Italy | Cross-sectional questionnaire survey | Moral Distress Scale Neonatal-Paediatric Version |

Main findings

(1) Incompetent healthcare providers; (2) aggressive medical interventions at the terminal stage of life; (3) nurses' personal characteristics; (5) number of deaths; (6) nurse with children report higher moral distress

11- Karanikola et al. (2014)

| 566 | Italy | Cross-sectional correlational design | Corley's Moral Distress Scale (CMDS) |

Main findings

(1) Nurse-physician collaboration and dissatisfaction on care decisions; (2) intention to resign (the frequency of occurrence of moral distress was associated with the intention of nurses to resign)

12- Asayesh et al. (2018)

| 117 | Iran | Cross-sectional with descriptive-correlation method | Futile Care Perception Questionnaire, Corley's Moral Distress Scale |

Main findings

(1) Futile care; (2) length of work experience (positive correlation)
Results

General characteristics of the included studies

Of the 17 studies, four were conducted in the US (23.5%), three in Italy (17.6%), three in Iran (17.6%), two in Canada (11.8%), one each in South Korea (5.9%), Sweden (5.9%), Thailand (5.9%), Turkey (5.9%), and the UK (5.9%), and one was a review study (Ahmad et al., 2022).

Regarding study design, 10 studies used a descriptive correlational design (58.8%), five used a qualitative design (29%), one used mixed-methods (5.8%), and one used an analytical review design (5.8%). Finally, regarding the measurement tools used to identify factors causing moral distress in critical care nurses, five quantitative studies used the 21-item Moral Distress Scale-Revised (29.4%), two used the 21-item Moral Distress Scale Neonatal-Pediatric Version (11.8%), two used the 32-item Moral Distress Scale (11.8%), and another study used the Jameton’s Moral Distress Questionnaire (5.8%). The mixed-methods design study used the Measure of Moral Distress for Healthcare Professionals (MMD-HP) (5.8%), whereas qualitative outcomes used semi-structured interviews in five studies (29.4%) and focus groups in one study (5.8%) (Table 3).

Factors contributing to moral distress among ICU nurses

Two reviewers grouped and categorized data from the primary independent coding of the articles; data were derived and grouped; disagreements were resolved through discussion in online meetings between the reviewers by the third reviewer; and the groups were organized into themes and subthemes. Four major themes of factors associated with moral distress in ICU nurses were identified: powerlessness, end-of-life care, ineffective teamwork, and personal characteristics of ICU nurses (Table 4).

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**Table 2. Continued**

<table>
<thead>
<tr>
<th>Sample size</th>
<th>Country</th>
<th>Study design</th>
<th>Tool</th>
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</thead>
<tbody>
<tr>
<td>13- Shoorideh &amp; Ashktorab (2015)</td>
<td>159 Iran</td>
<td>Descriptive-correlation research</td>
<td>ICU Nurses’ Moral Distress Scale, Copenhagen Burnout Inventory, Hinshaw and Atwood Turnover Scale</td>
</tr>
<tr>
<td><strong>Main findings</strong></td>
<td>Positive correlation with (1) nurses’ age; (2) work experience; (3) ratio to number of intensive care unit beds</td>
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14- Forozeiya et al. (2019) | 7 Canada | Qualitative | Semi-structured interviews |
| **Main findings** | (1) Low experience; (2) moral violations; (3) planning for end-of-life care; (4) withholding information from patients and families |

15- Karagozoglu et al., 2017 | 200 Turkey | Descriptive and cross-sectional | MDS-R |
| **Main findings** | (1) Inadequate communication within the team; (2) working with professionals they considered as incompetent; (3) futile care |

16- Henrich et al. (2016) | 23 ICU nurses Canada | Qualitative | Focus groups |
| **Main findings** | (1) Incompetent care from other staff and physicians; (2) aggressive medical interventions; (3) contradictory care plans; (4) deciding on the end of life; (5) interactions and conflicts between staff and family; (6) lack of support from management; (7) lack of resources; (8) poor communication |

17- Sannino et al. (2015) | 472 Italy | Cross-sectional | Moral Distress Scale Neonatal-Pediatric Version |
| **Main findings** | (1) Aggressive medical interventions for ventilator-dependent children |
Table 3. General characteristics of the included studies.

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>n</th>
<th>%</th>
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<tbody>
<tr>
<td>Measurement Instrument</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21-item Moral Distress Scale-Revised</td>
<td>5</td>
<td>29.4%</td>
</tr>
<tr>
<td>21-item Moral Distress Scale Neonatal-Paediatric Version</td>
<td>2</td>
<td>11.8%</td>
</tr>
<tr>
<td>32-item Moral Distress Scale</td>
<td>2</td>
<td>11.8%</td>
</tr>
<tr>
<td>Jameton's Moral Distress Questionnaire</td>
<td>1</td>
<td>5.8%</td>
</tr>
<tr>
<td>MMD-HP</td>
<td>1</td>
<td>5.8%</td>
</tr>
<tr>
<td>Semi-structured interviews</td>
<td>5</td>
<td>29.4%</td>
</tr>
<tr>
<td>Focus groups</td>
<td>1</td>
<td>5.8%</td>
</tr>
<tr>
<td>Analytical review</td>
<td>1</td>
<td>5.8%</td>
</tr>
<tr>
<td>Country of the Study</td>
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<tr>
<td>Canada</td>
<td>2</td>
<td>11.8%</td>
</tr>
<tr>
<td>Iran</td>
<td>3</td>
<td>17.6%</td>
</tr>
<tr>
<td>Italy</td>
<td>3</td>
<td>17.6%</td>
</tr>
<tr>
<td>South Korea</td>
<td>1</td>
<td>5.9%</td>
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<tr>
<td>Sweden</td>
<td>1</td>
<td>5.9%</td>
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<tr>
<td>Thailand</td>
<td>1</td>
<td>5.9%</td>
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<tr>
<td>Turkey</td>
<td>1</td>
<td>5.9%</td>
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<tr>
<td>UK</td>
<td>1</td>
<td>5.9%</td>
</tr>
<tr>
<td>USA</td>
<td>4</td>
<td>23.5%</td>
</tr>
<tr>
<td>Design</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Descriptive correlational design</td>
<td>10</td>
<td>58.8%</td>
</tr>
<tr>
<td>Qualitative design</td>
<td>5</td>
<td>29.4%</td>
</tr>
<tr>
<td>Mixed-method</td>
<td>1</td>
<td>5.8%</td>
</tr>
<tr>
<td>Analytical review design</td>
<td>1</td>
<td>5.8%</td>
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</table>

Table 4. Thematic analysis.

<table>
<thead>
<tr>
<th>Main Themes</th>
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<tbody>
<tr>
<td>1- Powerlessness</td>
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<td></td>
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<tr>
<td>Sub-Theme: Strong hierarchical relationship (McAndrew et al., 2018; Morley et al., 2022; Prompahakul et al., 2021)</td>
<td></td>
</tr>
<tr>
<td>Sub-Theme: Lack of empowerment (Altaker et al., 2018; Browning, 2013; Henrich et al., 2016; McAndrew et al., 2018; Morley et al., 2022)</td>
<td></td>
</tr>
<tr>
<td>Sub-Theme: Negative ethical climate (Altaker et al., 2018; Andersson et al., 2022; Choe et al., 2015; Forozeiya et al., 2019; McAndrew et al., 2018; Morley et al., 2022; Prompahakul et al., 2021; Shoorideh et al., 2012)</td>
<td></td>
</tr>
<tr>
<td>Sub-Theme: Poor staffing ratio (Altaker et al., 2018; Browning, 2013; Shoorideh et al., 2012; Shoorideh &amp; Ashktorab, 2015)</td>
<td></td>
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<tr>
<td>Sub-Theme: Nurse autonomy (Choe et al., 2015; McAndrew et al., 2018; Prompahakul et al., 2021)</td>
<td></td>
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<tr>
<td>Sub-Theme: Treatment plan directed by patient family (Browning, 2013; Henrich et al., 2016; Hiler et al., 2018; McAndrew et al., 2018; Prompahakul et al., 2021)</td>
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<tr>
<td>2- End of life Care</td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Sub-Theme: Aggressive interventions at the terminal stage of life (Browning, 2013; Henrich et al., 2016; Prompahakul et al., 2021; Sannino et al., 2015, 2019)</td>
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</table>
Table 4. Continued

<table>
<thead>
<tr>
<th>Futile actions</th>
<th>Providing false hope and information</th>
<th>Planning end of life care</th>
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</thead>
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<tr>
<td>(Andersson et al., 2022; Asayesh et al., 2018; Choe et al., 2015; Hiler et al., 2018; Karagozoglu et al., 2017; Prompahakul et al., 2021; Shoorideh et al., 2012)</td>
<td>(Andersson et al., 2022; Browning, 2013; Choe et al., 2015; Forozeiya et al., 2019; Morley et al., 2022; Prompahakul et al., 2021)</td>
<td>(Forozeiya et al., 2019; Henrich et al., 2016)</td>
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3- Ineffective Team Function

<table>
<thead>
<tr>
<th>Sub-Themes</th>
</tr>
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<tbody>
<tr>
<td>Poor communication and collaboration</td>
</tr>
<tr>
<td>(Choe et al., 2015; Henrich et al., 2016; Karagozoglu et al., 2017; Karanikola et al., 2014; McAndrew et al., 2018; Prompahakul et al., 2021; Shoorideh et al., 2012)</td>
</tr>
</tbody>
</table>

4- Personal Characteristics

| (Altaker et al., 2018; Asayesh et al., 2018; Browning, 2013; Forozeiya et al., 2019; Hiler et al., 2018; Sannino et al., 2015, 2019; Shoorideh & Ashktorab, 2015) |

Discussion

The intensive care unit is a chaotic and stressful setting in which nurses are constantly confronted with disruptive factors that expose them to moral distress. This is an overwhelming environment of increasing daily admissions, transfer, and deaths; these particular stressors exacerbate underlying weaknesses common in healthcare systems worldwide, such as low nurse-patient ratios, overwork, burnout, and poor life-work balance etc., all of which are independently related with an increase in the absolute value of the moral distress of ICU nurses (Sannino et al., 2019).

From the results of the present scoping review, it is clear that there are several factors that can lead to moral distress in critical care nurses, all of which negatively affect their personal and professional lives, and consequently the QoC they deliver, resulting in poorer patient outcomes (including clinical prognosis and wellbeing), service user satisfaction, and health system efficiency.

Powerlessness

Almost all of the articles in this review indicated that the powerlessness of ICU nurses in the face of organizational obstacles and constraints is one of the main causes of their moral distress while working with patients (Altaker et al., 2018; Andersson et al., 2022; Browning, 2013; Choe et al., 2015; Epstein et al., 2019; McAndrew et al., 2018; Morley et al., 2022; Prompahakul et al., 2021; Sannino et al., 2019; Shoorideh et al., 2012).

The most important factor contributing to differences in levels of moral stress was the prevailing ethical climate, with the creation of a positive ethical climate in the organization being associated with lower levels of moral stress (Altaker et al., 2018). ICU nurses described discomfort when work-related tasks interfered with their ability to advocate for patients (i.e., to provide holistic nursing care), or when the economic benefit of the hospital was seen as taking precedence over respect for human life and rights (e.g., when patients were forced to be discharged or transferred regardless of their condition).

Related to their perceived powerlessness (Prompahakul et al., 2021), emphasized that nurses experienced moral distress within strong hierarchical organizations, wherein they lacked organizational support, which is one of the most important indicators of nursing work satisfaction. The power imbalance between nurses and medical healthcare professionals was related to hierarchical structures favouring the latter by McAndrew et al. (2018), who emphasized that medical values predominate over nursing values in the organizations in which they work, inhibiting nurses from executing their holistic role, and impeding the development of advanced nursing practice and nursing advocacy for patients in care decisions. The decision-making hierarchy often encourages physicians to ignore and disregard nurses’ opinions regarding patient care, contributing to the nurses’ moral distress (Morley et al., 2022; Shoorideh et al., 2012).
From the results of this review, it was found that there was a strong hierarchical relationship between healthcare providers in the facilities where the studies were conducted. ICU nurses who are morally challenged felt powerless and helpless to stop treatment that they believed was ethically wrong, or where the care delivered did not meet required standards (McAndrew et al., 2018; Morley et al., 2022; Prompahakul et al., 2021). On this basis, we can emphasize the importance of a culture that promotes nurse autonomy and collaboration in decision-making related to patient care in different healthcare settings. Nurses perceived themselves as having little authority to make treatment decisions within the healthcare team. In many situations, nurses knew what was best for patients, but were unable to act due to a lack of practice and independence (Prompahakul et al., 2021). Concerns have been raised about the negative relationship between moral distress and autonomy and collaboration. Poor communication and collaboration can have serious consequences for patients and families if nurses do not feel valued in their professional interactions (McAndrew et al., 2018).

Inadequate resources, such as medical supplies, accessible beds, and staff, were another source of moral distress at the organizational level, as they undermined nurses’ ability to provide the best possible care to patients (Henrich et al., 2016; Prompahakul et al., 2021). Specific safety risks were reported, such as one case in which management pressed nurses to care for three patients at once, while also providing break relief for a fourth patient, which the nurses did not believe was safe (Henrich et al., 2016).

Nurse empowerment and organizational support appear to be important factors in reducing moral distress among ICU nurses (Altaker et al., 2018; Browning, 2013; Henrich et al., 2016; McAndrew et al., 2018; Morley et al., 2022; Prompahakul et al., 2021; Shooredib et al., 2012). A study conducted to examine the relationship between moral distress and psychological empowerment among critical care nurses found that the total psychological empowerment score was negatively correlated with the frequency of moral distress, and multiple regression analysis revealed that empowerment was a significant predictor of the frequency of moral distress (Browning, 2013).

Empowerment of the individual nurse has been the focus of numerous educational interventions, particularly in the area of end-of-life care and team building, but has not resulted in a reduction in moral distress levels (Altaker et al., 2018), implying that more knowledge and perceptions of empowerment are not sufficient to reduce the moral burden of ICU nurses; actual implementation of nurse empowerment in the organization is required to reduce ICU nurse moral distress, although a roadmap to facilitate this remains lacking.

The powerlessness of ICU nurses described above was not limited to their interactions with other healthcare professionals and organizational administrators but extended to their exchanges with service users. Several studies indicated that inappropriate and unnecessary treatments directed by patients’ family members were among the main causes of moral distress among nurses (Browning, 2013; Henrich et al., 2016; McAndrew et al., 2018; Prompahakul et al., 2021). Surrogates are influential decision makers in some countries when patients lack decision-making capacity, which is relatively common in ICU, and healthcare professionals can be subject to legal action if they do not adhere to surrogates’ wishes, even if they perceive these to be contrary to the interests of the patients themselves. As a result, some participants expressed moral concerns when they knew that the decision chosen was inappropriate for a patient, but they had no choice but to follow the surrogate’s decision because of the latter’s power within the care decision-making process (Prompahakul et al., 2021).

This may be related to prosaic issues related to the amenities offered to service users by critical care facilities. Families often have an interest in maximizing patients’ stay and treatment in ICU, where healthcare professionals undertake all care activities (including for activities of daily living), and which are usually under the umbrella of ICU medical costs covered by insurance schemes, thus families may ignore options to transfer patients to other units or even to discharge them from hospital when the nurse may consider this to be the best option for the patient.

In other studies, it was found that some patients’ family members refused treatment for financial reasons, or because of the burden of caring for a patient, even if the patient had a high chance of recovery. In such cases, physicians often agreed to discontinue treatment without first attempting to convince the patients’ families, which angered nurses because they had no control over the situation (Choe et al., 2015; Prompahakul et al., 2021).

**End-of-life care**

The reviewed studies concurred that moral distress was common among ICU nurses during the end-of-life decision-making process (Browning, 2013; Forozieya et al., 2019; Henrich et al., 2016; Prompahakul et al., 2021; Sannino et al., 2015, 2019). Almost 80% of the morally distressing situations mentioned by participants in Prompahakul et al.’s (2021) study were end-of-life situations, including unnecessary medical treatments, futile actions, and giving false hope to patients at the end-of-life. From the results of this review, it was found that there was a strong hierarchical relationship between healthcare providers in the facilities where the studies were conducted. ICU nurses who are morally challenged felt powerless and helpless to stop treatment that they believed was ethically wrong, or where the care delivered did not meet required standards (McAndrew et al., 2018; Morley et al., 2022; Prompahakul et al., 2021). On this basis, we can emphasize the importance of a culture that promotes nurse autonomy and collaboration in decision-making related to patient care in different healthcare settings. Nurses perceived themselves as having little authority to make treatment decisions within the healthcare team. In many situations, nurses knew what was best for patients, but were unable to act due to a lack of practice and independence (Prompahakul et al., 2021). Concerns have been raised about the negative relationship between moral distress and autonomy and collaboration. Poor communication and collaboration can have serious consequences for patients and families if nurses do not feel valued in their professional interactions (McAndrew et al., 2018).

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patients and families at the end of life. According to Henrich et al. (2016), nurses were concerned when aggressive care continued, even when the decision to switch to comfort care was made, when the decision was made on a weekend or at night; physicians commonly wanted to wait until after the weekend or until the next morning to implement the plan, for their own convenience rather than patients’ best interests. This finding was confirmed by Prompahakul et al. (2021), who found that ICU nurses were disturbed when they saw patients suffering as a result of overly aggressive and unnecessary treatments that they believed were not in the best interest of the patient.

Futile care has been described in several studies as a factor that triggers moral distress among ICU nurses (Andersson et al., 2022; Asayesh et al., 2018; Hiler et al., 2018; Karagozoglu et al., 2017; Prompahakul et al., 2021; Shoorideh et al., 2012). Futile care can be defined on the basis of survival or subsequent quality of life, and includes aggressive treatments or end-of-life interventions in patients with very low life expectancy or chance of recovery (Asayesh et al., 2018). According to Shoorideh et al. (2012), ICU nurses suffer moral distress due to unnecessary testing, unnecessary and expensive medications for patients nearing the end of life, unnecessary counselling, and cardiopulmonary resuscitation (Shoorideh et al., 2012). In critical care, the failure to set limits on futile treatments may exacerbate the experience of moral suffering in nurses (McAndrew et al., 2018).

Deceptive information and false hope for patients and relatives were cited in several studies as a distressing act that caused moral distress for ICU nurses (Andersson et al., 2022; Browning, 2013; Forozeiya et al., 2019; Morley et al., 2022; Prompahakul et al., 2021). Nurses’ distress over withholding information from patients’ families was compounded by a stark discrepancy between what they saw physicians say directly to families and what they then said in private (Forozeiya et al., 2019), affirming a point highlighted by Choe et al. (2015). This information-framing resulted in families not receiving a complete picture of their patients’ deteriorating condition, leading to prolonged and aggressive care for dying patients. End-of-life care planning, including how physicians plan for end-of-life care and the extent of family involvement in end-of-life care decisions, was another aspect identified in two studies as contributing to moral distress (Forozeiya et al., 2019; Henrich et al., 2016).

**Ineffective team function**

Related to the hierarchical powerlessness described previously, poor communication and lack of cooperation with other healthcare professionals (particularly physicians) in caring for critically ill patients was a major cause of moral distress among ICU nurses in the articles reviewed (Choe et al., 2015; Henrich et al., 2016; Karagozoglu et al., 2017; Karanikola et al., 2014; McAndrew et al., 2018; Prompahakul et al., 2021; Shoorideh et al., 2012). When nurses reported higher levels of moral distress, they cited communication with the physician as a cause of medication errors (McAndrew et al., 2018). Similarly, Henrich et al. (2016) emphasized that ineffective physician communication with families was identified by nurses and other health professionals as a source of distress.

Distress from not being heard during inter-professional conversations about end-of-life care typically magnified ICU nurses’ sense of powerlessness, despair, and frustration (McAndrew et al., 2018). Many studies highlighted many inappropriate peer behaviours that increased feelings of moral distress (McAndrew et al., 2018; Morley et al., 2022; Prompahakul et al., 2021). Neglecting patients and treating them unequally due to social hierarchy are unethical and morally questionable behaviours that triggered moral distress when encountered (Prompahakul et al., 2021).

Working with incompetent healthcare providers was another problem addressed in several studies (Andersson et al., 2022; Browning, 2013; Henrich et al., 2016; Karagozoglu et al., 2017; McAndrew et al., 2018; Prompahakul et al., 2021; Sannino et al., 2019). The nurses in the study conducted by Prompahakul et al. (2021) noted that their colleague’s incompetence threatened the patient’s integrity due to delayed treatment or inappropriate pain management. In another study, supporting a physician who provides incompetent care was found to be one of the main causes of the frequency and intensity of moral distress experienced by ICU nurses (McAndrew et al., 2018).

In two studies, conflicting care plans of the attending physicians for critically ill patients were cited as a cause of moral distress (Henrich et al., 2016; Shoorideh et al., 2012). Henrich et al. (2016) highlighted that the constant change in the care plan each week as new attending physicians took responsibility for patients was very stressful, as nurses had to explain to families why the direction of care had changed, especially if they disagreed with the change.

According to recent data, formal communication processes that involve the entire team in departmental ethics discussions and nursing rounds, or that provide ethics or morale-boosting counselling services, can reduce factors contributing to moral distress (Altaker et al., 2018, p. 300).
Personal characteristics

Based on the findings of the current review, the personal characteristics of nurses may play an important role in moral distress. Hiler et al. (2018) concluded that the age of ICU nurses was a statistically significant predictor of the severity of moral distress experienced (i.e., age was negatively correlated with moral distress). Similar findings were highlighted by Sannino et al. (2019), as they found a negative moderate correlation between ICU nurses’ age and level of moral distress. However, Browning (2013) reached the opposite conclusion, finding a positive relationship between the age of ICU nurses and their moral distress, emphasizing that the intensity of moral distress increased with the age of the nurse.

Nurses with a higher educational level were found to experience higher intensity of moral distress than those with relatively less education in a study by Altaker et al. (2018, p. 299), while Shoorideh and Ashktorab (2015) found no significant correlation.

A negative correlation was found between duration of caregiving experience and level of moral distress by Patrizio Sannino et al. (2019, p. 5), contrary to the results of other studies which reported a positive correlation between work experience and the level of moral distress (Asayesh et al., 2018; Shoorideh & Ashktorab, 2015).

McAndrew et al. (2018) found that female nurses reported more moral distress than their male counterparts, while Shoorideh and Ashktorab (2015) found no significant correlation between gender and moral distress. Conversely, Sannino et al. (2015) reported that male nurses experienced a higher level of moral distress in a significantly higher percentage of cases than female nurses.

Limitations

The literature included comprised full-text and research studies, so the content available in philosophical treatises, editorials, and dissertations could have extended the findings reported in this article.

Because the focus of the study was mainly on critical care settings, any generalizations of the findings are applicable only to this area of practice. However, by including neonatal and paediatric critical care nurses’ experiences in this study, the findings could be generalized to a broader range of critical care nurses.

Conclusion

This review has highlighted the factors that contribute to moral distress in critical care nurses. Many of the associated factors are due to the organizational climate and the nature of the ICU clinical environment. It is suggested that further studies should be conducted to examine the effects of some variables on moral distress, such as nurse autonomy, job satisfaction, length of duty hours, and nurses’ personal characteristics, which might exacerbate or cause moral distress.

Therefore, descriptive and intervention studies, including both experimental and action research, are needed to investigate the causal relationship between the identified variables, and to determine the best strategy to help ICU nurses cope with and reduce the intensity of moral distress. Comparative studies are required to better understand the actual factors associated with moral distress, such as comparing the intensity of moral distress and contributing factors with a Magnet hospital, to examine the impact of organizational factors designed to improve nursing satisfaction and retention on moral distress.

Data availability

Underlying data


The project contains the following underlying data:

- File 1- PubMed search strategy performed July 13, 2022.jpg. (Search strategy used in this study).
- Figure 1-PRISMA 2020 flow diagram.jpg. (Flowchart of study).
- Table 1 – Eligibility criteria.jpg. (Inclusion criteria for studies).
- Table 2 – Summary of included articles.docx. (List of final 17 articles in results).
• Table 3 – General characteristics of included studies.jpg. (Characteristics of 17 final studies).
• Table 4 – Content analysis.jpg. (Content analysis of final 17 studies).

Extended data

This project contains the following extended data:

• Blank example of data extraction form.xlsx (blank extraction form used in this study).

Reporting guidelines

Data are available under the terms of the Creative Commons Zero “No rights reserved” data waiver (CC0 1.0 Public domain dedication).

References


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