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Research Article

Critical care nurses' perception of moral distress in intensive care during the COVID-19 pandemic – A pilot study

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ABSTRACT

Objectives: To describe critical care nurses' perception of moral distress during the second year of the COVID-19 pandemic.
Design/Methods: A cross-sectional study involving a questionnaire was conducted. Participants responded to the Italian version of the Moral Distress Scale-Revised, which consists of 14 items divided in dimensions Futile care (three items), Ethical misconduct (five items), Deceptive communication (three items) and Poor teamwork (three items). For each item, participants were also invited to write about their experiences and participants' intention to leave a position now was measured by a dichotomous question. The data were analysed with descriptive statistics and qualitative content analysis. The study followed the checklist (CHERRIES) for reporting results of internet surveys.
Setting: Critical care nurses ($n = 71$) working in Swedish adult intensive care units.
Results: Critical care nurses experienced the intensity of moral distress as the highest when no one decided to withdraw ventilator support to a hopelessly ill person (Futile care), and when they had to assist another physician or nurse who provided incompetent care (Poor teamwork). Thirty-nine percent of critical care nurses were considering leaving their current position because of moral distress.
Conclusions: During the COVID-19 pandemic, critical care nurses, due to their education and experience of intensive care nursing, assume tremendous responsibility for critically ill patients. Throughout, communication within the intensive care team seems to have a bearing on the degree of moral distress. Improvements in communication and teamwork are needed to reduce moral distress among critical care nurses.

Implications for clinical practice

- Moral distress has impact on critical care nurses provision of nursing care during the COVID-19 pandemic. It also influences nurses' feeling of doing, or not doing, a "good" work. Therefore, situations when nurses feel they do not provide a "good" work need to be handled in the organization through ethical reflections.
- Healthcare organisations need to create supportive structures and leadership that will.
- Enhance communication involving nurses, physicians, patients and patient's relatives.
- Communication, or lack of communication, seem to play a significant role in situations that ultimately lead to moral distress. Training communication skills within the intensive care team might be one way to decrease nurses moral distress.

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Introduction

The COVID-19 pandemic has placed extraordinary pressure on health systems around the world and many people have become critically ill and required care in intensive care unit (ICU) (Chuang et al., 2020; Livingston et al., 2020; Simpson and Robinson, 2020). Before the COVID-19 pandemic, patients' relatives were welcomed to be with the patient in the ICU. This was seen as benefits for the patient, the patient's relatives, and the ICU staff (Engström, 2008). During the COVID-19 pandemic, the World Health Organization (2020) recommended that health systems not allow relatives to visit critically ill patients with COVID-19 due to the highly contagious nature of the illness.

To improve critical care nurses' (CCNs) ability to care for patients requiring intensive interventions, hospitals have increased the number of available ICU beds and have sometimes also set up temporary ICUs (Andersson et al., 2021; Maves et al., 2019). CCNs have worked with general care nurses to meet care demands and to increase the total number of patients they are able to treat (Andersson et al., 2021; Cadge et al., 2021; Halpern et al., 2020). CCNs had to quickly adapt to new physical workspaces, co-workers, limited resources, hospital guidelines and treatment protocols (Andersson et al., 2021; Cadge et al., 2021; Lai et al., 2020; Vincent and Creteur, 2020). They were also forced to contend with inadequate personal protective equipment and their obligations to provide nursing care for patients (Brown, 2020). Recent research (Donkers et al., 2021; Petrișor et al., 2021; Rodriguez-Ruiz et al., 2021; Silverman et al., 2021) have described health care professionals such as CCNs experiencing moral distress because COVID-19 pandemic created new challenges for CCNs.

Moral distress may affect moral integrity, ability to deliver care with quality and intention to resign (Asgari et al., 2019; Henrich et al., 2017; Colville et al., 2018; Oh and Gastmans, 2013). Moral distress arises when an individual knows what the right thing to do is, but institutional constraints make it nearly impossible to pursue the right course of action and to act in accordance with their ethical values (Boyle and Bush, 2018; Jameton, 1985). Jameton's definition describes moral distress in psychological–emotional–physiological terms and is linked to the presence of constraint on nurses' moral agency (McCarthy and Gastmans, 2014). According to Epstein and Hamric (2009) the intensity of the experience of moral distress increases to a point and then decreases as the acute phase of the moral distress situation passes – the crescendo of moral distress. However, the feelings and personal discord from the moral distressing situation continue after the situation is over and this residual distress acts as a new baseline from which the next crescendo of moral distress builds (Epstein and Hamric, 2009). This might cause damage over time, especially when the person is repeatedly exposed to moral distressing situations (Epstein and Hamric, 2009; McCarthy and Gastmans, 2014).

Moral distress triggers have been identified at three levels: patient-level factors, which include the patient and/or their relatives; unit/team-level factors, such as poor communication or inadequate collaboration between team members; and system-level factors, which include actions that occur outside the unit, such as poor staffing, pressure to reduce costs and inadequate resources (Hamric and Epstein, 2017). Being forced to compromise on patient safety or the quality of care due to lack of time or resources could trigger moral distress (de Boer et al., 2015).

Intensive care units are described as 'the frontline of a war' against the COVID-19 disease (Selman et al., 2020), and CCNs serving on the frontlines of this war are engaged with some of the most challenging ethical issues of our time (Gallagher, 2020). Given the increasing demand on an already overstretched healthcare workforce, it is essential that the magnitude of moral distress during the COVID-19 pandemic is assessed. The aim of this study was to describe critical care nurses' perceptions of moral distress during the second year of COVID-19 pandemic.

Methods

Design

A cross-sectional study involving an online questionnaire was conducted with a sample of Swedish CCNs. The study used a convergent mix-method design (Creswell et al., 2011), and followed the checklist for reporting results of internet surveys (CHERRIES) (Eysenbach, 2004). The study was also used to pilot test the questionnaire's construct validity and psychometric properties and is a manuscript under review.

Setting

The study was conducted in Sweden and focused on CCNs who were working in ICUs during the second year of the COVID-19 pandemic. In Swedish ICUs, the nurse-to-patient ratio is normally 1:1-2 and the ICU team caring for critically ill patients consists of CCNs, enrolled nurses, specialist physicians, and physiotherapists. During the COVID-19 pandemic several ICUs in Sweden temporarily needed to change the competence mix in the ICU team and include anesthesia nurses and registered nurses without post-graduate education.

Ethical approval

The participants received information concerning the study's aim, confirmation that participation was voluntary and that their identity would be kept confidential. By answering the questionnaire, participants agreed to the terms of publishing. This procedure corresponds to the World Medical Association's (2020) ethical principles. There was no need for ethical approval since the Swedish Ethical Review Act (2003:406) only include studies that handle sensitive data and patient data.

Participants

Participants were CCNs working in ICUs who met the following inclusion criteria: They were employed as a registered nurse and had a post-graduate education within intensive care on an advanced level (Marshall et al., 2017). A total of 135 participants responded to the questionnaire and of those, 71 participants met the inclusion criteria and completed every question in the questionnaire. It was not possible for single participant to fill in the same questionnaire multiple times. Participant characteristics were gender, age, household, and the number of years of experience in ICU (see Table 1).

Table 1
Demographic characteristics of ICU CCNs during second year of COVID-19 pandemic (n = 71).

Variable		*n* (%)
Sex	Female	58 (82)
	Male	11 (15)
	Unknown	2 (3)
Age	≤25 years	1 (1)
	26– 35 years	18 (26)
	36– 45 years	25 (35)
	46– 55 years	19 (27)
	≥56 years	8 (11)
Household	Living alone without children	13 (18)
	Living alone with children	11 (16)
	Co-habiting without children	10 (14)
	Co-habiting with children	37 (52)
ICU Experience	≤5 years	22 (31)
	6– 10 years	16 (22)
	11– 15 years	14 (20)
	≥16 years	19 (27)

Measures

Moral distress was measured with the Italian version of the Moral Distress Scale-Revised (MDS-R) (Lamiani et al., 2017). The MDS-R has been identified as one of the most useful and appropriate instruments for research purposes (Giannetta et al., 2020; Lamiani et al., 2017). The original version of MDS was developed by Corley et al. (2001) and Hamric and Blackhall (2007) revised the MDS (MDS-R) including two aspects of moral distress: frequency and intensity. For the Italian version of MDS-R, the Cronbach's alpha coefficient was 0.81 and the model accounts 59% of the total variance (Lamiani et al. (2017).

The Italian version of MDS-R consists of 14 items divided into four dimensions: Futile care (three items), Ethical misconduct (5 items), Deceptive communication (three items) and Poor teamwork (three items). The frequency (i.e., how often situation arose) and level of intensity (i.e., how disturbing the situation was when it occurred) of each item was evaluated using a five-point Likert scale; frequency ranged from 0 (never) to 4 (very frequently) and the level of disturbance ranged from 0 (none) to 4 (to a great extent). Previous research using MDS-R (Lamiani et al., 2017) or variations of the scale (Donkers et al., 2021; Petrișor et al., 2021; Rodriguez-Ruiz et al., 2021) are reported with a total score for each item meaning the frequency and intensity is computed by multiplying the two scores. However, reporting the two aspects of moral distress separately could provide further knowledge about the nuances of moral distress. For each item, participants were also invited to write about their experiences without any imposed limitation on the number of words or amount of space.

Brislin's (1970) translation model guided the process of translation of the Italian version of MDS-R. The questionnaire was translated from Italian to Swedish by a bilingual translator with Italian as native language and experiences of Swedish health care. Back translation from Swedish to Italian was done by the translator and the members of the research team and discussed for consensus. To test face and content validity, four experienced CCNs were asked to judge whether the items were understandable and clear. It resulted in minor linguistic and layout changes. The questionnaire included an additional question; *"Are you considering leaving your current position because of moral distress?"*.

Data collection

The study participants were recruited in May and June of 2021 through an announcement posted in nursing groups on the Facebook social media platform. Information about the study and a link to the questionnaire was presented on the Facebook pages of the Swedish Association for Anaesthesia and Critical Care nurses (1,900 followers), the Intensive Care Nurse (633 followers) and the Registered Nurse (34,300 followers). Two reminders were posted on each webpage. These specific nursing groups were used due to their focus on intensive care. However, the nursing groups are public on the Facebook social media platform and might have followers from general nursing care and other specialities as well. The data collection took place from May 2021 to June 2021.

Data analysis

The CCNs' demographics, their perceptions of the frequency and intensity of morally distressing situations, and their intentions to leave a position were examined with descriptive statistics. We analysed CCNs' commentary from each item ($n = 14$) in the four dimensions with a manifest approach using the qualitative content analysis delineated by Elo and Kyngäs (2008). The answers were read several times by the three researchers to obtain a comprehensive understanding thereof. The data were condensed and coded under the four dimensions; Futile care, Ethical misconduct, Deceptive communications, and Poor teamwork. All researchers were involved in the analysis process and any disagreement in coding were resolved by discussion in the research team until consensus was reached.

Results

The results are presented as mean values for each item including frequency and intensity in the dimensions Futile care, Ethical misconduct, Deceptive communication and Poor teamwork. The items in each dimension are presented from highest to lowest frequency (see Table 2). The analysis of the CCNs commentary from each item is sorted into the four different dimensions.

Futile care

CCNs perceived "Continuing to participate in the care of a hopelessly ill person…" as a morally distressing scenario with high frequency (Mean 2.23 SD 1.13) and intensity (Mean 3.06 SD 1.23). There were situations when CCNs have raised questions regarding continued care and prognosis for which the physicians were unprepared. The physicians sometimes listened to these concerns and discussed them with other physicians, or they were ignored, and treatments continued until change of shift.

CCNs also described experiences of, "Initiating extensive life-saving actions…" (frequency = Mean 1.99 SD 1.06; intensity = Mean 2.91 SD 1.15). This often occurred before all the facts were known or before the responsible physician was present. Prolonged care was viewed as something that benefited relatives, because it provided the necessary time for them to say goodbye to loved one. CCNs explained that ICU

Table2
CCN perceptions of frequency† and intensity‡ of morally distressing scenarios (n = 71).

Dimensions with Item	Mean (SD)	
	Frequency	*Intensity*
Dimension: Futile Care		
6. Continue to participate in the care of a hopelessly ill person who is being sustained on a ventilator when no one will make a decision to withdraw support	2.23 (1.13)	3.06 (1.23)
3. Initiate extensive life-saving actions when I think they will only prolong death	1.99 (1.06)	2.91 (1.15)
2. Follow the family's wishes to continue life support, even though I believe it is not in the best interest of the patient	1.72 (1.10)	2.68 (1.27)
Dimension: Ethical Misconduct		
5. Feel pressure from others to order what I consider to be unnecessary tests and treatments	1.63 (1.07)	1.91 (1.21)
9. Increase the dose of sedatives/opiates for an unconscious patient when I believe doing so could hasten the patient's death	1.04 (1.07)	1.07 (1.18)
7. Avoid taking action when I learn that a physician or nursing colleague made a medical error and did not report it	1.03 (0.85)	2.17 (1.27)
11. Follow the family's wishes for the patient's care when I do not agree with them because of the fear of a lawsuit	0.61 (0.94)	1.57 (1.58)
10. Take no action on an observed ethical issue because the involved staff member or someone in a position of authority requested that I do nothing	0.43 (0.79)	1.29 (1.54)
Dimension: Deceptive Communication		
1. Witness healthcare providers giving 'false hope' to the patient or family	1.52 (1.04)	2.29 (1.26)
14. Ignore situations in which patients were not given adequate information to ensure informed consent	0.88 (0.99)	1.37 (1.22)
4. Follow the family's request not to discuss death with a dying patient when they ask about dying	0.59 (0.75)	1.79 (1.42)
Dimension: Poor Teamwork		
12. Watch patient-care quality suffer because of a lack of provider continuity	2.43 (1.21)	2.67 (1.22)
13. Witness diminished patient-care quality due to poor team communication	2.07 (1.15)	2.66 (1.14)
8. Assist another physician or nurse who, in my opinion, is providing incompetent care	2.04 (1.22)	3.01 (1.30)

†*Frequency* ranges from 0 (never) to 4 (very frequently)
‡*Intensity* ranges from 0 (none) to 4 (to a great extent)
Items ranging from highest to lowest frequency in each dimension

team often had a good understanding of the patient's condition and background and a good dialogue with one another when decisions related to treatment limitations needed to be made. However, the CCNs were sometimes accused by physicians of having a pessimistic view of patients' recovery. CCNs perceived that several patients who had received long-term care in the ICU died when they arrived at hospital wards, and this caused moral distress among CCNs. However, they realized that it was not easy for a physician to predict whether a patient would be able to recover or not.

CCNs perceived lowest frequency (Mean 1.72 SD 1.10) and intensity (Mean 2.68 SD 1.27) in the item "Following the family's wishes to continue life support…". CCNs experienced that relative sometimes insist that medical care should continue, despite a poor prognosis and suffering by the patient. They described time-consuming processes requested by relatives who were opposed to limiting the care or palliation of their loved one. The CCNs observed patients who suffered and for whom there was no hope of recovery. CCNs admitted that they felt better when these patients were allowed to die in peace with a family member at their bedside, instead of continuing to endure futile care.

> *"No one want to make the decision. Sometimes a CCN who dares to tell the physician is required." (CCN 7).*

Ethical misconduct

CCNs perceived highest frequency (Mean 1.63 SD 1.07) and second highest intensity (Mean 1.91 SD 1.21) in the item "Feeling pressure from others…" CCNs experienced they had to provide treatments even though the patient's prognosis was poor, or in the palliative phase after intensive care was discontinued. CCN experienced no problem increasing medical dose if a patient showed signs of anxiety or pain, although it could be more difficult to observe these signs. Some CCNs did not recognise this as a problem, but rather that the patients had sometimes been superficially sedated to a greater extent than they felt was acceptable.

CCNs perceived the moral distressing situation with highest intensity (Mean 2.17 SD 1.27) was when they "Avoid taking action…" However, these situation's frequency was low (Mean 1.03 SD 0.85). When this occurred, it was usually discussed with everyone involved, but high workload often did not allow sufficient time to complete an adverse event report. Errors and mistakes with varying degrees of severity were made daily, and CCNs experienced that they were required to tolerate several incidents. CCNs described mistakes that they made when they were tired, which rarely led to serious consequences, and incidents of others distributing incorrect medications.

> *"When I began the evening shift, I realized that an older woman was unconscious. When reviewing the medical record, a neurological status from an ambulance, emergency room or heart intensive care unit had not even been performed.* […] *Because responsibility was so diluted, it was impossible to assess who was responsible"* (CCN 48).

Deceptive communication

CCNs perceived that the item "Witnessing healthcare providers giving false hope…" was the highest frequency (Mean 1.52 SD 1.04) and highest intensity (Mean 2.29 SD 1.26) morally distressing scenario that they encountered. They experienced physicians who interpreted relatively small improvements in their patients as being representative of more significant progress. CCNs described relatives who grasped at straws when the CCNs had not intended to engender false hope. CCNs experienced the use of Skype and Facebook Messenger was sometimes insufficient when patients needed to have their relatives close, for instance prior to intubation. Others CCNs described feeling compelled to purposefully hide information about patients' nursing care to avoid worrying relatives at home.

The CCNs perceived low frequent (Mean 0.59 SD 0.75) moral distressing situation with second highest intensity (Mean 1.79 SD 1.42) in the item "Following the family's request not to discuss death…" CCNs experienced challenges related to discussions about dying with patients and/or relatives from foreign countries with different cultures. When relatives could not be present with the patient in ICU, or when the CCNs were unable to talk with relatives, CCNs experienced it like caring for a body, as they provide nursing care without knowing the patient as a person. This resulted in moral distress because it went against their ethical principles.

> *"The sense of moral distress could be because we sometimes provide care that does not benefit the patient, but only prolongs their suffering, not to mention the moral distress of being the person who kills hope that has been unnecessarily built up"* (CCN 22).

Poor teamwork

The CCNs perceived the highest frequent (Mean 2.43 SD 1.21) situation in "Watching patient-care quality suffer because of a lack of provider continuity" and with high intensity (Mean 2.676 SD 1.22). CCNs experienced this was problematic when patients were in improvement phases and knowing the patient as a person was valuable in these cases. CCNs emphasised that patients in long-term intensive care who were experiencing a significant degree of delirium and anxiety needed a sense of continuity. They described relatives who had expressed dissatisfaction related to continuity, because they were in contact with different CCNs and physicians every day. CCNs experienced working with health care staff during the COVID-19 pandemic who lacked intensive care skills, which led to increased patient ratios and higher workload. This might have resulted in information being lost when different shifts reported to one another. However, they experienced that this situation with information being lost also often occurred before the COVID-19 pandemic.

CCNs perceived, "Witnessing diminished patient-care quality due to poor team communication" as frequent (Mean 2.07 SD 1.15) with intensity (Mean 2.66 SD 1.14) that was often due to misunderstandings because of protective equipment. The use of masks and protective equipment caused unclear, shallow communication, and details were easily missed.

CCNs perceived frequency (Mean 2.04 SD 1.22) and with high intensity (Mean 3.01 SD 1.30) in the item "Assist another physician or nurse who, in my opinion…" In particular, CCNs experienced that general care nurses who lacked an advanced education in intensive care were not always able to independently provide nursing interventions independently, and this might have affected the quality of care. CCNs described feeling relieved, when physicians without intensive care competence ended their shifts and physicians with intensive care competence began their shifts, because it was easier to discuss intensive care-related problems with these physicians. However, CCNs described a positive and helpful workplace cultures in which CCNs backed up less-competent nurses and physicians.

> *"It was incredibly difficult to communicate out in the corridor while wearing masks. For example, screamed for a video laryngoscope to be able to reintubate* […] *but I was given a defibrillator, because they thought that was that I asked for"* (CCN 61).

Current intentions to leave position

Seventy of the CCNs answered the question "*Are you considering leaving your current position because of moral distress?"* of these 39% admitted that they were considering leaving their current position.

Discussion

The integration of data consisted of combining the quantitative data with the qualitative data and according to Creswell et al. (2011) the integration can be achieved by reporting results together in the discussion section. The qualitative data allowed participants to describe their perceptions of moral distress in their own words and were used to expand understanding of the quantitative measures of moral distress intensity and frequency. The analysis and synthesis of the questionnaire responses related to moral distress provide a more comprehensive understanding of each aspect of the moral matrix in nursing care and is presented within the dimensions: Futile care, Ethical misconduct, Deceptive communication and Poor teamwork.

CCNs described feeling moral distress related to Futile care and when no one decided to withdraw ventilator support to a hopelessly ill person. Previous research (Petrișor et al., 2021) identified that CCNs reported higher moral distress in these situations than before the COVID-19 pandemic. CCNs should assume responsibility for the other, and this ethical responsibility is a duty CCNs must not refuse (Levinas, 1990). While Levinas defined care as a duty, Ricœur described care as daring to meet the patient in his and her suffering (Andersson, 2021). Ricœur's philosophy contrasts with Levinas' notion of care, where the initiative for these meetings always rests on the caregivers. In the present study, CCNs experienced moral distress when no one made the decision to withdraw life support and when they needed to summon the courage to raise 'difficult' questions. According to a concept analysis by Numminen et al. (2016), moral courage is the 'true presence, moral integrity, responsibility, honesty, advocacy, commitment and perseverance, and personal risk', which can be described as reflecting nursing values and principles (p. 878).

The CCNs described situations of Ethical misconduct when either they or a colleague wanted to do what they believed would be the best course of action for their patient of their patient's relatives, but they were prevented from doing so because of a lack of resources and organisation. If nursing care is regarded as a moral activity and nurses, need to feel as if they are doing something that is morally good and right, it is essential that the ways in which organisational structures hinder nurses from performing well are scrutinised.

A recent study by Andersson et al. (2021) used the Person-Centred Framework to deductively investigate person-centred care based on CCNs experiences during the first phase of the COVID-19 pandemic. CCNs described how organisational structures such as visiting restrictions required to prevent the spread of the virus, affected person-centred outcomes, and patients were objectified because of less contact with patients' relatives (Andersson et al., 2021).

It is tempting to say if CCNs in the present study had have sufficient moral courage they might had spoken up and challenged unacceptable practices. However, according to Gallagher (2010) the relationship between moral courage and moral distress is not straightforward. Organisations are not always supportive and may act defensively to concerns about standards of care even the most morally courageous staff might feel uncomfortable to speak up (Gallagher, 2010).

The ethical nature of nursing care is associated with wishing well for others, which is a form of giving and taking that relies on the recognition of the other as a unique person (Ricœur, 1994). Ricœur's philosophy and his dialectical approach to mutuality contrast with Levinas' idea of care that places the onus of responsibility on caregivers. Løgstrup (1994) asserted that if people do not answer the needs of others, they may experience persistent feelings of guilt; he further stated that people are bound to one another by love, sympathy, and solidarity. As such, doing good for someone who is ill benefits both the ill person and the CCN, and being prevented from doing this could cause harm to the ill person and a sense of moral distress to the CCN. According to Allen and Butler (2016), the ethical climate of a given workplace is an essential contributor to feelings of moral distress, and they proposed tools and skills that would better address ethical challenges related to morally distressing clinical situations. Additional research about the cause of and ways to prevent moral distress is needed.

CCNs described Deceptive communication as when relatives interpreted changes as being more significant than changes were and became hopeful of an unlikely recovery. This is consistent with the study by Henrich et al. (2017), which found that poor communication between physicians and families was a cause of distress. In this study, CCNs experienced that the physicians' discomfort informing patients and their families about hopeless situations, had the effect of prolonging relatives' hope for patients' recovery. The CCNs also asserted that not confirming a dying patient's request to discuss death resulted in very high levels of moral distress, which is in line the findings of Hasanlo et al. (2019). A review by McAndrew et al. (2016) concluded that communication issues between CCNs, physicians, patients and the patients' relatives were frequently described as sources of moral distress, which further confirms the CCNs' experiences related to communication difficulties.

Lake et al. (2021) found that most moral distressing situations for nurses during the first phase of the COVID-19 pandemic were the risk of transmission the virus to the nurses' families, caring for patients whose family members were unable to be present and caring for patients who were dying without any relatives present. The nurses experienced anxiety and reported sleeping difficulties, and their feelings of moral distress decreased with effective communication (Lake et al., 2021). De Brasi et al. (2020) suggested that health care professionals' moral sensitivity could be enhanced through team discussions. The possibility of discussing situations within a group, with a structured and guided debriefing format, would provide each CCN with the opportunity to reflect on their feelings and coping strategies with others (De Brasi et al., 2020).

CCNs described feeling moral distress related to Poor teamwork and/or misunderstandings within the team. Previous research (Donkers et al., 2021; Rodriguez-Ruiz et al., 2021; Silverman et al., 2021) have identified that a common source of moral distress among CCNs during COVID-19 pandemic was working with nurses who were not as competent as the nursing care of the patient required. This created an uncertainty about general nurses' competence and influenced the patient care interaction (Silverman et al., 2021).

International Council of Nurses (2021), nurses actively promote patient safety, ethical conduct in the event of errors or near-misses, speaking up when patient safety is threatened, advocating for transparency and working with others to reduce the potential of errors. Physicians in emergency department and ICU describe that good ability to communicate and interprofessional team training is required to achieve good teamwork (Rydenfält et al., 2018). During the pandemic, CCNs constantly worked with new colleagues which has been associated with higher moral distress among CCNs during the pandemic compared to before the pandemic (Petrișor et al., 2021). This finding highlights the importance of good communication among team members which has been substantiated by Andersson et al. (2021) and Bergman et al. (2021). Successful ICU teams exchange information and work together (Ervin et al., 2018) or deal with emotions from relatives whose loved ones are critically ill. Based on this, improvements in communication and teamwork are needed to reduce moral distress among ICU staff.

Thirty-nine percent of the CCNs in this study were considering leaving their current position because of moral distress and this is higher than Petrișor et al. (2021) and Rodriguez-Ruiz et al. (2021) reported in their studies. According to Lützén et al. (2003), leaving the field of nursing may be a last resort for some nursing professionals and a way to avoid the negative consequences of moral distress and the subsequent ill health, but this solution does not benefit the common good of healthcare. Considering the growing concern over CCN shortages, moral distress, and health of CCNs must be considered.

Limitation

This study has several limitations. The selection of study participants

was a non-probability sample from three nursing groups on social media platform and it was impossible to calculate a response rate. Despite our intention, we only reached a small sample from our designated target group. However, those who answered, wanted their voices to be heard. Participants who had been working during the second year but who had left their positions due to moral distress also may have had the possibility to answer, since the questionnaire had no connection to the CCNs' employment. Because of inactivity, suspended notifications and/or posts that rapidly drop down in the information flow, it is unlikely that all the nursing group followers saw the posts about the questionnaire.

The 71 CCNs that matched the inclusion criteria and answered the questionnaire may have been affected by whether the concept of moral distress has been acknowledged or whether an item was relevant to the participant. Despite this, the participants seemed to share a strong desire to express their experiences related to moral distress during the COVID-19 and the participants' free-text answers were rich in content.

Conclusion

During the COVID-19 pandemic, CCNs, due to their education and experience of intensive care nursing, assume tremendous responsibility for critically ill patients. Throughout, communication within the intensive care team seems to have a bearing on the degree of moral distress and improvements in communication and teamwork are needed to reduce moral distress among CCNs.

Ethical statement

The participants received information concerning the study's aim, confirmation that participation was voluntary and that their identity would be kept confidential. By answering the questionnaire, participants agreed to the terms of publishing. This procedure corresponds to the World Medical Association's (2020) ethical principles. There was no need for ethical approval since the Swedish Ethical Review Act (2003:406) only include studies that handle sensitive data and patient data.

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Conflicts of interests

We declare we have no conflicts of interest.

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Author contributions

Design MA, ÅE, MN. Data collection: MA, AN. Data analysis quantitative: MA, AN, ÅE. Data analysis qualitative: ÅE, MA, AN. Preparing the manuscript: ÅE, MA, AN.

Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.iccn.2022.103279.

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