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Mitigating Moral Distress: Pediatric Critical Care Nurses' Recommendations

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Abstract

In pediatric critical care, nurses are the primary caregivers for critically ill children and are particularly vulnerable to moral distress. There is limited evidence on what approaches are effective to minimize moral distress among these nurses. To identify intervention attributes that critical care nurses with moral distress histories deem important to develop a moral distress intervention. We used a qualitative description approach. Participants were recruited using purposive sampling between October 2020 to May 2021 from pediatric critical care units in a western Canadian province. We conducted individual semi-structured interviews via Zoom. A total of 10 registered nurses participated in the study. Four main themes were identified: (1) "I'm sorry, there's nothing else": increasing supports for patients and families; (2) "someone will commit suicide": improving supports for nurses: (3) "Everyone needs to be heard": improving patient care communication; and (4) "I didn't see it coming": providing education to mitigate moral distress. Most participants stated they wanted an intervention to improve communication among the healthcare team and noted changes to unit practices that could decrease moral distress. This is the first study that asks nurses what is needed to minimize their moral distress. Although there are multiple strategies in place to help nurses with difficult aspects of their work, additional strategies are needed to help nurses experiencing moral distress. Moving the research focus from identifying moral distress towards developing effective interventions is needed. Identifying what nurses need is critical to develop effective moral distress interventions.

Keywords Moral distress · Qualitative description · Pediatric critical care · Nurses · Interventions

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Introduction

Pediatric intensive care units are highly complex, busy environments with many different healthcare professionals providing numerous forms of advanced life-sustaining care to critically ill children. Medical, surgical, and technological advances cause new challenges within pediatric intensive care units, such as coordinating care among a team and ethical challenges surrounding end of life care (Epstein and Brill, 2005). These realities can cause stress and contribute to the high prevalence of moral distress within pediatric critical care (Epstein and Brill, 2005; Prentice et al., 2016). Moral distress "arises when nurses are unable to act according to their moral judgment. They feel they know the right thing to do, but system structures or personal limitations make it nearly impossible to pursue the right course of action" (Canadian Nurses' Association, 2017). There is an increased incidence of moral distress in pediatric and neonatal intensive care units compared to adult intensive care units or pediatric wards (Larson et al., 2017). Nurses experience an increase in moral distress intensity compared to other healthcare professionals (Larson et al., 2017), which may be due in part to the intimacy of the relationship nurses have with patients, and to the structure of nurses' practice (Prentice et al., 2016).

Many interventions to minimize the effects of moral distress have been proposed such as ethics education, communication improvement strategies and education, self-reflection, strategies to improve the organizational culture, and personal supports for healthcare providers (Burston and Tuckett, 2013; Carnevale, 2020), yet there are limited studies that implement and test these interventions (Deschenes et al., 2021; Morley et al., 2021). No studies have examined nurses' views on what interventions are needed within pediatric critical care units to minimize moral distress therefore, it is not clear what nurses identify as needed interventions. This qualitative study aimed to explore what pediatric critical care nurses identify as a needed intervention to minimize moral distress.

Methods

Design

We employed qualitative description to guide this exploratory study (Sandelowski, 2000) to answer the research question: *What do pediatric critical care nurses who have experienced moral distress identify as needed interventions to minimize moral distress?* Qualitative description generates a low-inference report of a phenomenon, favouring a naturalistic descriptive over an interpretative approach (Kahlke, 2014; Sandelowski, 2000).

Participants

Participants were recruited using purposive sampling (Bradshaw et al., 2017) on two Canadian pediatric critical care units between October 2020 to May 2021. Participants were eligible if they were registered nurses who worked in pediatric critical care and self-identified having experienced moral distress. No restrictions were made based on nursing experience or length of time working in pediatric critical care. Physical posters were displayed in staff rooms located on each unit. The posters defined moral distress, identified the purpose of the study, and provided contact details and credentials of the study team. An electronic version of the poster was also emailed by the unit's research coordinator or clinical nurse specialist to all nursing staff within the units. Additionally, we engaged in snowball sampling (Fawcett & Garity, 2008), asking participants to forward study information to nurses who might be interested in the study.

Setting

This study took place on two Canadian pediatric critical care units within an urban tertiary care hospital. These units collectively have 31 single patient rooms for pediatric patients with critical medical and surgical needs. All patients require intensive one-on-one monitoring and treatment from a multi-disciplinary team. Most patients are sedated and ventilated and have family members at their bedside.

Units adopt a multi-disciplinary approach to patient care. The healthcare team includes physicians ($n = 16$), fellows, residents, registered nurses ($n \geq 200$), pharmacists, registered respiratory therapists, social workers, occupational therapists, physiotherapists, dieticians, extracorporeal life support specialists, clinical nurse educators ($n = 5$), and a clinical nurse specialist. On each unit, two intensivists managed patient care during the weekdays and one covered nights and weekends. Residents and clinical/surgical fellows assist physicians with patient care. The charge nurses (one for each unit) organize and assign nursing care daily in consultation with unit managers.

The units have several strategies in place to help nurses manage the stressors of their work. These include various personnel nurses can go to for help (e.g., with procedures or managing complicated patients) such as clinical nurse educators, ethicists, palliative care personnel, pastoral care, and management. The Critical Incident Stress Management program is in place and consists of a small team of nurses who are specially trained to provide one-on-one support and help facilitate interdisciplinary meetings designed for dealing with acute traumatic events. There is a lengthy orientation for both units (approximately five weeks in length). Part of the orientation (less than one hour) is spent discussing nursing supports and experiences nurses may have on the unit, including moral distress. None of the existing supports were specifically designed to help nurses' moral distress.

Data Collection

One-on-one semi-structured interviews ranging between 60 and 90 minutes were completed and interviews were conducted by one member of the research team (SD, PhD candidate at that time). The interview guide (see supplementary information) consisted of open-ended questions that were developed based on the study's aim, the team's research experience, and the key elements of relational ethics (Bergum and Dossetor, 2020). Relational ethics is one lens in which moral distress can be examined through to better understand how we act in everyday ethical situations (Bergum and Dossetor, 2020; Deschenes and Kunyk, 2020). The interview guide was reviewed by substantive area experts and pilot-tested with a small group of nurses to determine the questions clarity and ensure these would elicit meaningful information. Upon receiving an email from interested participants, the interviewer (SD) followed up to schedule an interview at a mutually agreed-upon date and time. Interviews were conducted through Zoom due to social distancing guidelines. All participants completed a demographics questionnaire after written informed consent was obtained. Interviews were recorded then transcribed verbatim and de-identified to ensure confidentiality. Data collection and analysis occurred concurrently until data saturation was achieved (Sandelowski, 1995).

Data Analysis

Transcripts were uploaded to NVivo 12 qualitative data management software (QSR International, 2018). First, transcripts were read in detail several times. Second, using verified and cleaned transcripts, we conducted open coding and grouped codes into preliminary categories. Coded data were grouped into sub-categories and examined for internal and external homogeneity (Mayan, 2016). Lastly, preliminary themes were developed by further analyzing the categories. The process was initiated by the first author (SD), then verified by the research team. Credibility, dependability and confirmability (Lincoln and Guba, 1986; Morse, 2015) was addressed to enhance rigor. A comprehensive study log was maintained, identifying all methodological decisions and rationale. Field notes and reflexive journaling were used to enhance the understanding of each interview, examine potential bias, develop an audit trail, and further enhance rigor.

Ethical Considerations

Ethical approval was obtained from the Health Research Ethics Board (Pro00099148), and operational approval was obtained from each unit. Each potential participant received the study information sheet outlining the nature of the study, potential risks and benefits, the voluntary nature of their participation. Participants were given time to look over the information sheet and to ask questions about the research.

Results

Overview

A total of 10 pediatric critical care nurses participated in this study, all self-identified as having experienced moral distress. Demographic characteristics of participants are presented in Table 1. In this section, we describe the unit circumstances at the time of the interviews as well as common causes of moral distress as voiced by the participants to contextualize the later presented themes.

During data collection, the units were under strict COVID-19 restrictions (limited visitors, personal protective equipment must be worn, anyone with flu-like symptoms was not permitted on the unit) and several pediatric nurses were redeployed to adult critical care due to the number of adults admitted in critical condition. Many participants stated that the pandemic and subsequent changes to their work further exacerbated workplace stress, moral distress, and the overall morale among staff. Most participants (n = 9, 90%) stated that their moral distress was partly due to challenges or barriers in communication. Other common causes of moral distress among participants included futile care, differences of opinion related to patient care (within the healthcare team and between the team and the families), and the workplace culture. Supporting participant quotes are presented in Table 2.

Table 1 Characteristics of participants (n = 10)

Characteristics	Participants, n
Preferred gender identity	
Female	10
Age	
20–29	2
30–39	8
40 +	0
Highest level of education	
Bachelor's degree	9
Master's degree	1
Years practicing as an RN	
Less than 5	0
5–9	5
10–15	5
Years working in their current unit	
Less than 5	4
5–9	5
10–15	1

Table 2 Participant quotes on causes of moral distress

Lack of communication	• The physicians try to have a really good rapport with the families, but when they are only in and out for 10 minutes to talk to them, or 20 minutes, sometimes we do not feel like our voice is heard, as nurses, as to how awful the situation feels. And, sometimes we want to speak up and be like, "hey I think the family has had enough", or "I do not think they want to push forward". But, then there is always another physician or surgeon that comes in and just gives them this false sense of hope, and we cannot really say anything against that. Nurse-07 • So, for nurses who don't understand where the physicians are coming from and I especially have been one of those, it really does just look like we're torturing him [the patient]. It's like he almost died last night and here we are prolonging that. Like why aren't we having the conversations with the family about long-term prognosis and, you know, the likelihood of him getting better. Nurse-04
Futile care	• Continuing to care, prolonging care of a patient with a life-limiting diagnosis is a hard descriptor, because that doesn't necessarily mean death is imminent. I more mean prolonging care when death is the *only* foreseeable outcome. And I know it's hard to say that. I know anyone would say, well, we never know. But when death is *truly* like 99 percent the most likely outcome, and I'll say in the two [situations] that I'm thinking of, the patient died and the death ended up being traumatic for staff, yes, but I'm assuming also for families. Unfortunately, after the death happens you never really have that discussion with the family of how it went but as a health care provider, that's an assumption on my part. That it wasn't peaceful, for lack of a better word, for the family. Nurse-03 • We have a patient right now who was found unresponsive at home and has been diagnosed with SIDS, but is two percent shy of brain dead, two percent not being exact but they meet almost all the criteria, but there's just a very tiny bit of brain activity and that we have kept alive for months now because the family believes that their child is going to be miracle because God is going to save them. And sometimes we're giving false hope, but this hasn't been the situation, the family threatened to sue and so we've continued to do everything…. We've been forced to do a lot of the other stuff. …We've done this for months and every time we walk into the room, the family writes down your name. They're not doing it because they wanted to write you a thank you card, they're doing it either because they want to add your name to the lawsuit that they threatened or if you do this slightest thing that they don't agree with, that they're going to complain to someone in spite of us doing everything. …And it's just hard to watch because even if she isn't really there or maybe a bit of her still is because there is a tiny bit of brain activity, but what we're doing is not right. Nurse-02

Table 2 (continued)

Difference of opinions related to patient care	• Sometimes I think I want something different than what other families may want and that is my own burden to carry in the sense that I need to accept that what I think is right is not necessarily what's right for someone else. Nurse-02 • In all of the cases, there's that family element because we are in the pediatric setting. And so, in some cases the family element is lovely and supportive. The fact that there is that disconnect between what the plan of care that the healthcare professional wants versus what they're able to do with the support of a loving family can be really hard because they want to be there for the family but they don't agree with the plan of care. Or, the other end of the spectrum is that the family is really challenging. And so, it's difficult to communicate. It's difficult to empathize. And so, you've got that divide, that disconnect but you've got no way to sort of bridge the boundary and have that mutual respect and understanding despite the difference of opinion. Nurse-10
Staff dynamics and unit culture	• There was a medication error. Oh, I can't remember exactly the date, but within the first year that I was working, where a whole bag of TPN infused into a baby and I experienced some distress around that….What happened was this was a high alert medication which whenever we have high alert meds, we're meant to be double checking not only the bag, but your meds that go into the room, verify the pump, make sure the infusion rate is correct. And so, in this situation, I was the nurse who should've done that double check but our unit culture, at the time, was that you shouldn't have to do that. It's kind of like overstepping on the other nurse if you go in and you verify that. Nurse-04

Themes

Our analysis generated four main themes: (1) *"I'm sorry, there's nothing else": increasing supports for patients and their families*; (2) "*someone will commit suicide": improving supports for nurses* with subthemes (a) *receiving help to navigate their psychological and emotional distress;* and (b) *strategies to build morale and enhance unit culture;* (3) *"everyone needs to be heard": improving patient care communication*; and (4) *"I didn't see it coming": providing education to mitigate moral distress.*

"I'm Sorry, There's Nothing Else": Increasing Supports for Patients and Families

Participants expressed that improving supports for patients and their families throughout their time in pediatric critical care would help mitigate nurses' moral distress. Participants noted that having more immediate involvement of specialty services, increasing supports to improve patients' quality of life while on the units, and providing supports for families to navigate difficult decisions would be beneficial to improve the patient care experience and to help mitigate nurses' moral distress. According to participants, these supports could decrease nurses' moral distress by improving the quality of patient care, knowing that the family has designated

supports in place when making difficult decisions, and potentially minimizing futile care performed by the nurse.

Participants discussed that improving the utilization of pastoral care, palliative care, and social work to work with complex or chronic patients would be beneficial to support the patients and their families throughout their time in pediatric critical care. This support could improve the patient care experience by having specialists involved in care sooner, support families by helping to answer medical and non-medical questions, or by assisting them in navigating their stay in the hospital. One participant said, "in the future, when we can recognize that these patients are very ill and truly palliative …we should have the [palliative care] team involved because they are the specialists" (Nurse-03). Another participant noted that automatic referrals to palliative care would be beneficial because "when you're getting to the more difficult decisions, you've had them involved the whole way, so they're not new faces showing up" (Nurse-06). Participants identified that automatic referrals to these resources based on diagnosis, surgical intervention, or family circumstances would help improve access and provide valuable support to both the patient and their family.

Participants also discussed that supporting patient care by focusing on medical procedures and the patient's quality of life could reduce nurses' moral distress. One participant described a morally distressing situation that could have been minimized by improving a patient's quality of life,

> We had a kid on ECMO [extracorporeal membrane oxygenation] for months and months and months, and all she wanted to do was eat and drink, and she was not going to live. She had almost no chance of living and she was miserable and at the bedside, you're the one saying no, you can't eat or drink and to me, that's not an acceptable quality of life. We cannot facilitate that because she's too unstable to eat or drink, and she's miserable, and she has zero way out. That's not okay for me, and the kid ended up dying in a horrible arrest after months. And I was just like, ah, I wish they gave her some coke yesterday so she could've at least had enjoyed that simple pleasure. (Nurse-06)

The participant continued by stressing, "if we're going to do those things [medical procedures], we need to balance it and say, okay, we need to spend resources making their life acceptable to them if they're going to live here" (Nurse-06). Other suggestions to support patients' quality of life included implementing protected rest times, grouping medication administration when possible, and taking chronic patients off the unit for a change of scenery. Participants described that some of their patients have been on the unit for almost a year and improving their quality of life could improve the family's life by seeing their child enjoy simple pleasures as well as easing nurses' distress associated with actions or decisions required to care for the patient.

Additionally, numerous participants recognized the burden the healthcare team puts on parents when asking them to make difficult healthcare decisions and acknowledged that few supports exist to help families work through tough situations. Participants noted that these supports would be highly beneficial and could help families navigate emotions, grief, and stressors that often accompany the decision to

withdraw care when there is nothing else medically that can be done for the patient. Participants felt that this support could minimize their moral distress by knowing the family has someone designated to talk to and minimize possible futile care required by the nurse. One participant stated,

> I find sometimes moral distress issues come from the fact that the onus of the decision of the kids sometimes is placed on the parents. … We know what the obvious [decision] should be, but we give it to the parents and the burden of that sometimes causes prolongation [of care] and the distress that we see — and I've seen a lot. (Nurse-05)

When describing one situation, a participant recognized that "[the family] were the ones that had to make the decision, and I think as a parent living with that long-term is more difficult than having someone say to you, there's nothing else. I'm sorry, there's nothing else" (Nurse-06). She further added, "I think if somebody said, do you want to keep trying for your child, there's only like a 5% chance, I'd be like for sure. But it's hard to make decisions like that for your child" (Nurse-06). In those difficult situations, nurses often felt powerless when supporting families, and this feeling contributed to their moral distress. Participants felt that this support should be a psychologist designated for the families. One participant said,

> we could *always* use a shared psychologist that not only caters to the patients, but also deals with parents because sometimes some of these things that contribute to moral distress is the team saying that this is all we can do. We should withdraw care and parents are not ready. (Nurse-05)

In these ways, participants felt that having proper support in place to help families navigate difficult healthcare decisions would help to alleviate their own moral distress.

"Someone will Commit Suicide": Improving Supports for Nurses

In addition to supporting families, many participants discussed that improving supports for nurses would help minimize their moral distress. This theme is divided into two subthemes (a) *receiving help to navigate their psychological and emotional distress* and (b) *strategies to build morale and enhance unit culture.* In the first subtheme, participants suggested numerous supports that could facilitate coping with the psychological and emotional stressors associated with moral distress. In the second subtheme, participants described several current unit practices that could exacerbate their moral distress and suggested strategies to improve these supports, build morale, and minimize moral distress.

Receiving Help to Navigate Their Psychological and Emotional Stressors Several participants noted that resources are needed to facilitate nurses' coping and manage the toll that working in an extremely high-stress environment takes. These interventions include resources to help nurses navigate past and future morally distressing situ-

ations and increase their awareness of resources that promote self-assessment and self-reflection of their moral distress.

One resource that was suggested to manage the toll of working in a high stress area was having a designated psychologist available to help nurses navigate their morally distressing experiences. One participant pleaded that "someone will commit suicide" (Nurse-01) if support was not increased. Although the health benefits package for nurses covers some counselling, it was noted that cost is still a barrier. One participant noted, "it's expensive. It's $200 and benefits only cover half of that" (Nurse-08). Therefore, numerous participants felt that a psychologist could provide confidential one-on-one support to help nurses work through morally distressing situations. One participant asserted that "…we're working with people and if you make a mistake that costs somebody their life or contributes their deterioration, that's a really difficult thing for people to deal with. [Therapy's] ultimately what we need" (Nurse-04).

A few participants reported that improving awareness of existing moral distress supports and their navigate is needed. They suggested having a poster outlining common signs and symptoms of moral distress and current moral distress resources offered with details such as contact information or when one could use the supports would be beneficial. One participant stated what would help her is "an algorithm kind of sequence that if you take one step and you're still feeling distressed, there's another step that you can go to and if you're still feeling distressed in that situation, then you escalate to professional counselling. … [currently] there's no obvious process. I felt I needed that" (Nurse-04). With this, nurses could self-assess their moral distress, know what resources are available, and access appropriate resources. This poster could also help to normalize nurses seeking help for moral distress.

Participants indicated that a brief confidential questionnaire from management to check in with nurses after critical incidents would encourage self-reflection. The questionnaire could ask nurses how they were coping after an incident and determine if support, such as counselling, is needed. When describing the questionnaire, one participant said, "Just simple yes, no, questions, like have you talked to anybody about this? Do you want to talk to somebody about this? Do you think it would help you?" (Nurse-04). Overall, participants felt that talking to a psychologist, having a poster outlining existing supports, and being sent a brief questionnaire after critical incidences could help increase awareness of their moral distress and navigate psychological and emotional stressors.

Strategies to Build Morale and Enhance Unit Culture Participants suggested that current unit practices might be exacerbating nurses' moral distress, and implementing new strategies could help to mitigate the phenomenon. Their suggestions included increasing nurses' autonomy, changing the practice of who should be a charge or resource nurse, frequently changing nursing assignments for complex patients, and bringing back small gestures to build morale.

First, participants stated that their lack of autonomy and restricted scope of practice on the unit exacerbates moral distress. They recommended increasing nurses' autonomy by enabling them to work to their full scope of practice and removing

some institutional barriers to improve patient care and therefore, potentially minimize their moral distress. One participant said,

> I've had the least autonomy working in [province] and that's been hugely morally distressing. I found there's much more of a hierarchy here that contributes to it, just this feeling like you're at the bottom and you have little influence as to what's going on with your patient and ability to make changes. (Nurse-06)

She continued by describing what would help to minimize her moral distress,

> I think giving people autonomy to do things would be good. … There's just some big organizational barriers to cross. …I would love to take these kids out of the unit who've lived there for months and months, but I'm not allowed to do it because you need to have three people to go with you, and there's never staffing to accommodate that kind of entourage. (Nurse-06)

Second, participants recommended changing the practice of who should be a charge or resource nurse. One aspect of these roles is to help support nurses when they run into challenging situation or need an extra hand to complete patient care. Current practice is that nurses with a certain amount of clinical experience are expected to take on these roles without considering personality traits such as patience and approachability. Rather, selecting these roles should be based on experience along with personality to have more approachable nurses in these roles. One participant said,

> There's certain people who can take on certain roles and the problem is there's an expectation for everyone to take on the same role on a unit and I don't think that works out. Not everyone can be a charge nurse. Not everyone can be a resource nurse. Those roles should be shared between people who are more compassionate. (Nurse-01)

She continued stating,

> When you have someone you can't trust or to talk to or ask for help, even if it's to grab you something or talk to about some sort of issue that happened, you really feel constrained. You feel your world has definitely gotten a lot smaller. (Nurse-01)

Participants discussed that unapproachable nurses in these roles exacerbates their moral distress because they do not have the support required to properly care for their patients from the leaders whose very role is to support them. The third suggestion was to implement practices to ensure nursing assignments for complex patients are changed frequently. Changing assignments regularly would share the emotional and mental labour that accompanies these complex cases thereby minimizing their moral distress. Automatically changing assignments would eliminate the need for the nurse to ask for a new assignment then deal with a potentially difficult situation. One participant expressed,

> I won't ask for a new assignment anymore. It's not worth the pushback that you get, I know that's not okay. … How much fight should I have to put in to

> advocate for myself? And if you get beat down so many times when you're already struggling, it's not worth it. (Nurse-02)

Participants felt that even if the charge nurse is supportive, having this practice in place would take the onus off the individual nurse to ask for a new assignment. This change to unit practice would help the nurse feel supported by their workplace, could enhance unit culture, and contribute to minimizing their moral distress.

Lastly, nurses suggested bringing back small gestures to build morale and build a sense of community. In the past, nurses would organize a massage therapist to come to the unit to massage staff while on their breaks and on other occasions nurses would order pizza. The staff paid for these gestures but participants felt it was a great way to increase morale, bring nurses together and build a sense of community. One participant shared,

> In helping to de-stress pre-COVID, there was a time that a massage therapist came to the unit and she would provide a 10-minute massage to anyone. … It helped with morale. I remember she'd come in and everyone felt happy. (Nurse-09)

Although these are small gestures, participants recognized they made a significant impact on improving morale. However, they recognized these activities might be challenging to implement due to the coronavirus restrictions in place.

One participant felt that there was adequate support currently being offered for nurses, including a poster outlining stress responses with a list of resources if needed and numerous personnel a nurse can go to for help. However, this participant held a different role on the unit than the other participants. Other participants acknowledged the poster, and stated that it did not specifically address moral distress, therefore did not provide support to navigate morally distressing situations.

"Everyone Needs to be Heard": Improving Patient Care Communication

Most participants shared that improving patient care communication among the healthcare team is necessary to minimize their moral distress. They noted that lack of clarity regarding medical decisions contributed to their moral distress and believed improving patient care communication would be beneficial. One participant declared, "communication goes a long way… and ever since I started on these units, in comparison to other places, we're not very good at that" (Nurse-02). Participants outlined existing interventions to facilitate patient care communication including townhall meetings, debriefings, weekly written patient updates, and electronic health records. They described necessary changes to these interventions for improving communication and minimizing their moral distress. These focused on ensuring the interventions are consistently implemented, predictable, and occur in an environment to foster communication.

Participants explained that townhall meetings are currently in place on an ad hoc basis. Currently meetings are typically initiated by a nurse in response to a patient situation, often after it has become complicated due to escalation of patient care or

lack of clarity around medical decisions. These meetings are intended to provide clinical information and rationale for patient care decisions to the healthcare team. When discussing the benefits of these meetings, one participant said,

> I think they're helpful.… You can ask questions and usually get pretty comprehensive responses of why decisions have been made… it's an opportunity to just connect to others about how they feel and to see that you're not the only one feeling these things. These can be very validating and really ease your moral distress. (Nurse-03)

However, participants stated that the current townhall meetings are hit or miss in quality depending on who is facilitating them and can be unproductive or even worsen the situation. One participant stated,

> I think sometimes people end up arguing … the idea is usually to listen to people but people have a listening problem, especially a lot of our physicians. A lot have lost patience and when people stop listening they just start arguing in return, no one gets anywhere, and people get upset. (Nurse-01)

Participants noted that townhalls that are consistently implemented, determined *a priori*, and based on best practices are needed to improve these meetings. First, participants suggested that patients meeting specific criteria (i.e., diagnosis, length of stay, or family situations) need to be automatically discussed in townhall meetings. This proactive process would take the pressure off nurses asking for a meeting. Second, participants stated that complex patients should be discussed shortly after admission and again if there are significant changes such as surgeries, codes, or changes to goals of care. One participant said,

> If we brought in the support earlier, right when the situation is starting or midway through when we are recognizing that the emotions are high and people are struggling or feeling torn, we would have a better outcome instead of trying to address it after the moment because then people have already struggled through it, and they are either burnt out and don't want to talk and just want to forget and block it versus actually acknowledging what they have gone through. (Nurse-07)

Third, it was noted that townhall meetings should be run systematically to minimize potential bias and make the meeting more productive no matter who is facilitating the meeting. One participant stated,

> If you have a physician who is well-spoken and empathetic, you can get a lot more out of the meeting because you get better detailed answers and better validation of your emotional standing and distress. (Nurse-03)

Participants felt that having a standardized checklist of talking points for each patient would reduce the power dynamics among team members therefore increase interdisciplinary communication and attendance in the townhalls.

Debriefing sessions currently occur on the units and have been beneficial; however, these sessions occur inconsistently and are not always facilitated effectively,

further speaking to the need for standardized and consistent approaches. Participants discussed that having standardized debriefing sessions after every traumatic event would be helpful to unpack the situation. One participant shared,

> If there was a standard protocol after a code or a traumatic event we would go through the motions and hit every part of moral distress rather than sometimes we do debrief and sometimes we just don't. If it was something that was done routinely and done in the same way, then nothing gets missed and nobody gets missed. (Nurse-08)

It was suggested that these debriefing sessions should occur as soon as possible after the event and include all members of the team.

For the townhall meetings and debriefing sessions, participants emphasized that the environment in which this communication takes place is essential to consider. Participants shared that these interventions need to occur in a non-judgmental, and welcoming space, free from hierarchal structures often exhibited among healthcare teams. Additionally, participants felt that the townhall meetings and debriefings would be best led by someone who had specific training in counselling or debriefing; however, the primary physician would need to be present to answer medical questions and provide detailed guidance. Once the meetings have been up and running effectively, someone from the team could take over,

> I think eventually we need to lead, we need to solve it or we need to fix our own unit. I think people are in the mess right now, and they're so burnt out, nobody knows what to do. Nobody is willing to listen, everyone is just willing to just tell their opinion, without any sort of filter and any sort of understanding of the consequences of saying their opinion. And so, I think we definitely need help, for sure. But if it's someone who has to lead us in the immediate term, it would be somebody outside of the mess who teaches us how. (Nurse-01)

Participants also discussed the re-implementation of weekly written patient updates. In the past, written patient updates were sent out virtually at the end of each week by the clinical fellow on service. These updates were on all the chronic patients to inform the healthcare team about how the patient's week went and the plan of care going forward. Participants noted that this intervention was quite helpful to keep everyone up to date on what was happening medically with chronic patients. One participant purported, "I find that the weekly updates really helped in the sense that it's coming from the physician team to update us on what the plan is … to help guide us" (Nurse-09). Overall, participants felt that it would be beneficial if they were re-implemented and securely sent out to all healthcare professionals on the unit.

The last venue that participants discussed to improve patient care communication is optimizing electronic health records to provide nurses with easy access to patient updates, in a way that does not breach patient confidentiality. Nurses discussed that the current process of reading through the chart is inefficient, frustrating if the information is hard to find, and can contribute to moral distress because they are not aware of or up-to-date on conversations regarding patient care. One participant said,

"If we can create a section in the chart or a place for key things like the ethicist's information, that up until last week I didn't know was there, that you can access without it being a breach to confidentiality" (Nurse-02). Overall, participants felt that these four venues could be optimized to improve patient care communication, increase clarity surrounding patients' medical decisions and minimize their moral distress.

One participant stated that Critical Incident Stress Management program implemented within the unit does not focus on feelings or fix anything because "we're not psychologists. We can't fix. That's not our job. Our job is peer support" (Nurse-10). She felt that Critical Incident Stress Management was a sufficient communication intervention for minimizing moral distress given the quality of the peer support and the ability to refer to a registered psychologist if needed. This participant was dissimilar to all others interviewed by virtue of her role in the unit.

"I Didn't See it Coming": Providing Education to Mitigate Moral Distress

Participants reported that increasing education on communication strategies and moral distress would be beneficial to minimizing their moral distress. This education would provide them with needed strategies to effectively communicate and recognize and address moral distress. Several participants identified that modules on empathetic listening, assertiveness, difficult conversations or conflict resolution would empower them with the necessary skills to better communicate with colleagues, patients, and their families. Participants noted that there are numerous modules on communication available through their employer, however none of these modules are mandatory for healthcare professionals. Mandatory modules could help improve team communication because everyone would have a similar understanding of communication skills to better foster an open environment for discussion. Participants stated that these communication modules could be done individually online and could occur as part of orientation and annual continuing competencies. One participant identified,

> In orientation, we could benefit from …[learning]communication skills in difficult situations…. I could use more tools for these situations because it's not something I enjoy and it makes me feel anxious and so if I can avoid it, I will…. [communication skills for difficult situations] could also be helpful because it can be applied to whether you're struggling with your team, your patient, their family. [It's] just one more tool to set people up for being able to speak up and not keep it to themselves and not have those moments where you wish you could've done it differently. (Nurse-02)

Another participant explained, "Everyone needs to be heard… everyone needs to be educated on how to communicate and how to–I don't know, just maybe display compassion, kindness, very basic–I think it's not complicated, whatever it is" (Nurse-01).

Participants also suggested that increasing opportunities for moral distress education is needed. There is minimal moral distress education currently available, and they proposed that this education take place in orientation and routinely as nurses

become more experienced on the unit and exposed to more complex, and potentially more morally distressing, experiences. Nurse-06 explained, "the more experience you get, the more sick and complex patients you get, and the more likely [you are to experience moral distress]." Participants stated that moral distress education could occur as group education or individually directed as an online module. At a minimum, it should include signs, symptoms, and existing resources that staff could access when needing help. When discussing how important education on moral distress was, one participant shared,

> I knew that when I signed up for this job that there were sacrifices; you prepare for weekends and holidays away from your family and long hours and whatever life expectancy you're losing to shift work, but I wish I had been more prepared for this. I still would've signed up to do it, but it wasn't even on my radar that this is something that I was going to experience. So, not only did I not have the tools to know what to do about it, I didn't even see it coming. (Nurse-02)

Overall, participants noted that increasing education on both communication strategies and moral distress during orientation and as part of their annual continuing competencies would minimize their moral distress. They felt that education on these two topics would empower them by increasing their awareness of moral distress as well as providing the tools they need to better prepare for difficult situations.

Discussion

Moral distress is an experience of anguish when one is unable to act in a way that aligns with their ethical principles. This study sought to uncover what 10 pediatric critical care nurses working on two Canadian pediatric critical care units identified as needed interventions to minimize moral distress. Study participants identified numerous interventions that could minimize their moral distress, and our key findings are: increasing supports for patients and their families, improving supports for nurses, improving patient care communication, and providing education to mitigate moral distress.

Increasing Supports for Patients and Their Families

Participants in our study expressed that increasing supports for patients and their families to improve the patient care experience could help minimize nurses' moral distress. This is a novel finding that has not been explored in the moral distress literature. These findings are not surprising given that many contributing factors of moral distress are linked to the patient care experience, for example, nurses providing care they perceive is unwanted, perceived lack of competent care, diminished quality of care, and inadequate pain management (De Brasi et al., 2021; Forozeiya et al., 2019; Henrich et al., 2016; Larson et al., 2017). In our study participants described improving the utilization of social work, palliative care and pastoral

care as one possible strategy to improve the patient experience. In Helmers et al. (2020) qualitative study exploring moral distress experiences among pediatric intensive care unit nurses, participants identified the need for formal supports, including social work and palliative care services. It is unclear in their study if there is a link between these recommendations and improving patient care that in turn would minimize participants' moral distress (Helmers et al., 2020). Examining ways to improve the patient experience could not only improve patient care but can potentially minimize nurses' moral distress. These findings need to be explored further in future moral distress research.

Improving Supports for Nurses

Our findings suggest that improving supports for nurses could minimize their moral distress. Participants in our study indicated that having a psychologist available to aid them in navigating morally distressing situations could be beneficial. In De Brasi et al. (2021), a phenomenological study examining moral distress among Italian nurses, they found that meeting with a psychologist can be beneficial. While Vig (2022) suggests that easy access to mental health support and time to access this support is necessary to reduce moral distress among healthcare staff.

Additionally, nurses in our study suggested strategies to build morale and enhance the unit's culture to better support nurses and minimize their moral distress. These findings are echoed in the moral distress literature. Woods (2020) conducted a national survey among New Zealand nurses. They found that poor ethical climate, lack of morale, and lack of support from the healthcare system contributed to nurses' moral distress. Larson et al. (2017) state that moral distress was inversely associated with perceived hospital supportiveness among neonatal and pediatric intensive care unit providers. Alternatively, Ventovaara et al. (2021) found that pediatric oncology nurses' perceptions of a positive ethical climate were inversely correlated with their moral distress. Researchers suggest that this may result from having competent and supportive co-workers (Ventovaara et al., 2021). The environment supports and encourages certain choices and behaviours through its policies, demonstrations of support or neglect, and how it enables individuals to engage with one another or seek help. Creating an environment that supports individuals and develops a sense of community can mitigate nurses' moral distress.

Improving Patient Care Communication

Our findings reveal that poor communication surrounding patient care issues contributes to moral distress. This finding is congruent with findings in other studies where poor communication has contributed to moral distress (e.g., Browning and Cruz, 2018; Coville et al., 2019; Morley et al., 2021). Participants in our study purported that interventions to improve communication among the healthcare team are necessary to minimize their moral distress. Vig (2022) recommends facilitated discussions about morally distressing situations that do not aim to fix the situation but to discuss moral distress and its sources to help alleviate the negative effects of the

phenomenon. Wocial et al. (2017) found that their weekly inter-professional rounds intervention decreased nurses' overall moral distress scores, with a statistically significant decrease in three *Moral Distress Scale-Revised* (Hamric et al., 2012) survey items when comparing matched pairs. Additionally, this intervention positively impacted participants' ability to communicate with the team and with the patient and family (Wocial et al., 2017). Morely and Horsburgh (2021) found a promising approach to mitigate moral distress among healthcare providers in their case study examining the effect of moral distress reflective debriefs. These studies suggest that strategies to increase team communication could be one potential strategy to minimize moral distress; however, merely presenting an opportunity to communicate may not be enough.

Participants in our study also stated that interventions to improve communication among the healthcare team should be standardized and occur regularly, taking the pressure off nurses to ask for an intervention. In a study examining the implementation of debriefing sessions in a children's hospital, Zinns et al. (2020) found that in the pediatric intensive care unit debriefing sessions were not implemented for several factors including physician and nurse discomfort in initiating the debriefing sessions. While Aponte-Patel et al. (2018) found that after implementing a formal debriefing program in a tertiary children's hospital, debriefing sessions after activation of the rapid response team were sustained at a rate 46%, compared to 26% preintervention. These results further support the need for consistently implemented moral distress interventions.

Participants in our study described feeling frustrated during existing interventions intended to facilitate healthcare team communication. They explained that having someone who is trained to facilitate communication would be beneficial to improve the outcomes of these meetings. These findings parallel previous research in the field stating that clinical ethicists, social workers, or other individuals trained to provide psychological support are well-positioned to assist colleagues during morally distressing situations (Browning and Cruz, 2018; Morley and Horsburgh, 2021; Wall et al., 2015). Morally distressing situations occur within relationships, and repairing the disconnect in those relationships needs to occur in a dialogical manner, as suggested by the participants in our study and other researchers. Strategies to improve patient care communication should be examined as a potential strategy to minimize moral distress. Future research needs to be conducted to examine if interventions to improve communication among the interdisciplinary team will mitigate nurses' moral distress.

Providing Education to Mitigate Moral Distress

Participants in our study suggested that educational interventions on moral distress are needed to recognize and effectively address moral distress. Abbasi et al.'s (2019) moral empowerment program focused on providing nurses with education on moral distress. Abbasi et al. (2019) found a statistically significant reduction in mean moral distress scores. Similarly, Molazem et al. (2013) found that providing moral distress education to cardiac nurses significantly reduced their moral distress. In their literature review, Burston and Tuckett (2013) propose that moral distress

education is essential to mitigate the negative effects of the phenomenon. Providing nurses with the proper education to identify and name their moral distress is a crucial step towards mitigating the many negative effects of the phenomenon.

Limitations

Study interviews were conducted at a single point in time and during a pandemic; therefore, the results of our study may differ under different circumstances. We relied on participants' self-report of their moral distress experiences and suggested supports, and thus recall bias may be present. Additionally, the sample may be biased due to the self-selection nature of the recruitment process. While recruitment was open to all nurses working in pediatric critical care, we only received interest from female nurses, which make up approximately 75% of nursing staff. Similarly, we did not receive any interest from nurses working in their current unit for more than 12 years. Therefore, our results may not reflect the needs of these groups. Due to the nature of moral distress and the impact the working environment has on it, the results of this study may not be generalizable to other healthcare professionals, units, hospitals, or regions.

Conclusion

Exploring what pediatric critical care nurses identify as needed interventions to minimize moral distress is crucial to identify effective strategies to reduce the negative impact of this phenomenon. What is unique about this study is that we sought to explore nurses' views on what interventions are needed within pediatric critical care to minimize their moral distress. Our findings indicate that although numerous strategies are in place to aid nurses with challenging aspects of their daily work, participants identified further potential strategies that would help minimize their moral distress, including interventions that increase supports for patients and their families, improve supports for nurses, improve patient care communication, and provide education on moral distress and communication strategies. Further research is needed to develop interventions based on these findings and pilot test the interventions to identify barriers and assess feasibility, efficacy, and sustainable. If effective, the interventions should be tailored to other healthcare professionals and units.

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