


Experiences of moral distress in a COVID-19 intensive care unit: A qualitative study of nurses and respiratory therapists in the United States

Sophie Trachtenberg¹  | Tara Tehan² | Sara Shostak¹ | Colleen Snyderman³ |
Mariah Lewis¹ | Frederic Romain^{4,5} | Wendy Cadge¹ | Mary Elizabeth McAuley⁶ |
Cristina Matthews⁷ | Laura Lux⁶ | Robert Kacmarek⁴ | Katelyn Grone² |
Vivian Donahue⁸ | Julia Bandini^{9,10} | Ellen Robinson^{3,5}

¹Department of Sociology, Brandeis University, Waltham, Massachusetts, USA

²Neuroscience Intensive Care Unit, Massachusetts General Hospital, Boston, Massachusetts, USA

³Patient Care Services Office of Quality & Safety, Massachusetts General Hospital, Boston, Massachusetts, USA

⁴Respiratory Care Department, Massachusetts General Hospital, Boston, Massachusetts, USA

⁵Ethics Service, Massachusetts General Hospital, Boston, Massachusetts, USA

⁶Blake 12 Intensive Care Unit, Massachusetts General Hospital, Boston, Massachusetts, USA

⁷Lunder 7 Neuroscience Unit, Massachusetts General Hospital, Boston, Massachusetts, USA

⁸Blake 8 Cardiac Surgical Intensive Care Unit, Massachusetts General Hospital, Boston, MA, USA

⁹Institute for Patient Care, Massachusetts General Hospital, Boston, Massachusetts, USA

¹⁰RAND Corporation, Boston, Massachusetts, USA

Correspondence

Sophie Trachtenberg, Department of Sociology,
Brandeis University, 415 South St, Waltham,
MA 02453, USA.

Email: strachtenberg@brandeis.edu

Funding information

Brandeis University

Abstract

The COVID-19 pandemic has placed extraordinary stress on frontline healthcare providers as they encounter significant challenges and risks while caring for patients at the bedside. This study used qualitative research methods to explore nurses and respiratory therapists' experiences providing direct care to COVID-19 patients during the first surge of the pandemic at a large academic medical center in the Northeastern United States. The purpose of this study was to explore their experiences as related to changes in staffing models and to consider needs for additional support. Twenty semi-structured interviews were conducted with sixteen nurses and four respiratory therapists via Zoom or by telephone. Interviews were transcribed verbatim, identifiers were removed, and data was coded and analyzed thematically. Five major themes characterize providers' experiences: a fear of the unknown, concerns about infection, perceived professional unpreparedness, isolation and alienation, and inescapable stress and distress. This manuscript

With the exception of the first and last authors, authorship is listed in reverse alphabetical order and alternating by institution to highlight the collaborative nature in which this manuscript was written.

Nursing Inquiry was saddened to learn of the death of Robert Kacmarek following submission of this manuscript.

© 2022 John Wiley & Sons Ltd.

analyzes the relationship between these themes and the concept of moral distress and finds that some, but not all, of the challenges that providers faced during this time align with previous definitions of the concept. This points to the possibility of broadening the conceptual parameters of moral distress to account for providers' experiences of treating patients with novel illnesses while encountering institutional and clinical challenges.

KEYWORDS

COVID-19, critical care, intensive care units, moral distress, nurses, respiratory therapy

1 | INTRODUCTION

As the COVID-19 pandemic continues for its third year, the effects of the ongoing crisis on frontline healthcare providers remain an urgent concern. In the United States alone, nearly 80 million cases of COVID-19 and over 900,000 deaths have been reported as of March 13, 2022 (*The New York Times*, 2022). While hospitals expanded their capacity to administer intensive care, providers on intensive care units (ICUs) have faced extensive challenges as they care for seriously ill patients. In the past, nurses have confronted personal risks at the bedside, which include exhaustion, burnout, and moral distress (Fumis et al., 2017; Hamric & Blackhall, 2007; Jameton, 1984, 1993), even outside of times of crisis. This pandemic has posed profound new challenges, including the uncertainty created by the initial lack of knowledge about the virus, personal and familial risks, and changes to typical safety and care procedures (Cadge et al., 2021).

Nurses spend more time at the bedside than any other healthcare professional (Chambliss, 1996; DeLucia et al., 2009), and spend more time in close physical contact with patients than do physicians (Butler et al., 2018). Additionally, nurses' scope of practice spans beyond medical treatment to involve personal connection and emotional support for their patients (Bolton, 2001; Chambliss, 1996; Strauss et al., 1982). Such affective demands—as well as long shifts, little break time, and high acuity patients—often lead to both physical and emotional overload (DeLucia et al., 2009). ICUs are particularly challenging environments, as they are fast-paced and require quick and intentional thinking while caring for the critically ill (Scholtz et al., 2016), leading to a higher prevalence of stress for all staff, and especially for nurses (Kumar et al., 2016). Because patients with COVID-19 may require mechanical ventilation, registered respiratory therapists (RRTs) likewise have been immersed in the high stress environment of the ICU along with nurses and thus face similar risks (Miller et al., 2020).

Prior studies that examine the impacts of infectious disease outbreaks (e.g., SARS or MERS) indicate that these events put healthcare workers under great distress and at increased risk for mental illness (Lee et al., 2018; Tam et al., 2004). Studies of prior pandemics and epidemics also show that healthcare workers experience lasting psychosocial repercussions that persist after the crisis subsides, increasing risk for developing symptoms of

posttraumatic stress disorder, anxiety, depression, and general psychological distress (Preti et al., 2020). There are multiple reports on the emotional impacts that providing care during the COVID-19 pandemic has had on healthcare workers in across the globe (Al Mahyijari et al., 2021; Caillet et al., 2020; Lai et al., 2020), and qualitative studies have captured the experiences of nurses as they care for patients with COVID-19 (Ardebili et al., 2021; Fernández-Castillo et al., 2021; Galehdar et al., 2020; Sun et al., 2020). However, fewer papers connect nurses' experiences to concepts prominent in nursing literature, like that of moral distress. We suggest that this unprecedented pandemic presents an opportunity to examine this concept in a new light, given nurses' intense experiences during this time.

This study explores the experiences of RNs and RRTs as they cared for COVID-19 patients in the ICU during the first surge of the pandemic in the United States. We asked providers about their responses to changes in staffing models, as well as their needs for additional support during times of crisis. RNs and RRTs shared that their challenges were extensive, beyond their normal working capacity, and included concerns surrounding a general fear of the unknown, concerns about infection, perceived professional unpreparedness, social isolation and alienation, and an inescapable sense of stress and distress. Some of what nurses experienced during this time is encompassed by the concept of moral distress, while other aspects highlight new internal and external constraints on nurses' practices. Consequently, we explore how the concept of moral distress might be expanded to account for frontline providers' experiences during the pandemic.

2 | METHODS

2.1 | Setting and study population

This study focused on the experiences of nurses and respiratory therapists at a large academic medical center in the Northeast United States during the first surge of the COVID-19 pandemic. This surge lasted from April to June 2020, during which the hospital increased its ICU bed capacity by 90%. This study focused on the experiences of RNs and RRTs working in the COVID-19 ICUs during this time.

Semi-structured, in-depth interviews were conducted between June and August of 2020. Each interview followed a standard interview guide that included open-ended questions across three domains: (1) experiences of working under unfamiliar practice conditions and adopting new ways of organizing patient care; (2) experiences of caring for a patient population with a novel infectious disease, including those populations that disproportionately have borne the impact of the pandemic; (3) personal impact and experiences of risk to self and family, including needs for further support.

Participants in this study included sixteen nurses and four respiratory therapists who practiced in two units at the hospital during the pandemic. Half of the nurses ($n = 8$) originally practiced on ICUs, while half ($n = 8$) were general care nurses from other areas of the hospital. Of the ICU nurses, half ($n = 4$) continued to practice on their home units for the duration of the surge, while half ($n = 4$) were deployed to work on interim surge ICUs. The same sampling followed for the general care nurses. Respiratory therapists ($n = 4$) worked throughout various units with COVID-19 patients during the surge. Such sampling allowed for the comparison of experiences between groups of healthcare professionals with different backgrounds. These differences, particularly between ICU and general care nurses, are explored in data analysis.

Potential participants were notified of the study through an email from nursing directors on behalf of the principal investigator. This email included an attached information sheet with pertinent study details. Invitations emphasized that participation was voluntary and would not be revealed to unit or hospital leadership. Interested participants were then instructed to contact the study coordinator to schedule an interview. All potential participants—those offered an interview and those we were unable to include—were offered a list of support resources after contacting study staff.

2.2 | Data collection

Interviews were conducted by four members of the research team, each of whom had experience in qualitative research before the study. Participants were offered an appointment for an interview at a time convenient for them. They were also asked to indicate their preference for being interviewed by a coinvestigator from the hospital itself or Brandeis University, as it was anticipated that some clinicians would take comfort in talking with their peers, while others would prefer the relative anonymity of talking with someone outside of the hospital. Interviews lasted between 35 min and 1 h and took place via Zoom or by telephone in a quiet, confidential location chosen by the participant. Verbal consent for participation and recording was obtained at the beginning of each interview. Participants were given an honorarium of \$20 in appreciation for their involvement in the study, mailed to them upon completion of the interview.

Demographic data were collected using a self-administered online survey, which all but two participants completed (90% response rate). For the 18 participants for whom complete demographic data is available, the mean (SD) age was 32.8 (8.8) years, 17 (94.4%) were women, 1 was male (5.6%), 16 (88.9%) were white, and 2 (11.1%) were Black. On average, participants had a mean (SD) of 9.3 (7.6) years of experience as a nurse, 1 (5.6%) had an associate's degree, 15 (83.3%) had a bachelor's degree, and 2 (11.1%) had a master's degree.

2.3 | Data analysis

Interviews were transcribed verbatim and all identifiable information was removed from the transcripts before analysis began. Transcripts were imported into ATLAS.ti (version 8.4) and coded thematically (Creswell, 2013) by two members of the Brandeis University research team. The analysis relied on both inductive and deductive approaches. Researchers used a codebook which centered around the core concerns of the broad research questions that guided this exploratory study. During this first round of coding, additional themes also emerged. After integrating these new themes into the analysis, a second round of focused coding was conducted. After one rater coded an interview, the second rater reviewed the coded data to establish consistency. Coding was discussed in team meetings, during which any discrepancies were addressed and resolved. This approach allowed for the lived experiences of RNs and RRTs to be preserved while also remaining congruent with a systematic method of qualitative data analysis.

2.4 | Ethical considerations

This study was reviewed and approved by the Institutional Review Boards (IRB) at both institutions from which the investigators are associated. Consent information was emailed to participants before their interview via the study information sheet, and verbal consent was also obtained at the beginning of each interview. Participants were assigned a participant number to ensure confidentiality. Principles of ethics were followed throughout the entirety of study to maintain the safety, confidentiality, and anonymity of the participants.

3 | RESULTS

RNs and RRTs described a variety of experiences they perceived to have had a significant impact on their well-being. These findings focus on five themes which best capture and represent providers' experiences in a coherent and holistic way: a fear of the unknown, concerns about infection, perceived professional

unpreparedness, isolation and alienation, and inescapable stress and distress.

3.1 | Fear of the unknown: Lack of knowledge about the virus and changing protocols

RNs and RRTs reported an overwhelming fear of the unknown surrounding the newness and novelty of the virus at the beginning of the pandemic. As more information about the virus became available, providers modified care procedures in real time. One participant said, "I think like part of the hardest thing of all of this was the unknown... things changed every single day. It felt like protocols and policies and everything... nothing felt permanent... what we were supposed to do yesterday changed every single day." Overall, the lack of information contributed to a persistent sense of fear, which was mentioned by nearly all participants: "...as a nurse it feels really scary to walk in and both of your patients are on ventilators, and both of them have this disease that you don't know that much about it all. And a lot of other people don't know that much about." In addition to conjuring fear, these missing pieces of information caused challenges in providing patient care, with some nurses—especially non-ICU nurses—feeling as though they did not know enough about COVID-19 to be caring for such ill patients: "...we didn't know what we were doing, I've never felt so uncomfortable and out of my depth. It was quite something... I think we were all so frightened that we were going to be left like having to assume primary care for these patients that we didn't have the expertise to care for."

This distress transcended from providing direct patient care to also giving updates to family members who were not present at the bedside. When speaking about interactions with families, one nurse said: "I felt as though I couldn't give like the best, most adequate information to these people when they're dealing with like such uncertain times and like loved ones that they can't see... I just felt that for them." Another nurse elaborated on this feeling, saying, "I don't think I could have spoken to a family member in a way that would have given them hope and given them any kind of solace because I felt like I could barely, barely keep it together myself... I feel like I just didn't have the technical knowledge to be able to speak to... what was happening."

Participants mentioned that some of these uncertainties began to diminish as new information about the virus became available. However, what was most helpful to participants in addressing this source of distress was direct, consistent communication from nursing leadership, especially as protocols were updated. Many participants mentioned the role of the clinical nurse specialist (CNS), who "...worked so endlessly to make sure that we all had like every bit of knowledge at our fingertips." In particular, one CNS supported her team by sending weekly emails that were, "...almost like a Q and A sheet and it would go through and say different questions that maybe we would be asking... And so, it was quick, to the point, with a question, with an answer... And she would send it out every Friday, so it wasn't... too much overload." Having this source of intra-staff

support and instructional clarity allowed nurses to regain a sense of control in their work, especially for general care nurses who took on new responsibilities outside of their normal scope of care: "I mean the whole thing was a challenge, like the whole thing was like the unknown and just kind of like going with the flow and getting used to it... However, like towards the end of it I will say I feel like the ICU nurses kind of had it under control..."

3.2 | Concerns about infection: Potential spread to selves and families at home

While working with very sick patients, RNs and RRTs were also worried about the possibility of becoming sick themselves. One nurse mentioned caring for a colleague, saying, "And then I think... just the fear of all of us getting sick was endlessly distressing... we cared for like someone in the nursing community in our ICU in the beginning, so I think that was just eye-opening and distressing for all of us. We're like 'If we're caring for her, who's next?'" Some participants mentioned engaging in detailed cleaning and protective procedures—in the hospital and at home—to try and mitigate this risk. One nurse described, "... I was... stripping down, like shower[ing] instantly after I got home and really trying to be cognizant of my practice at the hospital... appropriately donning and doffing my gear to not accidentally touch anything... we were working with positive patients, so there was no wondering if they [had] COVID. We knew they had COVID. So, then it [became] 'Okay, how can we protect ourselves?'"

To mitigate the risk of infection and conserve PPE, hospital protocols limited the number of people allowed in patient rooms. RNs and RRTs often were the only providers working in direct physical contact with patients. Physicians frequently operated outside of patient rooms, and other hospital support staff—including chaplains and social workers—worked remotely. Families were also not permitted on site. Participants shared that these circumstances caused them to feel as though their own health and wellness was expendable. One nurse said, "I think I left this experience feeling very disposable... it didn't matter if I got sick... someone was waiting to take my place... it's like... Then why should I put my life on the line if, if it doesn't matter to you if I die or not?" Others echoed this, with one mentioning that, "... there was kind of that mental [ity] of like, 'Why is the nurse the one that's stuck in the room the whole time?' You just kind of feel like you're being thrown to the wolves, especially in the beginning when like we really didn't know how it was transmitted..."

However, participants reported feeling less concerned about their own health, and more worried about protecting the health of others around them, particularly their families: "...I am not so much worried about myself as I am worried about like the other people I'm around and the other people I interact with." Participants often mentioned their children, as well as their older parents: "I was more nervous about my kids... I was worried I would bring it home and get them sick. That, and my parents... we didn't see them for the first 8 weeks... I still worry about it. Like, if I get it and bring it home, or bring it home and give it to my parents, it's so scary."

3.3 | Perceptions of professional unpreparedness

The novel SARS-CoV-2 virus created uncertainties around patient care. With cases rising quickly and limited time to adjust, providers felt both unprepared and lacking the necessary knowledge to be able to adequately care for ill patients. Participants mentioned having to complete tasks that fell outside of their typical duties. One general care nurse spoke about how this led to a diminished sense of self-confidence: "... it's also a confidence factor. We were doing things outside of our role and I wanted to go in there confident that I could do it and that I wouldn't be second guessing myself."

Being unable to help patients who were suffering, some for extended periods of time, was mentioned frequently as RNs and RRTs described their experiences. Most participants noted that patients stayed at the hospital for much longer than usual, sometimes being in intensive care for months at a time. One nurse said, "[There were] like people there for a month, who were just kind of cooking in these medications... and on the vent... it felt like we weren't making progress. So, it was hard to feel like you could [only] do so much for your patient... and you never really felt like they were better off for everything that you did." This generated further feelings of helplessness for RNs and RRTs: "I think it was hard just because like [I] worked so hard and still felt like I wasn't doing the best I could for them."

Feeling powerless in their efforts to combat the virus contributed to the great challenges that RNs and RRTs faced during this time. Some providers began to question their work, wondering if what they were doing was in the best interest of their patients, themselves, and their own families. One said: "...we always think like, 'At the end of this, will everything we have done be worth it for them?' So... to put somebody through all of this for months... and then to not survive or go home and have nothing... 'Have we really helped you?'" Another asked: "Why am I doing this?" Like, 'Why am I risking my life and my family's life?' These people aren't even getting better, what we're doing is not working."

3.4 | Isolation and alienation: Inside and outside of the hospital

Throughout the pandemic, participants reported a pervasive sense of isolation while providing direct patient care. As RNs and RRTs worked alone at the bedside, feelings of separateness from one's colleagues arose: "Honestly, I kind of felt like I was in a fishbowl. People would just kind of walk by and... naturally look into the room and we all had our... curtains open cause there weren't any visitors so it wasn't like we had to hide anything from anyone who wasn't used to what they were seeing. But it kind of created this sense of like seclusion on top of all the other anxiety that came with it." Another ICU nurse commented on the harsh impact of having limited social interactions, saying, "Like it was surreal driving to work. You're by yourself. You're alone in these sick patients' rooms. You have like no contact out of the few interactions with people at work."

In addition to the seclusion felt while working in patient rooms, participants reported that such distress followed them once they went home as well. One nurse commented on the isolating nature of this experience: "It was very isolating. And especially... doing the work that I was doing, you know, it's a high stress, very challenging work. And then to come home and be completely alone, that was really hard." To further mitigate the risk of spread, participants distanced themselves physically from family and friends. These practices had emotional implications: "I felt kind of like diseased... it was very isolating in the sense that you didn't want to be around anybody else because God forbid... you were sick, yet you weren't showing symptoms." In both their work and home lives, RNs and RRTs felt detached from important social relationships and alienated from those around them.

Isolation and alienation were further induced by a public disregard for the seriousness of the virus. This was reflected in noncompliance with appropriate preventative measures such as wearing masks or abiding by social distancing guidelines. This caused worry and frustration outside of the workplace, as one nurse said: "... there were times where I wanted to just go be outside and... get some fresh air. And you know, there would be people outside with no masks... and it was so frustrating to see that because here I was in the ICU taking care of people who are dying from this virus and you know, everyone else is [acting like it's] no big deal. When in reality, I was probably one of the people who needed to be outside the most and get some fresh air and decompress after what I've been doing."

3.5 | Inescapable stress and distress: No time for rest and recovery

The stressful environment that participants endured in the ICU persisted outside of the hospital as well. Participants reported a lack of a work-life balance during this time, as one RRT mentioned, "...you couldn't [even] escape it when you went home... it was a part of every part of your life." As RNs and RRTs physically left the hospital, their minds often stayed consumed by the work they left behind. One said, "Being a nurse... [I] hadn't seen my family, I hadn't done much else besides work and come home. And so there [was] a lot of time once I was home just to think about work, and... it was all-consuming. So, the thoughts, and 'What I can be doing better, and how can I get through this?' it was just a constant... burden on me." To cope with this consistent tension and anxiety, some staff sought to pick up extra shifts to distract themselves from these all-consuming thoughts, including this RRT: "I did work a lot of overtime... I would work 5 days a week... I think it was also a method to not have to deal with what I was actually fearing at the time. Just because I was so overwhelmed with everything, it was easier to just be at work and be go, go, go instead of having to come home and be like 'Wow, I saw 3 people die today.'"

Even in using distraction techniques, participants still felt emotionally overwhelmed both at work and at home. Some mentioned being unable to separate themselves from persistent

and unwanted thoughts. One nurse said: "...it was just a very sobering realization to think that you know you couldn't really distance yourself cognitively from what you were experiencing because it just seemed so immediate and so very likely that, that this could happen to someone that you know. And there was nothing that you could do to prevent it..." Knowing that their high acuity patients needed constant attention, care, and assistance added to the all-consuming nature of this experience. As one RRT put it, "...it was very time-consuming, very stressful, and I think a lot of people got really overwhelmed and really kind of beat down from the amount of pressure that we were under. Because we want to help all of these patients... because we know that they all need us right this second, but we can't do all this like physical work... And it was also a really tough emotional burden to know that you can't be fully present for every single patient all of the time."

These circumstances made it difficult for these RNs and RRTs to engage in self-care practices. Some participants mentioned having no time, while others said they were too exhausted to do anything for themselves. One nurse described this scenario as, "You know, it was really just survival mode, like we weren't doing anything to like try to better ourselves." The words of an RRT echoed these feelings: "...when you're so emotionally and physically exhausted, you just can't keep up with taking care of yourself well." Providers reported that these circumstances resulted in a variety of struggles, including sleep disturbances, crying, depressive symptoms, and anxiety related to the virus and their work: "I know in the beginning too, just the anxiety alone, I was getting like raging palpitations and just, from like a mental health standpoint, I was super anxious. [And] I am not really an anxious person to begin with..."

4 | DISCUSSION

This study explores the experiences of RNs and RRTs who provided care during the first surge of the COVID-19 pandemic at a large academic medical center in the Northeastern US. Findings highlight five key themes central to their experiences: a fear of the unknown, concerns about infection, perceived professional unpreparedness, isolation and alienation, and inescapable stress and distress.

Overall, these data are concordant with recent qualitative studies reporting that frontline healthcare providers have experienced fear of personal infection, risk of spread to families, and worries surrounding the novelty and acuity of the virus (Ardebili et al., 2021; Galehdar et al., 2020; Sun et al., 2020); they also have experienced obsessive thoughts and frustration surrounding ignorance from the public (Galehdar et al., 2020). Likewise, data from this study supports quantitative research from across the globe that connects provider experiences with concerns related to mental health and well-being (Al Mahyijari et al., 2021; Caillet et al., 2020; Lai et al., 2020). More broadly, our analysis suggests that providers in COVID-19 ICUs may be experiencing moral distress, and that earlier articulations of this concept require reconsideration in light of providing care during this pandemic. Additionally, our analysis considers what some healthcare professionals, scholars, and nursing leadership have proposed as

meaningful interventions to combat moral distress and other risks posed to emotional well-being, and specifically includes how the hospital in this study has responded with resources to support their staff after the first surge of the pandemic.

First described by Andrew Jameton in his 1984 book titled *Nursing Practice: The Ethical Issues*, moral distress refers to situations "when one knows the right thing to do, but institutional constraints make it nearly impossible to pursue the right course of action" (p. 6). Moral distress has most commonly been studied in nurses providing end of life care, including those working in ICUs with critically ill patients (Hamric & Blackhall, 2007). Even outside of times of crisis, the presence of this concept has been linked to burnout and intention to leave a position (Fumis et al., 2017; Hamric & Blackhall, 2007; Whitehead et al., 2015), highlighting the importance of addressing this concern with regard to nurse retention, longevity, and well-being.

Since Jameton's original definition of the concept, moral distress has become an important focus of healthcare research, and of nursing in particular. While there is some variation in definitions of moral distress, most highlight *external constraints* often imposed by institutions, and also consider both *internal constraints* and *clinical situations* as factors that evoke moral distress in healthcare providers (Deschenes et al., 2020; Epstein & Delgado, 2010; Epstein & Hamric, 2009; Walton, 2018). As the concept has expanded, some scholars argue that conceptual clarity has been compromised, especially insofar as there may be overlap with other concepts such as psychological distress; this has created a lack of consensus for how moral distress and its parameters should be defined (McCarthy & Deady, 2008; Pauly et al., 2012). We suggest that the extraordinary challenges faced by nurses during the COVID-19 pandemic present a unique opportunity to reexamine understandings of moral distress.

Some of the experiences highlighted in this study align with extant definitions of moral distress, especially as they point to the kinds of constraints that scholars previously have identified as impeding nurses from meeting their perceived obligations. Such constraints include, for example, experiencing feelings of self-doubt, not having full knowledge of clinical situations, and abiding by hospital policies that may conflict with care needs (Epstein & Delgado, 2010; Epstein & Hamric, 2009; Walton, 2018). During this pandemic, these constraints have been additionally compounded by caring for critically ill patients with a novel virus, gaining knowledge for treatment and clinical practice in real time, and having a limited number of staff present at the bedside.

At the same time, other components of providers' experiences point to how the parameters of the concept of moral distress could be reconsidered to account for new constraints introduced by the COVID-19 pandemic. Such constraints include the risk of infection with a potentially lethal virus, the extraordinary challenges of clinical practice in COVID-19 ICUs (e.g., high acuity patients, high mortality rate, etc.), and the pervasiveness of the pandemic outside the walls of the hospital. Our analysis considers the relationship between these experiences and such understandings of moral distress, and makes initial suggestions for conceptual expansion in light of the challenges presented by a pandemic caused by a novel, infectious disease.

Table 1 identifies internal, external, or institutional constraints, and clinical situations that act as evidence for nuanced experiences of moral distress during the COVID-19 pandemic. The constraints highlighted in this table have been previously identified and discussed as central to experiences of moral distress by the authors being referenced, or link to the definitions of moral distress that these authors use. This table shows where such constraints and situations map onto the data from this study specifically. The quotations in this table are selected examples of these connections from each theme in the manuscript.

What nurses described to be a “fear of the unknown” relates to experiences of moral distress as conceptualized in the literature. These findings show that the newness, severity, and unfamiliar dimensions of COVID-19 contributed to significant challenges for providers, especially as they lacked experience caring for patients with this novel respiratory disease. Fumis et al. (2017) describes moral distress as “the inability of a moral agent to act according to... core values and perceived obligations due to internal and external constraints,” (p. 2). Scholars have long recognized a “lack of understanding of the full situation” as an internal constraint associated with moral distress (Epstein & Hamric, 2009), and recent research notes that uncertainty surrounding treatment for COVID-19 represents what may be a new root cause of moral distress in nurses (Silverman et al., 2021). Additionally, participants mentioned feeling powerless and experiencing self-doubt as they encountered these unknowns, further contributing to the inability to act in ways that fulfilled their perceived obligations. Historically, scholars of moral distress note that feeling powerless and doubting oneself is central to experiencing moral distress (Elpern et al., 2005; Epstein & Hamric, 2009; Jameton, 1993). Such powerlessness was especially felt by nurses as they attempted to communicate with families that were not present at the bedside, and with whom they felt that they could not give adequate information to. These experiences highlight the compounding of both internal constraints and institutional barriers that thus decrease providers' ability to “fulfill their moral obligations to patients, families, and the public,” (Austin, 2012, p. 28).

However, providers in this study shared that as the pandemic progressed, they continued to learn more about best practices for personal safety and treatments for COVID-19. Participants highlighted that having additional, concrete information about the virus—and by gaining experience working with these severely ill patients—helped them adapt and persist through these challenges. This aligns with research showing that more experienced nurses are better equipped to navigate around and work through morally distressing situations (Traudt et al., 2016). RNs and RRTs explained that nursing leadership played an integral role in supporting their daily work during the pandemic. Participants noted their appreciation, especially, for CNSs and nurse directors who streamlined information about constantly changing guidelines and practices to their staff through a series of weekly, Q and A style emails. This concise and timely communication was appreciated by nurses who felt overwhelmed by the magnitude of other materials present at the hospital and out in the general public. These emails demonstrated that concrete

assistance from peers helped staff manage daily tasks and make operational decisions.

Additionally, nurses' perceptions of professional unpreparedness during this time align well with the extant literature on moral distress. In the early weeks of the pandemic, participants felt as though they were unprepared to care for patients with a novel and contagious virus. Although all providers were treating patients unlike those they had ever seen before, general care nurses—who specifically assumed responsibilities outside of their normal scope of care—voiced additional concerns as they cared for very sick patients. Such distress—along with feelings of helplessness tied to the critical status of most patients—led participants to report a diminished sense of confidence in their own skillset and professional knowledge. As a consequence, providers questioned their professional identity, value, and the meaning behind their work. Empirical research shows that questioning one's role is a common response to experiencing moral distress (Gutierrez, 2005), as nurses may feel that their professional goals cannot be achieved due to external constraints (Austin, 2012; Corley, 2002). In the case of this pandemic, the external constraints were often tied to the institutional request that some general care nurses deploy to COVID ICUs and perform duties outside of their typical roles. Despite their expertise and knowledge, providers in this study—and in particular these general care nurses—shared that they did not feel professionally equipped to be caring for such ill patients. Additionally, some participants mentioned feeling powerless when treating patients for long periods of time, and noticing little improvement in their condition. Scholars note this sense of perceived powerlessness as an internal constraint tied to experiences of moral distress (Epstein & Hamric, 2009).

As noted above, some participants mentioned an increase in professional confidence as they continued to care for patients with COVID-19. Again, they shared that what was most helpful during this time was unwavering support from colleagues, especially nursing leadership. Actions that increased staff camaraderie—such as pre-shift huddles or group debriefing sessions—were integral for supporting the mental well-being of staff, as it is important for providers to be reminded that they are not alone. Such communication helps create psychologically safe environments for staff to effectively employ the skills that this pandemic has challenged, and has been discussed and suggested as a means to intervene and protect against various types of distress in the workplace, both during this pandemic and beyond (Dzau et al., 2020; Edmondson & Lei, 2014).

The theme of isolation and alienation clearly reinforces scholarly accounts of moral distress, yet also may serve as a basis for reexamining the parameters of the concept. This analysis shows that isolation and alienation occurred within three social domains: coworkers, families, and friends, and lastly the general public. Isolation at work was created by novel conditions of practice in the ICUs, as RNs and RRTs were left to care for patients without the physical presence of staff who would normally be active members of their interdisciplinary teams. This institutional policy—limiting the number of colleagues allowed on site and inside patient rooms—and

TABLE 1 Using a selection of quotations from the data gathered in this study, Table 1 identifies internal, external, or institutional constraints, and clinical situations that act as evidence for nuanced experiences of moral distress during the COVID-19 pandemic.

Theme	Quotation from the data	Constraint(s)	Type of constraint	Explanation
Fear of the Unknown: Lack of Knowledge about the Virus and Changing Protocols	"I think like part of the hardest thing of all of this was the unknown... things changed every single day. It felt like protocols and policies and everything... nothing felt permanent... what we were supposed to do yesterday changed every single day."	Lack of understanding of the full situation ^{a,b}	Internal	Constraints described by authors.
	"...we didn't know what we were doing, I've never felt so uncomfortable and out of my depth. It was quite something... I think we were all so frightened that we were going to be left like having to assume primary care for these patients that we didn't have the expertise to care for."	Self-doubt, lack of confidence ^{a,c}	Internal	Constraints described by authors.
Concerns about Infection: Potential Spread to Selves and Families at Home	"I don't think I could have spoken to a family member in a way that would have given them hope and given them any kind of solace because I felt like I could barely, barely keep it together myself... I feel like I just didn't have the technical knowledge to be able to speak to... what was happening."	Lack of understanding of the full situations ^{a,b}	Internal	Constraints described by authors.
	"And then I think... just the fear of all of us getting sick was endlessly distressing... we cared for like someone in the nursing community in our ICU in the beginning, so I think that was just eye-opening and distressing for all of us. We're like 'if we're caring for her, who's next?'"	Lack of fully safe working conditions for bedside providers due to the clinical nature of COVID-19 ^d	Clinical Situation	Constraints described by authors.
Perceptions of Professional Unpreparedness	"I think I left this experience feeling very disposable... it didn't matter if I got sick... someone was waiting to take my place... it's like... Then why should I put my life on the line if, if it doesn't matter to you if I die or not?"	Provider's primary commitment is to the institution or employer, rather than to the patient ^e	External or Institutional	Links to definition of moral distress used by author.
	"I was more nervous about my kids... I was worried I would bring it home and get them sick. That, and my parents... we didn't see them for the first 8 weeks... I still worry about it. Like, if I get it and bring it home, or bring it home and give it to my parents, it's so scary."	Policies and priorities that conflict with care needs ^a		Constraints described by authors.
	"I was more nervous about my kids... I was worried I would bring it home and get them sick. That, and my parents... we didn't see them for the first 8 weeks... I still worry about it. Like, if I get it and bring it home, or bring it home and give it to my parents, it's so scary."	Conflicting duties ^{b,f,g}	External, Clinical Situation	Links to definitions of moral distress used by authors.
	"... it's also a confidence factor. We were doing things outside of our role and I wanted to go in there confident that I could do it and that I wouldn't be second guessing myself."	Self-doubt, lack of confidence ^{a,c}	Internal	Constraints described by authors.

TABLE 1 (Continued)

Theme	Quotation from the data	Constraint(s)	Type of constraint	Explanation
	"[There were] like people there for a month, who were just kind of cooking in these medications... and on the vent... it felt like we weren't making progress. So, it was hard to feel like you could [only] do so much for your patient... and you never really felt like they were better off for everything that you did."	Providing unnecessary treatment ^b	Clinical Situation	Constraints described by authors.
	"Why am I doing this? Like, 'Why am I risking my life and my family's life?' These people aren't even getting better, what we're doing is not working."	Perceived powerlessness, self-doubt ^a	Internal	Constraints described by authors.
Isolation and Alienation: Inside and Outside of the Hospital	"Like it was surreal driving to work. You're by yourself. You're alone in these sick patients' rooms. You have like no contact out of the few interactions with people at work."	Inadequate staffing, policies and priorities that conflict with care needs ^{a,h}	External or Institutional	Constraints described by authors. Also links to definition of moral distress used by author.
	"I felt kind of like diseased... it was very isolating in the sense that you didn't want to be around anybody else because God forbid... you were sick, yet you weren't showing symptoms."	Working in the presence of a novel and contagious virus ^d	Clinical situation	Constraints described by authors.
Inescapable Stress and Distress: No Time for Rest and Recovery	"...it was just a very sobering realization to think that you know you couldn't really distance yourself cognitively from what you were experiencing because it just seemed so immediate and so very likely that, that this could happen to someone that you know. And there was nothing that you could do to prevent it..."	Perceived powerlessness ^a	Internal	Constraints described by authors.
	"...it was very time-consuming, very stressful, and I think a lot of people got really overwhelmed and really kind of beat down from the amount of pressure that we were under. Because we want to help all of these patients... because we know that they all need us right this second, but we can't do all this like physical work... And it was also a really tough emotional burden to know that you can't be fully present for every single patient all of the time."	Conflicting duties ^{b,f,g}	External, Clinical situation	Links to definitions of moral distress used by authors.

Note: See main text for additional explanation.

^aEpstein and Hamric (2009).

^bWalton (2018).

^cEpstein and Delgado (2010).

^dSilverman et al. (2021).

^eAustin (2012).

^fMorley et al. (2020).

^gKällemark et al. (2004).

^hJameton (1984).

its subsequent moral implications are concordant with Jameton's original definition of the concept, which highlights the impacts that institutional constraints have on nurses' ability to do their work (1984). Participants in this study repeatedly mentioned that while being the only provider in the room impacted their practical operations, it also deeply affected their emotional well-being, causing them to question whether their work and safety was valued. Outside the hospital, participants shared that they felt especially isolated in terms of physical distance from their families, and additionally from a lack of public understanding for their intense work and the severity of the illness. As noted above, Austin's definition of moral distress highlights feelings of frustration that are often evoked when providers are unable to meet the needs of various constituencies, including patient families and the public (2012). We argue that due to the new clinical constraints of their work—imposed by the contagion of the virus and the desire to limit the spread—nurses were subjected to a moral dilemma that resulted in isolation as they sought to preserve the health and safety of their family and friends.

To reduce isolation and increase staff camaraderie within the workplace, Peer Supporters—colleagues that have been specifically trained to assist their peers through difficult events—have since been made available at the hospital in this study to provide emotional first aid to staff affected by distressing events. Peer Supporters volunteer for these positions and are taught how to identify the signs of a struggling colleague, express empathy, discuss coping strategies, and create a plan to help distressed clinicians move forward. Known barriers to help seeking—including time constraints, lack of confidentiality, and stigma surrounding mental health—often lead to the underutilization of more established resources and programs (Hu et al., 2012). Peer support has been highlighted as a possible intervention for both preventing and addressing outcomes of moral distress (Krautscheid et al., 2020), while recent research also shows that peer support programs are helpful in promoting individual resilience and well-being in the aftermath of this pandemic specifically (Mellins et al., 2020).

Likewise, the theme of inescapable stress and distress supports current understandings of moral distress, while also raising questions about whether the magnitude of the pandemic requires an expansion of its conceptual boundaries. Some RNs and RRTs noted that seeing so many patients die, not being able to help suffering patients, and having a lack of distance between themselves and their work brought on obsessive thoughts. Witnessing prolonged human suffering is linked to experiencing moral distress, especially when nurses perceive that patients will not benefit from continued life-sustaining treatment (Elpern et al., 2005; Whitehead et al., 2015). Participants in this study mentioned that such events contributed to feeling all-consumed by the pandemic, even when staff were at home. We argue that the pandemic has exacerbated the extent to which stress and distress can disrupt life outside of work. This calls for the boundaries of moral distress and its sphere of influence to be reexamined and perhaps broadened, or alternatively highlights the presence of a different and more intense form of distress that encapsulates the totality of nurses' experiences.

As a possible intervention, practicing mindfulness and incorporating structured break taking into the work day have been discussed as a means to preserve nurse well-being and mitigate distress during a shift (Taylor, 2005). To encourage taking quick breaks on the job, some units at this institution eventually set up what they called a "Zen Den," a designated quiet space located inside the hospital, but away from the stressful events occurring at the bedside. Once implemented, these relaxation rooms were utilized as staff meditated or rested here, and decorated them with pictures drawn by children, messages and letters of encouragement, and even family photos. Taking breaks in the company of fellow team members has been suggested as a way to foster additional mutual support between colleagues while emphasizing the importance of rest, thereby minimizing the impact of distressing events encountered while caring for patients (West & Coia, 2019).

Lastly, while risk of infection was one of the most salient sources of distress mentioned by RNs and RRTs, it has not been included in discussions on moral distress until recently (Silverman et al., 2021). Interviews revealed that participants were concerned about their own health, but perhaps were even more worried about spreading the virus to their families, thus having to prioritize the needs of their patients while also increasing personal risk. Källemark et al. (2004) defines moral distress as "traditional negative stress symptoms that occur due to situations that involve ethical dimensions and where the health care provider feels [they are] not able to preserve all interests and values at stake" (pp. 1082–1083). While the thought of personal or familial infection has not been included on traditional scales that measure moral distress (Corley et al., 2001), and historically, this factor has rarely been cited as an external constraint or clinical situation (Hamric, 2012; Walton, 2018), these data clearly highlight the moral juggling that nurses encountered while caring for patients with COVID-19. As our participants shared, providers were placed in situations where they had an obligation to care for the patients, uphold the standards of the institution, and protect both themselves and their families. Recent discussion surrounding moral distress and the COVID-19 pandemic proposes these trade-offs as potential contributors to moral distress (Morley et al., 2020). With this aspect being so prominent during the COVID-19 pandemic, we suggest that future research directly explore the relationships between fear of infection, moral distress, and impacts on provider well-being. Perhaps, fear and risk of infection could be considered a new root cause of moral distress, thereby highlighting the need for broadened conceptual parameters in light of the pandemic.

In addition to the themes focused on in this study, participants mentioned that they desired a platform to share their stories. Some described the process of being interviewed for this study as cathartic, validating, and integral for their emotional recovery. Following the first surge, Resiliency Rounds were offered at this hospital as a unit-based forum for staff to identify the challenges that impede their ability to be resilient, share their experiences, and confide in others who might be encountering similar obstacles. These groups are facilitated by a variety of hospital staff—including social workers, chaplains, nurse ethicists, and other nurse specialists—and are

designed to gain insight into the nursing experience so that their needs can be relayed to hospital leadership for changes in practice and policy. Such “moral communities” have been proposed as means to address moral distress in nurses (Pavlish et al., 2018), and recently increased in popularity at other institutions due to possible onset of moral distress faced by providers during this time (Berg, 2020). Further interventions to minimize distress should be predicated on active listening, as well as recognizing and acknowledging the true experiences of RNs and RRTs.

Our study took a collaborative approach, with a research team consisting of social scientists, nursing, and respiratory professionals. Another strength of the study is its methodology; the in-depth interviews allowed RNs and RRTs to articulate their experiences in their own words. The study is limited by its small sample size—including a small number of RRTs—and its homogenous sample (i.e., all participants worked in the same urban hospital, and were mostly white females). Despite these limitations, this study highlights a need for more empirical research on moral distress in healthcare providers during the COVID-19 pandemic, especially as scholars continue to work to better understand and define the scope and parameters of moral distress.

5 | CONCLUSION

This study demonstrates that the experiences of RNs and RRTs caring for patients during the COVID-19 pandemic reaffirm the salience of the concept of moral distress, while also pointing to some ways that the parameters of the concept should be reevaluated. We argue that this pandemic has challenged RNs and RRTs in an unprecedented way and thus generated novel constraints to their clinical practice. As such, we urge scholars to revisit original conceptualizations of moral distress, think closely about how the concept is defined, and better pinpoint its root causes and implications for the well-being of healthcare providers. Each facet of providers' experiences illustrates the extent to which they were emotionally challenged during this time. Providers should not be left alone to repair the wounds they have suffered as a consequence. This calls for nursing, respiratory, and hospital leaders to make unit and institutional level changes to better support their staff before, during, and after crises (Morley & Shashidhara, 2020).

Moral distress has long been discussed in nursing literature and practice (Jameton, 1984, 1993, 2017), and these findings suggest that it is an urgent concern in the present. The voices of RNs and RRTs practicing in ICUs during the height of the first surge of the COVID-19 pandemic clearly reveal the magnitude and impact of the multi-faceted distress incurred at the bedside. As scholars debate definitions of the concept, it is important that the experiences of providers at the bedside be elevated as an integral part of the discussion. A clear and holistic conceptual understanding of moral distress is necessary as healthcare organizations work to implement appropriate interventions and provide meaningful support for their staff, especially amidst an ongoing pandemic. Our study supports the

potential need for broadening the concept to account for the extraordinary factors present at the bedside during the COVID-19 era. Since his earlier papers, Jameton has recently recognized the presence of new factors—like evolving critical care environments and climate change—that contribute to and shape modern understandings of moral distress (2017). We argue that this pandemic acts as yet another stimulus that is doing the same.

The COVID-19 pandemic has also shed light on systems that were ill-equipped to support the physical and emotional needs of frontline staff. Data from this study reveals the importance of individual-level self-care, resiliency, and practical coping skills, but also asks what healthcare institutions should do to provide adequate and consistent support for staff before, during, and after times of crisis. It is important for staff to practice in an environment that prioritizes their emotional and ethical safety, while also ensuring that the signs and impacts of moral distress are understood and can be addressed appropriately. This is dependent on the extent to which healthcare institutions embrace programs, practices, and interventions that genuinely hold safe and supportive spaces for direct care providers, like this institution aimed to do through the establishment of various systems of support. Further, these findings point to some circumstances that are beyond both the control of the individual and the institution or system, as highlighted by the extent of this pandemic. The voices of RNs and RRTs give vital insight for policy and hospital leaders in pursuit of creating and maintaining a healthy workplace for the most valuable asset of healthcare system: the staff that provide direct care at the bedside.

ACKNOWLEDGMENTS

Authors affiliated with Brandeis University (Wendy Cadge and Sara Shostak) were supported by funds from Brandeis University. All other authors remained unfunded.

DATA AVAILABILITY STATEMENT

Research data are not shared in an effort to protect the anonymity and confidentiality of the participants.

ORCID

Sophie Trachtenberg  <http://orcid.org/0000-0002-8917-9435>

REFERENCES

- Al Mahyijari, N., Badahdah, A. M., & Khamis, F. (2021). The psychological impacts of COVID-19: A study of frontline physicians and nurses in the Arab world. *Irish Journal of Psychological Medicine*, 38, 1–17. <https://doi.org/10.1017/ipm.2020.119>
- Ardebili, M. E., Naserbakht, M., Bernstein, C., Alazmani-Noodeh, F., Hakimi, H., & Ranjbar, H. (2021). Healthcare providers experience of working during the COVID-19 pandemic: A qualitative study. *American Journal of Infection Control*, 49(5), 547–554. <https://doi.org/10.1016/j.ajic.2020.10.001>
- Austin, W. (2012). Moral distress and the contemporary plight of health professionals. *HEC Forum*, 24(1), 27–38. <https://doi.org/10.1007/s10730-012-9179-8>
- Berg, S. (2020, June 25). *Virtual resilience rounds help physicians navigate moral distress*. American Medical Association. <https://www.ama->

- asn.org/practice-management/physician-health/virtual-resilience-rounds-help-physicians-navigate-moral
- Bolton, S. (2001). Changing faces: Nurses as emotional jugglers. *Sociology of Health & Illness*, 23(1), 85–100. <https://doi.org/10.1111/1467-9566.00242>
- Butler, R., Monsalve, M., Thomas, G. W., Herman, T., Segre, A. M., Polgreen, P. M., & Suneja, M. (2018). Estimating time physicians and other health care workers spend with patients in an intensive care unit using a sensor network. *The American Journal of Medicine*, 131(8), 972.e9–972.e15. <https://doi.org/10.1016/j.amjmed.2018.03.015>
- Cadge, W., Lewis, M., Bandini, J., Shostak, S., Donahue, V., Trachtenberg, S., Grone, K., Kacmarek, R., Lux, L., Matthews, C., McAuley, M. E., Romain, F., Snyderman, C., Tehan, T., & Robinson, E. (2021). Intensive care unit nurses living through COVID-19: A qualitative study. *Journal of Nursing Management*, 29(7), 1965–1973. <https://doi.org/10.1111/jonm.13353>
- Caillet, A., Coste, C., Sanchez, R., & Allaouchiche, B. (2020). Psychological impact of COVID-19 on ICU caregivers. *Anaesthesia Critical Care & Pain Medicine*, 39(6), 717–722. <https://doi.org/10.1016/j.accpm.2020.08.006>
- Chambliss, D. F. (1996). *Beyond caring: Hospitals, nurses, and the social organization of ethics*. University of Chicago Press.
- Corley, M. C. (2002). Nurse moral distress: A proposed theory and research agenda. *Nursing Ethics*, 9(6), 636–650. <https://doi.org/10.1191/0969733002ne557oa>
- Corley, M. C., Elswick, R. K., Gorman, M., & Clor, T. (2001). Development and evaluation of a moral distress scale. *Journal of Advanced Nursing*, 33(2), 250–256. <https://doi.org/10.1111/j.1365-2648.2001.01658.x>
- Creswell, J. W. (2013). Data analysis and representation. In *Qualitative inquiry and research design: Choosing among five approaches* (3rd ed., pp. 179–212). SAGE Publications.
- DeLucia, P., Ott, T., & Palmieri, P. (2009). Performance in nursing. *Reviews of Human Factors and Ergonomics*, 5, 1–40. <https://doi.org/10.1518/155723409X448008>
- Deschenes, S., Gagnon, M., Park, T., & Kunyk, D. (2020). Moral distress: A concept clarification. *Nursing Ethics*, 27(4), 1127–1146. <https://doi.org/10.1177/0969733020909523>
- Dzau, V. J., Kirch, D., & Nasca, T. (2020). Preventing a parallel pandemic: A national strategy to protect clinicians' well-being. *New England Journal of Medicine*, 383(6), 513–515. <https://doi.org/10.1056/NEJMp2011027>
- Edmondson, A. C., & Lei, Z. (2014). Psychological safety: The history, renaissance, and future of an interpersonal construct. *Annual Review of Organizational Psychology and Organizational Behavior*, 1(1), 23–43. <https://doi.org/10.1146/annurev-orgpsych-031413-091305>
- Elpern, E. H., Covert, B., & Kleinpell, R. (2005). Moral distress of staff nurses in a medical intensive care unit. *American Journal of Critical Care*, 14(6), 523–530.
- Epstein, E. G., & Delgado, S. (2010). Understanding and addressing moral distress. *OJIN: The Online Journal of Issues in Nursing*, 15(3), Manuscript 1. <https://doi.org/10.3912/OJIN.Vol15No03Man01>
- Epstein, E. G., & Hamric, A. B. (2009). Moral distress, moral residue, and the crescendo effect. *The Journal of Clinical Ethics*, 20(4), 330–342.
- Fernández-Castillo, R.-J., González-Caro, M.-D., Fernández-García, E., Porcel-Gálvez, A.-M., & Garnacho-Montero, J. (2021). Intensive care nurses' experiences during the COVID-19 pandemic: A qualitative study. *Nursing in Critical Care*, 26(5), 397–406. <https://doi.org/10.1111/nicc.12589>
- Fumis, R. R. L., Amarante, G. A. J., de Fátima Nascimento, A., & Junior, J. M. V. (2017). Moral distress and its contribution to the development of burnout syndrome among critical care providers. *Annals of Intensive Care*, 7(1), 1–8. <https://doi.org/10.1186/s13613-017-0293-2>
- Galehdar, N., Kamran, A., Toulabi, T., & Heydari, H. (2020). Exploring nurses' experiences of psychological distress during care of patients with COVID-19: A qualitative study. *BMC Psychiatry*, 20(1), 1–9. <https://doi.org/10.1186/s12888-020-02898-1>
- Gutierrez, K. M. (2005). Critical care nurses' perceptions of and responses to moral distress. *Dimensions of Critical Care Nursing*, 24(5), 229–241. <https://doi.org/10.1097/00003465-200509000-00011>
- Hamric, A. B. (2012). Empirical research on moral distress: Issues, challenges, and opportunities. *HEC Forum*, 24(1), 39–49. <https://doi.org/10.1007/s10730-012-9177-x>
- Hamric, A. B., & Blackhall, L. J. (2007). Nurse-physician perspectives on the care of dying patients in intensive care units: Collaboration, moral distress, and ethical climate. *Critical Care Medicine*, 35(2), 422–429. <https://doi.org/10.1097/01.CCM.0000254722.50608.2D>
- Hu, Y.-Y., Fix, M. L., Hevelone, N. D., Lipsitz, S. R., Greenberg, C. C., Weissman, J. S., & Shapiro, J. (2012). Physicians' needs in coping with emotional stressors: The case for peer support. *Archives of Surgery*, 147(3), 212–217. <https://doi.org/10.1001/archsurg.2011.312>
- Jameton, A. (1984). *Nursing practice: The ethical issues*. Prentice-Hall. <https://repository.library.georgetown.edu/handle/10822/800986>
- Jameton, A. (1993). Dilemmas of moral distress: Moral responsibility and nursing practice. *AWHONN's Clinical Issues in Perinatal and Women's Health Nursing*, 4(4), 542–551.
- Jameton, A. (2017). What moral distress in nursing history could suggest about the future of health care. *AMA Journal of Ethics*, 19(6), 617–628. <https://doi.org/10.1001/journalofethics.2017.19.6.mhst1-1706>
- Källemark, S., Höglund, A. T., Hansson, M. G., Westerholm, P., & Arnetz, B. (2004). Living with conflicts-ethical dilemmas and moral distress in the health care system. *Social Science & Medicine*, 58(6), 1075–1084. [https://doi.org/10.1016/s0277-9536\(03\)00279-x](https://doi.org/10.1016/s0277-9536(03)00279-x)
- Krautscheid, L., Mood, L., McLennon, S. M., Mossman, T. C., Wagner, M., & Wode, J. (2020). Examining relationships between resilience protective factors and moral distress among nursing students. *Nursing Education Perspectives*, 41(1), 43–45. <https://doi.org/10.1097/01.NEP.0000000000000471>
- Kumar, A., Pore, P., Gupta, S., & Wani, A. O. (2016). Level of stress and its determinants among intensive care unit staff. *Indian Journal of Occupational and Environmental Medicine*, 20(3), 129–132. <https://doi.org/10.4103/0019-5278.203137>
- Lai, J., Ma, S., Wang, Y., Cai, Z., Hu, J., Wei, N., Wu, J., Du, H., Chen, T., Li, R., Tan, H., Kang, L., Yao, L., Huang, M., Wang, H., Wang, G., Liu, Z., & Hu, S. (2020). Factors associated with mental health outcomes among health care workers exposed to coronavirus disease 2019. *JAMA Network Open*, 3(3), 1–12. <https://doi.org/10.1001/jamanetworkopen.2020.3976>
- Lee, S. M., Kang, W. S., Cho, A.-R., Kim, T., & Park, J. K. (2018). Psychological impact of the 2015 MERS outbreak on hospital workers and quarantined hemodialysis patients. *Comprehensive Psychiatry*, 87, 123–127. <https://doi.org/10.1016/j.comppsy.2018.10.003>
- McCarthy, J., & Deady, R. (2008). Moral distress reconsidered. *Nursing Ethics*, 15(2), 254–262. <https://doi.org/10.1177/0969733007086023>
- Mellins, C. A., Mayer, L. E. S., Glasofer, D. R., Devlin, M. J., Albano, A. M., Nash, S. S., Engle, E., Cullen, C., Ng, W. Y. K., Allmann, A. E., Fitelson, E. M., Vieira, A., Remien, R. H., Malone, P., Wainberg, M. L., & Baptista-Neto, L. (2020). Supporting the well-being of health care providers during the COVID-19 pandemic: The CopeColumbia response. *General Hospital Psychiatry*, 67, 62–69. <https://doi.org/10.1016/j.genhosppsy.2020.08.013>
- Miller, A. G., Roberts, K. J., Hinkson, C. R., Davis, G., Strickland, S. L., & Rehder, K. J. (2020). Resilience and burnout resources in respiratory care departments. *Respiratory Care*, 66(5), 715–723. <https://doi.org/10.4187/respcare.08440>
- Morley, G., Sese, D., Rajendram, P., & Horsburgh, C. C. (2020). Addressing caregiver moral distress during the COVID-19 pandemic. *Cleveland Clinic Journal of Medicine*. Advance online publication. <https://doi.org/10.3949/ccjm.87a.ccc047>
- Morley, G., & Shashidhara, S. (2020). Debriefing as a response to moral distress. *The Journal of Clinical Ethics*, 31(3), 283–289.

- Pauly, B. M., Varcoe, C., & Storch, J. (2012). Framing the issues: Moral distress in health care. *HEC Forum*, 24(1), 1–11. <https://doi.org/10.1007/s10730-012-9176-y>
- Pavlish, C. L., Robinson, E. M., Brown-Saltzman, K., & Henriksen, J. (2018). Moral distress research agenda. In C. M. Ulrich, & C. Grady (Eds.), *Moral distress in the health professions* (pp. 103–125). Springer Publishing Company.
- Preti, E., Di Mattei, V., Perego, G., Ferrari, F., Mazzetti, M., Taranto, P., Di Pierro, R., Madeddu, F., & Calati, R. (2020). The psychological impact of epidemic and pandemic outbreaks on healthcare workers: Rapid review of the evidence. *Current Psychiatry Reports*, 22(8), 1–22. <https://doi.org/10.1007/s11920-020-01166-z>
- Scholtz, S., Nel, E. W., Poggenpoel, M., & Myburgh, C. P. H. (2016). The culture of nurses in a critical care unit. *Global Qualitative Nursing Research*, 3, 1–11. <https://doi.org/10.1177/2333393615625996>
- Silverman, H. J., Kheirbek, R. E., Moscou-Jackson, G., & Day, J. (2021). Moral distress in nurses caring for patients with Covid-19. *Nursing Ethics*, 28(7–8), 1137–1164. <https://doi.org/10.1177/09697330211003217>
- Strauss, A., Fagerhaugh, S., Suczek, B., & Wiener, C. (1982). Sentimental work in the technologized hospital. *Sociology of Health & Illness*, 4(3), 254–278. <https://doi.org/10.1111/1467-9566.ep10487954>
- Sun, N., Wei, L., Shi, S., Jiao, D., Song, R., Ma, L., Wang, H., Wang, C., Wang, Z., You, Y., Liu, S., & Wang, H. (2020). A qualitative study on the psychological experience of caregivers of COVID-19 patients. *American Journal of Infection Control*, 48(6), 592–598. <https://doi.org/10.1016/j.ajic.2020.03.018>
- Tam, C. W. C., Pang, E. P. F., Lam, L. C. W., & Chiu, H. F. K. (2004). Severe acute respiratory syndrome (SARS) in Hong Kong in 2003: Stress and psychological impact among frontline healthcare workers. *Psychological Medicine*, 34(7), 1197–1204. <https://doi.org/10.1017/S0033291704002247>
- Taylor, W. C. (2005). Transforming work breaks to promote health. *American Journal of Preventive Medicine*, 29(5), 461–465. <https://doi.org/10.1016/j.amepre.2005.08.040>
- The New York Times*. (2022, March 13). Coronavirus in the U.S.: Latest map and case count. *The New York Times*. <https://www.nytimes.com/interactive/2021/us/covid-cases.html>
- Traudt, T., Liaschenko, J., & Peden-McAlpine, C. (2016). Moral agency, moral imagination, and moral community: Antidotes to moral distress. *The Journal of Clinical Ethics*, 27(3), 201–213.
- Walton, M. K. (2018). Sources of moral distress. In C. M. Ulrich, & C. Grady (Eds.), *Moral distress in the health professions* (pp. 79–93). Springer Publishing Company.
- West, M., & Coia, D. D. (2019). *Caring for doctors caring for patients: How to transform UK healthcare environments to support doctors and medical students to care for patients*. https://www.gmc-uk.org/-/media/documents/caring-for-doctors-caring-for-patients_pdf-80706341.pdf
- Whitehead, P. B., Herbertson, R. K., Hamric, A. B., Epstein, E. G., & Fisher, J. M. (2015). Moral distress among healthcare professionals: Report of an institution-wide survey. *Journal of Nursing Scholarship*, 47(2), 117–125. <https://doi.org/10.1111/jnu.12115>

How to cite this article: Trachtenberg, S., Tehan, T., Shostak, S., Snyderman, C., Lewis, M., Romain, F., Cadge, W., McAuley, M. E., Matthews, C., Lux, L., Kacmarek, R., Grone, K., Donahue, V., Bandini, J., & Robinson, E. (2022). Experiences of moral distress in a COVID-19 intensive care unit: A qualitative study of nurses and respiratory therapists in the United States. *Nursing Inquiry*, e12500. <https://doi.org/10.1111/nin.12500>