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**Examining Nurses' Moral Distress, Acts of Moral Courage, and Influence of  
Ethical Climate in Caring for COVID-19 Patients During the Pandemic**

**by**

**Emily Elizabeth Willcott, MSc, RN**

Dissertation

Presented to the Faculty of the Graduate School of  
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for the Degree of

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## **Dedication**

To Kyle, whose unconditional love pushed me to the finish line.

To my family & friends, who inspired me to just keep swimming.

To my mentor & friend, Cheyenne Martin, for her unwavering encouragement and support.

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# **Examining Nurses' Moral Distress, Acts of Moral Courage, and Influence of Ethical Climate in Caring for COVID-19 Patients During the Pandemic**

Publication No. \_\_\_\_\_

Emily Elizabeth Willcott, PhD

The University of Texas Medical Branch, 2023

Supervisors: Darlene Martin & Mary O'keefe

The problem of interest was the nurses in the United States (U.S.) and their moral actions taken in the care of COVID-19 patients. Since March 2020, the U.S. has recorded over 103 million COVID-19 cases and over 1.1 million COVID-19 deaths (CDC, 2023). Healthcare workers comprised nearly 1.2 million of the cases and 2,500 of the deaths (CDC, 2023). Nurses' moral stances in response to pandemic pressures varied. Nurses were seen acting morally courageous by sacrificing themselves for the care of their patients, and yet a handful of nurses abused their licenses and made unethical decisions by falsifying vaccine cards. Nurses experienced unprecedented stress, leading to experiences with moral distress, but there is limited literature regarding nurses' moral responses to moral distress during their care of COVID-19 patients. Examining the hospital environment incited by the pandemic as well as see how nurses responded to moral distress in the hospitals was imperative.

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## **List of Abbreviations**

AIDS	Acquired Immunodeficiency Syndrome
ANF	American Nurses Foundation
BSN	Bachelor of Science in Nursing
CDC	Centers for Disease Control and Prevention
ECT	Ethical Climate Theory
HCP	Healthcare Provider
HECS	Hospital Ethical Climate Survey
ICU	Intensive care unit
IRB	Institutional Review Board
M/S	Medical-Surgical
MHA	Mental Health America
MMD-HP	Measure of Moral Distress for Healthcare Professionals
NMCS	Nurses' Moral Courage Scale
PTSD	Post-Traumatic Stress Disorder
RN	Registered Nurse
SD	Standard Deviation
SPSS	Statistical Package for Social Sciences
U.S.	United States
UTMB	University of Texas Medical Branch
VAS	Visual Analog Scale
VW	Volkswagen
WF	Wells Fargo

WHO      World Health Organization

## **CHAPTER ONE: INTRODUCTION**

This dissertation examined nurses' experiences with moral distress, acts of moral courage, and the hospital unit's ethical climate as a support or barrier in caring for COVID-19 patients. Chapter one introduces the study and study components including the specific aims, research questions, and significance of the study. Chapter one also describes the study's methodology and provides a preview of the subsequent dissertation chapters.

### **PROBLEM STATEMENT**

The problem of interest was the registered nurses (RNs) in the United States (U.S.) and their moral actions taken in the care of COVID-19 patients. Since March 2020, the U.S. has recorded over 103 million COVID-19 cases and over 1.1 million COVID-19 deaths (Centers for Disease Control and Prevention [CDC], 2023). Healthcare workers comprised nearly 1.2 million of the cases and 2,500 of the deaths (CDC, 2023). Nurses' moral stances in response to pandemic pressures varied. Nurses were seen acting morally courageous by sacrificing themselves for the care of their patients, and yet a handful of nurses abused their licenses and made unethical decisions by falsifying vaccine cards. Nurses experienced unprecedented stress, leading to experiences with moral distress, but there is limited literature regarding nurses' moral responses to moral distress during their care of COVID-19 patients. Examining the hospital environment incited by the pandemic, as well as nurses' responses to moral distress in the hospitals, was imperative.

### **BACKGROUND AND SIGNIFICANCE**

The purpose of this study was to examine the extent to which nurses experienced moral distress and responded with moral courage in caring for COVID-19 patients, and to assess the



extent to which the ethical climate correlated to nurse experiences with moral distress and moral courage in caring for COVID-19 patients.

Experts describe five conditions or situations in which nurses experience moral distress. First, nurses experience moral distress when they believe their actions are ethically wrong but are powerless to change the situation (Epstein et al., 2019). “This pressure to act unethically is the defining concept of moral distress” and it distinguishes those situations which are morally troubling (e.g., uncertainty in the future) from those that compromise moral integrity (e.g., lying to patients) (Epstein et al., 2019, p. 114). Second, nurses experience moral distress when they are taken lightly or not listened to despite having knowledge relevant to the situation (Epstein et al., 2019). Third, the nurse experiences moral distress when professional standards of care (e.g., minimizing unnecessary suffering) are impossible to execute (Epstein et al., 2019). Fourth, the nurse tends to experience morally distressing situations repeatedly over time (Epstein et al., 2019). Finally, moral distress tends to be caused by something within the patient, unit, or system level (Epstein et al., 2019). Substantial research has been done on moral distress in nursing, but it is unclear whether the pandemic created newfound moral distress, or if it exacerbated a pre-existing issue.

During the pandemic, nurses reported experiencing substantial stress while caring for COVID-19 patients. They identified top stressors to be the uncertainty of the pandemic (e.g., changes in patient care policy and procedure) and increased workload (i.e., increased acuity, disproportionate nurse-to-patient ratio) (Mental Health America [MHA], 2020). Nurses faced ethical challenges related to these stressors, and when nurses were unable to respond in a morally appropriate manner (i.e., according to principles of biomedical ethics), they experienced moral distress. In a study on ethical issues faced by pandemic nurses in China, one nurse reported

occasionally hiding the truth from her patients to keep them from becoming anxious, and another nurse reported witnessing other nurses avoid their patient rooms because they were afraid to contract COVID-19 (Jia et al., 2021). Both examples demonstrate violations of nursing's ethical principles, thus leading to experiences with moral distress. While substantial research has been done on moral distress, nursing ethics, issues, and responses, pandemic research on ethical issues involving healthcare providers (e.g., end-of-life care) is in development, and there is little research describing the nurse-specific dimensions of ethical dilemmas faced in caring for COVID-19 patients.

During the pandemic, nurses reported feeling insufficiently supported by their work environments. In a survey by Trusted Health (2021), 95% reported feeling the healthcare industry did not prioritize or support nurses' mental health and wellbeing. Forty-six percent (46%) reported feeling less committed to nursing since the pandemic and 71% reported intention to leave at some point (Trusted Health, 2021). The American Nurses Foundation (ANF) (2022) found in their 2022 survey that 52% of nurses were considering or intending to leave the profession, which was a 12% increase from the 2021 survey. Some nurses reported wanting to leave because of work's negative impact on their health and wellbeing. In a series of three Mental Health and Wellness Surveys during the pandemic, ANF (2022) found a 350% increase in burnout since the first survey. ANF (2021) also found in their survey series 25-44% of nurses reported wanting to leave nursing because of the inability to deliver quality care consistently in caring for COVID-19 patients. Quality care in nursing is defined as the promotion of health and wellbeing in all patients, which was impossible to do with the influx of critical patients and finite resources (Gebreheat & Teame, 2021).

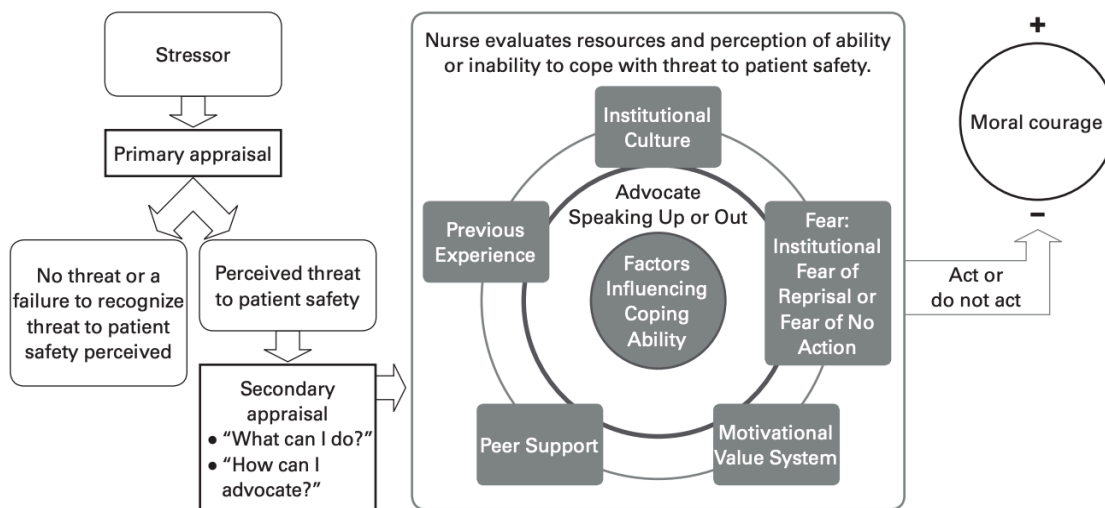
The work environment is composed of peers, patients, managers, physicians, and the hospital overall. When these components have a shared belief on how to handle ethical dilemmas, they create an ethical climate, or a “personality” of the workplace (Pergert et al., 2018). The shared perceptions provide support when assessing and managing ethical dilemmas. Pre-pandemic research shows the ethical climate positively impacts nurse outcomes and negatively correlates to moral distress (Koskenvuori et al., 2019). During the pandemic, Donkers et al. (2021) studied the relationship between moral distress experienced by nurses and their perceptions of the ethical climate and found that nurses who perceived the ethical climate negatively had higher levels of moral distress. Pre-pandemic research also demonstrated positive ethical climates promote ethical responses (Koskenvuori et al., 2019). A positive ethical climate is based on the cohesion of the team; however, nurses experienced less adequate emotional support (45%) compared to healthcare providers (HCPs) overall (39%) (MHA, 2020). Only 38% of healthcare providers reported receiving emotional support from peers, which suggests most surveyed HCPs may not have received support from their coworkers. If HCPs were not supporting other HCPs, then there was a lack of teamwork, which may have resulted in a negative ethical climate during the pandemic. Research across multiple disciplines (e.g., finance, healthcare, and business) confirms negative ethical climates promote unethical behavior; however, there is little research on the ethical climates experienced by nurses during the pandemic and their possible influence on nurses’ ethical responses.

Moral courage has been suggested as an ethical response and means of combatting moral distress. Moral courage in nursing is defined as “the nurse’s ability to rationally defend professional ethical principles and to act accordingly despite the anticipated or real adverse consequence of such action” (Numminen et al., 2019, p. 2440). Experts categorized moral

courage into four domains: *Verbal communication*; *Immediate action*; *Written notification*; *Failure to act* (p. 720). Nurses are expected to settle issues through civil discussions and raise concerns about unethical practice. Nurses may also call upon moral courage to immediately interfere with a potentially damaging action (p. 721). Research shows nurses experience guilt and shame when failing to act morally courageous (p. 721). However, there is a lack of research on nurses' acts of moral courage during the pandemic and if moral distress was a barrier to acting with moral courage.

An adaptation on Lazarus and Folkman's Transactional Model of Stress and Coping (Dinndorf-Hogenson, 2015) suggested the following response process for nurses (See Figure 1.1): The nurse experiences a stressor and conducts an initial survey to determine if it threatens patient safety. If there is a threat, then the nurse assesses the extent to which they can act by considering their resources and ability to cope with the stressor. The influencing factors (e.g., peer support, fear, and institutional culture) either assist or hinder the nurse in acting or not acting with moral courage. However, this model was not created in the context of a pandemic. It is possible the response process has changed.

Figure 1.1 Adapted Transactional Model of Stress and Coping



Nurses are the backbone of the healthcare system but appear defeated since 25% have left the profession since the beginning of the pandemic (Wolf, 2022), and 75% are expected to leave the profession by 2025 if better support is not offered to today's nurses (Kelly, 2022). The pre-pandemic and pandemic literature provided an adequate foundation for this study, but no research to date has examined the relationships between a nurse's moral distress, ethical climates, acts of moral courage in caring for COVID-19 patients during the pandemic.

## **THEORETICAL FRAMEWORK**

Victor & Cullen (1987) developed the ethical climate theory (ECT) and defined ethical climate as “the shared perceptions of what is ethically correct behavior and how ethical issues should be handled” (p. 52) in the work environment. Based on philosophical and sociological theories, ECT acts as a descriptive map for making ethical decisions and taking ethical actions within an organization (Koskenvuori et al., 2019, p. 327).

Victor & Cullen (1987) developed ECT using a grid (Figure 1.1). The vertical axis represents ethical criterion, which suggested ethical action is determined by one of three philosophies: egoism (concern for self-interests), benevolence (concern for greatest utility of greatest number of people), and principle (concern for following rules and principles) (Atabay et al., 2015). The horizontal axis represents the locus of analysis, which consists of three levels: individual, local (corresponds to organization), and cosmopolitan (corresponds to society) (p. 105). Consequently, Victor & Cullen (1987) identified five types of ethical climate that predominate within organizations and establish the ethical climates: *caring*, *rules*, *law and code*, *independence*, and *instrumental* (Atabay et al., 2015).

Figure 1.2: ECT: Five Types of Ethical Climate (Martin & Cullen, 2006, p. 5)

<i>Ethical Theory</i>	<i>Locus of Analysis</i>		
	Individual	Local	Cosmopolitan
<b>Egoism</b>	Instrumental		
<b>Benevolence</b>	Caring		
<b>Principle</b>	Independence	Rules	Law and Code

The intersections of the axes create nine theoretical climate types (Figure 1.2), which subsequently implies the ways in which organizations make decisions about ethical issues (Martin & Cullen, 2006). First, a *caring* climate is rooted in utilitarianism and is characterized by the organization's prioritization of employee well-being, collaboration, and support. Second, a *rules* climate applies a deontological approach in which adhering to the organization's rules and regulations is the employee's priority. Third, a *law and code* climate apply the deontological approach at the cosmopolitan level, where the employee prioritizes obeying legal standards and professional codes of conduct to avoid violating state and/or national law (Atabay et al., 2015). Fourth, an *independence* climate is based on individual deontology, meaning employees prioritize their own interests and operate based on personal morality. Finally, an *instrumental* climate encourages any behavior and ignores negative consequences as long as the organization's interests are furthered. Research demonstrates *caring*, *rules*, *independence*, and *law and code* climates have positive influences on nurse outcomes whereas *instrumental* climates have negative influences (Koskenvuori et al., 2019).

Figure 1.3: ECT Theoretical Strata (Martin & Cullen, 2006, p. 5)

<i>Ethical Theory</i>	<i>Locus of Analysis</i>		
	<b>Individual</b>	<b>Local</b>	<b>Cosmopolitan</b>
<b>Egoism</b>	Self-Interest	Company Profit	Efficiency
<b>Benevolence</b>	Friendship	Team Interest	Social Responsibility
<b>Principle</b>	Personal Morality	Company Rules and Procedure	Laws and Professional Codes

## VARIABLES

The independent variables utilized within this study are nurses' moral distress in caring for COVID-19 patients and ethical climate. The dependent variable is moral courage, or the extent to which nurses take moral action in caring for COVID-19 patients.

## RELEVANT TERMS

### *Conceptual Definitions*

The following conceptual definitions were utilized within this study:

- ***Organizational Climate*** is considered the organization's "personality" and "how the organization is perceived by group members" (Pergert et al., 2018, p. 2).
- ***Ethical Climate*** is a type of organizational climate, and for the purposes of this study, is defined as "the context in which ethical behavior and decision-making occurs" (Olson, 1998, p. 346), consisting of five common characteristics: peers, patients, managers, hospital, and physicians.

- ***Positive Ethical Climate*** is “characterised by a shared vision of care and teamwork where members inform and support each other and promotes the ability to meet the needs of patients and their families” (Pergert et al., 2018, p. 2).
- ***Moral Distress*** occurs when “You know the ethically appropriate action to take, but are unable to act upon it. You act in a manner contrary to your personal and professional values, which undermines your integrity and authenticity” (Morley et al., 2019, p. 653).
- ***Moral Courage*** in nursing is defined as “the nurse’s ability to rationally defend professional and personal ethical principles and values, and to act accordingly despite the anticipated or real adverse consequences of such actions to self. Lack of moral courage undermines nurses’ integrity as autonomous moral agents” (Numminen et al., 2021, p. 810).

### ***Operational Definitions***

The following operational definitions were utilized within this study:

- Extended Measure of Moral Distress for Healthcare Professionals (MMD-HP) by Donkers et al. (2021, 35 items).
- Nurses’ Moral Courage Scale (NMCS) by Numminen et al. (2019, 25 items including 1 narrative response).
- Hospital Ethical Climate Survey (HECS) by Olson (1998, 26 items).

### **STUDY PURPOSE, AIMS, AND RESEARCH QUESTIONS**

The study will examine nurses’ experienced or witnessed acts of moral courage in caring for COVID-19 patients. The study will also explore if nurses have responded to moral distress with acts of moral courage. The study will also explore the unit’s ethical climate as a contributing factor in nurses experiences with moral distress and acts of moral courage in caring for COVID-



19 patients. Additionally, the study will explore whether the ethical climate and moral distress serve as barriers to nurses' acts of moral courage.

**AIM 1:** To examine if a relationship exists between nurses' experiences with moral distress and acts of moral courage in caring for COVID-19 patients.

**RQ1.1:** What are nurses' experiences with moral distress in caring for COVID-19 patients?

**RQ1.2:** What are nurses' experiences with acts of moral courage in caring for COVID-19 patients?

**RQ1.3:** Is there a relationship between nurses' experiences with moral distress and caring for COVID-19 patients?

**RQ1.4:** What are nurses' experiences with moral distress as a barrier to acting morally courageous in caring for COVID-19 patients?

**AIM 2:** To examine if a relationship exists between nurses' perceptions of the ethical climate, experiences with moral distress, and acts of moral courage.

**RQ2.1:** What are nurses' perceptions of the ethical climate in units caring for COVID-19 patients?

**RQ2.2:** Is there a relationship between nurses' perceptions of the ethical climate and experiences with moral distress in caring for COVID-19 patients?

**RQ2.3:** Is there a relationship between nurses' perceptions of the ethical climate and willingness to act with moral courage in caring for COVID-19 patients?

**RQ2.4:** What are nurses' experiences with the ethical climate as a barrier to acting morally courageous in caring for COVID-19 patients?

The research questions for this study concentrated on the moral distress and moral courage experiences of nurses working in acute care hospitals. Nurses were selected for this study because they had first-hand experience in the care of COVID-19 patients, but there is limited research examining the relationships between a nurse's moral distress, ethical climates, and acts of moral courage while caring for COVID-19 patients in the U.S.

## **METHODOLOGY OVERVIEW**

### ***Population and Sample***

A descriptive design was used for this study. The target population was critical care, stepdown and medical-surgical (M/S) nurses in the United States (U.S.). To be included in the study, the nurses must have a Bachelor of Science in Nursing (BSN) degree, at least three (3) years of work experience, full or part-time employment on a M/S, stepdown or critical care unit, and experience providing direct patient care to COVID-19 patients in adult hospital units. Nurses were recruited using social media (e.g., Facebook, Twitter), professional networks (e.g., LinkedIn, ResearchMatch) and word-of-mouth. Convenience sampling was used, and a sample size of 350 was desired. The sample size was determined via Power Analysis in conjunction with a Biostatistician.

### ***Data Collection***

Data was collected using eleven (11) demographic questions and an adapted compilation of three (3) instruments: Extended Measure of Moral Distress for Healthcare Professionals (MMD-HP) by Donkers et al. (2021, 35 items); Nurses' Moral Courage Scale (NMCS) by Numminen et al. (2019, 25 items including 1 narrative response); Hospital Ethical Climate Survey (HECS) by Olson (1998, 26 items). The authors approved the use of their instruments for this study (See Appendices E, G & I). The data was obtained for this study only.

The Extended MMD-HP measured nurse experiences with moral distress during the pandemic as well as assessed the extent to which moral distress prevented nurses from acting with moral courage. The NMCS measured nurse experiences acting with moral courage in the care of COVID-19 patients as well as examined the extent to which the ethical climate helped or hurt the nurse's ability to act with moral courage. The HECS measured nurse perceptions of the ethical climate in their workplace.

“Ethics and morality refer to issues of right and wrong, good and bad, and obligations and virtues” (O’Mathúna et al., 2023). It can be argued that morality and ethics have philosophical differences; however, the terms are used interchangeably throughout the literature and this dissertation.

### ***Data Analysis***

After data was collected, Statistical Package for Social Sciences (SPSS) was used for data analysis. Data from each individual survey was input into SPSS using the associated Likert scales. Descriptive statistics (i.e., measures of central tendency, standard deviation) and tests of difference (i.e., Pearson’s correlation) were used in analyzing the data. A statistical significance of  $p \leq .05$  was used as the benchmark. Narrative responses concerning experiences with moral distress and acts of moral courage in the care of COVID-19 patients were analyzed and interpreted according to Naturalistic Inquiry (Lincoln & Guba, 1985).

### **CHAPTER SUMMARY**

In Chapter one, the researcher introduced the study in the following manner: The problem statement; background and significance of the study topic; theoretical framework guiding the inquiry; variables; relevant terms; study purpose, aims and research questions; methodology overview.

In Chapter two, the researcher will provide a review of the literature, including: Moral distress during the COVID-19 pandemic; ethical climate in nursing settings; moral courage in nursing.

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## CHAPTER TWO: REVIEW OF LITERATURE

Chapter two presents an overview of the significant literature relating to the nurse's response to moral distress, acts of moral courage, and perceptions of the ethical climate while caring for COVID-19 patients during the pandemic.

### REVIEW OF RELEVANT LITERATURE

#### *Moral Distress and the COVID-19 Pandemic*

**The Five Components of Moral Distress.** Experts describe five components of moral distress: *complicity in wrongdoing; lack of voice; wrongdoing associated with professional values; repeated experiences; root causes* (Epstein et al., 2019). In the context of the pandemic, the components present as such:

1. *Complicity in wrongdoing:* The registered nurse (RN) believes they are doing something ethically wrong but lacks power to move the situation in an ethical direction, thus causing moral distress (Epstein et al., 2019). "Pressure to act unethically is the defining concept of moral distress", and it distinguishes between situations that may be morally troubling (e.g., uncertainty of the future) from those that compromise moral integrity (e.g., lying to patients) (p. 114).
2. *Lack of voice:* Nurses believe they have knowledge pertaining to the situation but when they are disregarded, they experience moral distress (Epstein et al., 2019). In a concept analysis of barriers to nursing advocacy, barriers are defined as "something immaterial that impedes or separates" (Hanks, 2007, p. 173). The most common attribute of the barriers is the "conflict of interest between the nurse's responsibility to the patient and the nurse's duty to the institution where the nurse is employed" (pp. 173-174).

Depending on the type of environment one works in, the internal struggle can either

lead to action or silence. Silence, or a lack of voice, in the workplace is unfortunately common. In studies investigating the reasons for remaining silent in the workplace, “people often hold back even when they believe that what they have to say could be important for the organization, for the customer, or for themselves” (Edmondson, 2019). Silence is safe.

3. *Wrongdoing associated with professional values*: The unethical action is associated with professional standards of care, not personal values (Epstein et al., 2019). For example, the social distancing requirements of the pandemic made for morally distressing situations because nurses felt unable to provide the necessary professional support for their patients. Jia et al. (2021) conducted a study on ethical issues faced by pandemic nurses in China where nurses reported helplessness in responding to ethical issues in caring for COVID-19 patients, and one nurse said, “I saw the panic and fear in [my patients’] eyes when I was keeping a distance from them” (p. 37).
4. *Repeated experiences*: Repeated exposure to morally distressing situations tends to have a compounding effect. One pandemic nurse described a time when the pressure became so heavy that she went to the restroom to have a cathartic cry (Jia et al., 2021). This effect manifests more often in nurses than other healthcare professionals because nurses are disproportionately involved in morally distressing situations. Additionally, the pandemic may have caused other healthcare providers to be fearful of COVID-19, thus compelling them to avoid COVID-19 units. As mentioned by another pandemic nurse, “[Nurses] frequently needed to deal with patients, which increased the chance of infection, but doctors spent much less time in the ward” (p. 38).

5. *Three levels of root causes:* Moral distress stems from an experience with either the *patient, unit, or system*. A *patient-level* example of moral distress occurred when a nurse was caring for a COVID-19 patient who needed to be intubated, but the anesthetist was more concerned with their own self-protection and delayed care of the patient (Jia et al., 2021). Problems that impact patient care such as poor communication and collaboration are morally distressing at the *unit level* (Epstein et al., 2019). A *unit-level* example of moral distress occurred when a nurse said nurses sometimes finished the doctor's work or doctors tried to get nurses to perform doctor duties via the phone (Jia et al., 2019). *System-level* examples causing moral distress would be the lack of resources or insufficient staffing during the pandemic.

Nursing research regarding COVID-19 patient care demonstrates a similar sentiment: Nurses were stressed, tired, and burnt out. One pandemic nurse said, "We were constantly changing protocols which made it difficult to function at work on a daily basis, it was stressful because it was impossible to keep up with the ever-changing protocols" (Gray et al., 2021, p. 7). Mental Health America (MHA) (2020) partnered with Johnson & Johnson on a healthcare provider (HCP) wellness survey of 1,119 HCPs, which demonstrated 61% were stressed by the uncertainty of the pandemic and anxiously awaiting a return to normal. 54% listed burnout and 49% listed increased workload as additional stressors. When hospitals were inundated with COVID-19 patients, there was inadequate staff to support the influx, which created disproportionate workload and nurse-to-patient ratios. Critical care nurses, who were typically assigned 1 or 2 patients, were caring for up to 4 or 5 at a time, and non-critical care nurses were given patients with more critical diagnoses.

**Human Suffering: Pandemic Restrictions.** Pandemic nurses have also had a front row seat to immense human suffering. Not only did nurses have to handle their own emotions, but with visitation restrictions in hospitals, nurses also had to carry the emotional baggage of their patients. Studies show the pandemic caused post-traumatic stress disorder (PTSD), sleep disturbances, burnout, fatigue, emotional exhaustion, anxiety, compassion fatigue, and depression in nurses (Franklin & Gkiouleka, 2021; Trusted Health, 2021). The PTSD nurses are dealing with has been compared to the kind of trauma associated with combat. It has been suggested that nurses receive mental health support comparable to our veterans who suffer from PTSD (Sperling, 2021). “These elements can put nurses under ethical challenges, which may cause nurses to submit to negative emotions (such as anxiety or fear) and psychological pressure (such as insomnia or irritability), damaging their mental health” (Jia et al., 2021, p. 34). Trusted Health (2021) conducted a survey on over 1,000 RNs, and the nurses reported significant declines in mental health with a 22% decrease from the 2020 survey. The top stressors - the lack of pandemic preparedness, social distancing measures, unfamiliar working environments, disease exposure, media attention, and scarce resources like clinical supplies - created ethical challenges for nurses, thus leading to experiences with moral distress (Gebreheat & Teame, 2021; Jia et al., 2021; MHA, 2020).

**Nurse Experiences.** Nurses experienced moral distress when they were restricted from acting upon one or more of nursing’s guiding biomedical ethical principles (e.g., autonomy, justice, beneficence, non-maleficence). In Jia et al.’s (2021) study, one nurse reported sometimes hiding the truth from her patients to keep them from being too anxious, but the lying bothered her, thereby violating the beneficence principle. Another nurse reported witnessing other nurses avoid their patient rooms and not turn their patients out of concern for becoming infected, thus



violating the non-maleficence principle. Each qualitative statement demonstrated a type of ethical principle violation that led to experiencing moral distress. Distributive justice, which was a principle employed during the acute allocation of resources, meant some patients did not receive the necessary equipment for treatment (e.g., ventilators), thus antagonizing the justice principle. Autonomy was also compromised in some cases. One nurse remarked, “Some of the critical patients were not able to communicate, so we could not explain treatment plans to them. They could only accept what we offered” (Jia et al., 2021, p. 37).

Nurses felt insufficiently supported by their work environments during the pandemic. Trusted Health (2021) reported that 95% of surveyed nurses believed the healthcare industry did not prioritize or support nurse mental health and wellbeing, nor did they have adequate support measures. Consequently, MHA (2020), Trusted Health, and multiple American Nurses Foundation (ANF) surveys found similar degrees of nursing commitment. Trusted Health (2021) found 46% were feeling less committed to nursing since the pandemic and 71% reported intention to leave at some point. ANF (2022) found in their Two-Year Pandemic Impact survey of 11,964 nurses that 52% were considering or intending to leave, which was a 13% increase from the One-Year Survey (2021) of 22,316 nurses.

Some nurses reported wanting to leave because of work’s negative impact on their health and wellbeing. ANF (2022) conducted a series of three Mental Health and Wellness Surveys during the pandemic, and they found a 350% increase in burnout since the first survey. Some nurses reported wanting to leave because of the inability to deliver quality care consistently. Between Years 1, 2, and 3 of the survey, 25-44% of the nurses reported wanting to leave for this reason (ANF, 2022). Some nurses cited a handful of organizational reasons (i.e., insufficient staffing, work’s negative impact on wellbeing, lack of employer support and trust, poor

organizational response to COVID-19) for wanting to leave, further suggesting nurses felt insufficiently supported by their work environments (ANF, 2022).

### ***Ethical Climate***

When examining moral distress in nursing, it is imperative to examine the context in which the nurse works. Every organization has an inherent workplace culture or climate. The organizational climate is often considered to be the “personality” of the organization and how the organization is perceived by its constituents (Pergert et al., 2018). The work climate is composed of peers, managers, physicians, and the hospital overall. When these components have a shared belief in how to handle ethical dilemmas, they create a type of organizational climate called the ethical climate (Koskenvuori et al., 2019). According to Olson (1998), the ethical climate is mostly influenced by peers, patients, managers, hospitals, and physicians. Employee behaviors and beliefs are informed by shared perceptions developed through taking interpersonal risks (e.g., voicing concern, asking questions) and engaging in workplace interactions (Olson, 1998). Because it has been shown to influence nurses’ wellbeing at work, ethical decision-making, and ethical behavior, the ethical climate is a critical aspect of the healthcare environment (Koskenvuori et al., 2019).

**Ethical Climate Outcomes.** Ethical climates are known to mediate nurse outcomes, such as employee engagement, use of evidence-based practices, and commitment to the organization (Koskenvuori et al., 2019; Moss et al., 2017). Deshpande & Joseph (2008) found a significant correlation ( $p < .05$ ) between ethical behavior of coworkers and supportive climates. Koskenvuori et al. (2019) found a positive correlation between the ethical climate and the following outcomes: “job satisfaction, professional competence, individualized care,

organizational support, organizational commitment, satisfaction with quality of care, ability to manage disagreements, opinions about work, work effectiveness, and physicians' and nurses' collaboration" (p. 332). They also found a negative correlation between the ethical climate and moral distress (Koskenvuori et al., 2019).

Unethical climates may lead to unethical practice. Schwappach & Niederhauser (2019) conducted a study of healthcare staff ( $n = 3,519$ ) in Swiss psychiatric hospitals and found 47% observed colleagues violating patient safety rules intentionally or unintentionally, and 25% reported withholding safety concerns at least once. It was also found that nurses experienced significantly higher mean frequencies of perceiving concerns ( $p < .001$ ), withholding voice ( $p < .001$ ) and speaking up ( $p < .001$ ) when compared with doctors and psychologists (p. 1366). Schwappach & Gehring (2015) found in a study about patient safety concerns among oncology staff, 54% reported witnessing a colleague make a detrimental mistake and 43% witnessed violations of safety rules at least sometimes. Unethical action has been witnessed in clinical care, and one explanation for unethical practice is if the ethical climate of the workplace is conducive to it. During the pandemic, a pair of nurses in New York forged vaccine cards for a profit of \$1.5 million (Lenthang, 2022). New York's strict social regulations coupled with the turbulence of the pandemic created a climate that was ripe for an unethical workaround.

Ethical climate research spans all disciplines like business, finance, and healthcare, and it shows unethical climates are those that allow unethical practice. For example, in 2015 Volkswagen (VW) admitted to installing software that could detect emissions testing of diesel engines. The software could cheat an emissions test by sensing the test and improving the performance accordingly. The chief of VW's supervisory board, Ferdinand Piëch, most likely played a role in the cheating because Piëch reportedly incited "a reign of terror and a culture

where performance was driven by fear and intimidation” (Lutz, 2015). A colleague recalled Piëch telling the VW staff to essentially find a way to make it work or find a new job. A culture of fear was created not only by the threats from leadership, but also the task itself was unreasonable. Wells Fargo (WF) gave another scandalizing example of unrealistic expectations and pressure for results when employees opened two million accounts without the consent of their customers. “Spurred by sales targets and compensation incentives” (Consumer Financial Protection Bureau, 2016), WF employees suffered the same systemic issue as VW: “demanded hitting targets so ambitious they could only be met by deceit” (Edmondson, 2019).

**Nurse Experiences.** Nurses experience moral conflict when their desired action does not line up with what the climate promotes. Donkers et al. (2021) studied the relationship between moral distress experienced by nurses and their perceptions of the ethical climate during the pandemic. They found the primary cause for moral distress in nurses was at the patient level and it was the inadequacy of emotional support for patients and families. One nurse in the study said she begged administrators to allow family to visit patients at the ends of their lives. Administration did not budge even though she spoke out against the visitation restrictions. Donkers et al. (2021) also found that nurses who perceived the ethical climate negatively had higher levels of moral distress.

Every nurse has a healthy sense of fear in the workplace, but the literature distinguishes between the types of fear experienced in the work environment. Nurses who operate in volatile environments, such as critical care or emergency departments, are inclined to be afraid of violent patients. Fear becomes unhealthy when it impedes one’s ability to do their job ethically. “Fear of making mistakes can be paralyzing...[with] fears over what will happen to you if you are brave enough to speak out about poor practice, it is easy to see why much of today’s nursing is

governed by fear” (Wright, 2014, pp. 26-27). Fear inhibits, leads to inefficiency, and causes damage in the healthcare environment. It also tends to be all-consuming where nurses spend a lot of time and energy dealing with the fear (e.g., avoidance, justification, behavior modification) (Langlois, 2009). One detrimental consequence of fear in the healthcare environment is the nurse’s loss of confidence in their own ability thereby leading to a downward spiral and more error (Herrin, 2001). Stress or conflict at work triggers the fight-or-flight response in the brain, which impedes critical thinking and encourages reactive as opposed to logical responses (Armani & Armani, 2019; Rock, 2009).

Without the support of an ethical climate, nurses may have experienced increased ethical stress which is known to decrease job satisfaction and increase leave intentions. “They may experience compassion fatigue, characterized by the depleted ability to cope with their environment and resulting in reduced levels of resilience and burnout” (Sperling, 2021, p. 10). Additionally, the prevalence of negative outcomes may have increased during pandemic times. In a response to the pandemic exacerbating staffing shortages, Dr. Timothy Harlin, executive vice president and Chief Executive Officer of the University of Texas Medical Branch (UTMB) at Galveston said, “We have to create a culture where people want to stay...They’re part of a family at UTMB. They feel they have a voice. They feel that we really do emphasize quality and that we are not just in the business of grinding through employees” (Heath, 2021). To address the nursing shortage and mental health crisis, wellbeing and mental health need to be prioritized and supportive, ethical organizational climates need to be cultivated.

### ***Moral Courage***

Merriam-Webster (2023) defines courage as “mental or moral strength to venture, persevere, and withstand danger, fear, or difficulty”. Similarly, moral courage in nursing is

defined as “the nurse’s ability to rationally defend professional ethical principles and to act accordingly despite the anticipated or real adverse consequences of such action” (Numminen et al., 2019, p. 2440). Some research examined moral courage as a coping mechanism for moral distress (LaSala & Bjarnason, 2010; Rathert et al., 2016), but otherwise, studies on moral courage are limited as the concept is novel in nursing.

**Four Domains of Moral Courage.** Kleemola et al. (2020) categorized acts of moral courage into four domains: *Verbal communication*; *Immediate action*; *Written notification*; *Failure to act*. For the most part, nurses try to settle disagreements through civil discourse and raise concerns by speaking out against and/or reporting unethical practice. However, nurses may also call upon moral courage to take a physical stand or interrupt a potentially damaging action. “Nurses interrupted the action of another professional when they found it to cause harm or risk to the patient’s good care” (p. 721). In some cases, the nurses demanded action from another healthcare professional. One nurse remarked, “I thought the doctor made a radical mistake during the surgery when he left a tissue that could not be left there! The doctor asked for a sewing thread to close the area he was operating but I refused to give it because he had not removed the tissue” (p. 721). Nurses also reported feeling guilt when they did not act morally courageous. One nurse shared, “The situation is still bothering me. I didn’t tell the manager about that because I was afraid of the ‘revenge’ of the instrument nurse. I should have been more determined” (p. 721). Thus, it is critical for nurses to call upon moral courage for the patient’s as well as the nurse’s well-being.

**Responding With Moral Courage.** Responses to ethical challenges varied according to the research. The following are examples of nurses responding to ethical challenges during the pandemic:

“In order to prevent the patients from being too anxious to worsen their conditions, I sometimes hid the truth from my patients, which made me very upset” (Jia et al., 2021, p. 37).

“Some nurses were worried about being infected, so they secretly reduced the frequency of helping patients turn over and rubbing their backs” (p. 38).

“An elderly patient was suffering from wheezing, and it became increasingly severe. None of the treatments could ease her symptoms. She said ‘help’ to me trembling, and I burst into tears” (p. 39).

Pre-pandemic research on the relationship between moral distress and moral courage suggests moral courage can be employed as a means of handling ethical issues and combatting moral distress. Other studies on moral courage examined care situations and instrument development. But there is a lack of research on nurses acts of moral courage during the COVID-19 pandemic and if moral distress is a barrier to acting with moral courage.

## **STUDY RATIONALE**

Nurses are the backbone of the healthcare system. Nurses served on the frontlines of an unprecedented, chaotic, and stressful pandemic. At the beginning, nurses were highly unprepared. The unprecedented nature of the pandemic left nurses with so much uncertainty, nurses had to adapt rapidly to changes in their work environments, like policies, procedures, and patient assignments. Consequently, nurses were exhausted physically and emotionally. With these changes came a change in emotional responsibility as well. Nurses shouldered the grief of suffering patients and felt helpless. When nurses felt helpless, they experienced moral distress. They knew what needed to be done but were constrained from acting. The nurse workforce has

seen a 25% decrease since March 2020 with a 75% decrease expected by 2025 (Kelly, 2022; Wolf, 2022) if nothing is done to better support nurses.

Another significant aspect of the proposed study is how the definition of an ethical climate may be changing because of the pandemic. Nurse support is not limited to peer or leader support, but financial and resource support. It is possible these new constraints change what is considered to be an ethical versus unethical climate.

A positive ethical climate is based on the cohesion of the team, a shared understanding of how to deal with issues on the floor. Teamwork is a cornerstone of the positive ethical climate. The MHA (2020) survey showed nurses reported having less adequate emotional support (45%) compared to HCPs overall (39%). Only 38% of HCPs reported receiving emotional support from peers (otherwise HCPs were receiving support from family and friends), which suggests the majority of surveyed HCPs may not have received support from their coworkers. Thus, if HCPs were not supporting other HCPs, there was a lack of teamwork, which may have made for a negative ethical climate during the pandemic.

Quality care in nursing is defined by the promotion of health and wellbeing in all patients, and as demonstrated in the literature, it was not easy to do given the pandemic's influx of critical patients coupled with finite resources. Nurses were tasked with minimizing suffering, but during the pandemic, they were involved in resource allocation discussions which speculated the patient's relative worth (i.e., does the younger patient get the ventilator over the older one? Or does the otherwise healthy COVID-19 patient deserve the ventilator more than the patient who does not manage their health?).

Nursing is an inherently moral vocation and nurses constantly confront ethical dilemmas in their work. Additionally, either personal or organizational constraints may prevent nurses from



fulfilling their moral obligations and acting on their values in providing patient care (Numminen et al., 2017). Nurses need to be able to call upon and exercise their moral courage for the patient's wellbeing, yet numerous studies have shown nurses suffer from unresolved ethical problems leading to moral distress with adverse consequences (Numminen et al., 2019). It is also important to note there is a difference between being and acting morally courageous.

Professional guidelines and codes of ethics provide guidance to healthcare workers in addressing ethical challenges, but they do not necessarily require them to respond (Sperling, 2021). "Indeed, it is their individual behavior and character, as well as their social and organizational surroundings, that may affect nurses' willingness to respond to such emergencies and the content of such a response" (p. 19).

COVID-19 clinical care has been researched extensively (e.g., vaccine trials). The pandemic guidelines and mandates were based on science, although the director of the Centers for Disease Control and Prevention (CDC) admitted some measures were taken not based on data, but based on what they believed the people could handle (Tollefson et al., 2022). An article in *Nature* evaluated the following of the science and said behavioral sciences were not considered enough (Tollefson et al., 2022). As seen in the divided social response, the people acted as they saw fit, hence the pandemic protesters and counter protesters. Nurses, however, did not have the luxury of choosing a side without suffering professional backlash. Many nurses were terminated during the pandemic for resisting the vaccine mandate (many for religious reasons), which highlights the sacrifice that is expected of nurses. Additionally, nurses are known for being compassionate and trustworthy, and they are expected to uphold quality of care. But when they were unable to fulfill that expectation and it caused moral distress, what was the

source of the distress, how did they assess the ethical dilemmas and how did they operationalize their concerns?

## **REVIEW OF LITERATURE: SUMMARY**

The world owes a debt of gratitude to nurses, and research should focus on improving outcomes for pandemic nurses, especially now that both the U.S. Federal Government (in conjunction with the CDC) and the World Health Organization (WHO) have declared the pandemic to no longer be a global health crisis. Research demonstrates moral courage is used in response to an unresolved ethical issue or to combat moral distress. Moral distress has been researched extensively, and current research demonstrates the COVID-19 pandemic incited and exacerbated moral distress in nurses. However, there is a lack of research on nurses' acts of moral courage during the COVID-19 pandemic and if moral distress is a barrier to acting with moral courage. Pre-pandemic research also explored nurses' perceptions of ethical climates and moral courage. But there is no current research on the ethical climate's influence on a nurse's willingness to act with moral courage in caring for COVID-19 patients. Therefore, the purpose of the proposed study is to examine nurses' acts of moral courage, their relationship to moral distress experienced in caring for COVID-19 patients, and their relationship to the ethical climate of the nurses' units. The proposed study will provide knowledge about nurses' acts of moral courage during the pandemic. The proposed study will also determine if the ethical climate is a contributing factor in how nurses experience and respond to moral distress, and if moral distress and/or the ethical climate are barriers to nurses acting with moral courage.

## **CHAPTER SUMMARY**

In Chapter two, the researcher reviewed the literature in the following manner: Moral distress during the COVID-19 pandemic, including the five components of moral distress,

pandemic restrictions leading to human suffering, and nurse experiences with moral distress during the pandemic; ethical climate, including outcomes of positive and negative ethical climates as well as nurse experiences with their ethical climates during the pandemic; moral courage in nursing including the four domains of moral courage and morally courageous responses. The review of literature was then followed by the study rationale.

In Chapter three, the researcher will describe the study's methodology as follows: Research design; setting; sampling method including inclusion and exclusion criteria; data collection including descriptions of the instruments, measurement of variables, and online survey process; data analysis techniques for each aim and research question; study limitations; ethical considerations.

## **CHAPTER THREE: METHODS**

Chapter three presents the study methodology in the following manner: Research design; setting; sampling method including inclusion and exclusion criteria; data collection including descriptions of the instruments, measurement of variables, and online survey process; data analysis techniques for each aim and research question; ethical considerations.

### **RESEARCH DESIGN**

A descriptive design using correlational statistics was used in guiding this inquiry. Hypotheses were not needed for this design (Aggarwal & Ranganathan, 2019). Additionally, narrative responses to open-ended questions were collected and analyzed.

### **SETTING**

The subjects completed an online survey through SurveyMonkey© (See Appendix A). Due to the flexibility of online survey administration, subjects had the convenience of being located anywhere in the United States (U.S.).

### **SAMPLING METHOD**

The sample consisted of Bachelor's-prepared (BSN), registered nurses (RNs) who reside in the U.S., with at least three (3) years of nursing experience. Medical/surgical (M/S), stepdown, and critical care nurses were selected for this study. Potential participants comprehended English and had access to a computer, tablet, or smart phone. The sample was recruited using convenience sampling. A sample size of 350 was determined via Power Analysis in conjunction with the Biostatistician.

Subjects were recruited via the researcher's professional network (e.g., LinkedIn, ResearchMatch), word-of-mouth, and social media (e.g., Facebook, Twitter), all of which were online. The researcher posted the social media Flyer inviting subjects to participate in the study

(See Appendix B), and if interested, they were asked to contact the researcher via email for the link to the online survey. The researcher's contact information was also provided if the interested subject had questions about the study. The researcher also contacted subjects via email within their professional network to provide the Fast Fact Sheet (See Appendix C) with a brief description of the study procedures (e.g., informed consent, anonymity of the survey, data security measures, and voluntary nature of participation). Additionally, the survey opened with a reminder of the anonymous and voluntary nature of the study. If the subject agreed to participate, then their consent was implied by completing and submitting the survey. The subjects were not compensated for participating.

### ***Inclusion Criteria***

The following inclusion criteria was identified for this study:

- RNs who live and currently work full-time or part-time in direct adult patient care in the U.S.
- RNs who work in M/S, stepdown or critical care units, or as an agency/travel nurse.
- RNs who have at least three (3) years of nursing experience.
- RNs who have experience caring for COVID-19 patients.
- RNs who comprehend English.
- RNs who have internet and email access.

### ***Exclusion Criteria***

The following exclusion criteria was identified for this study:

- RNs who live outside of the U.S.
- RNs who work in administration.
- RNs who have less than three (3) years of nursing experience.

- RNs who do not have experience caring for COVID-19 patients.
- RNs who do not comprehend English.
- RNs who do not have internet and email access.

## **DATA COLLECTION: INSTRUMENTS**

Eleven (11) demographic questions (See Appendix D) were assembled by the researcher and placed at the beginning of the survey. The study survey was an adapted compilation of three (3) instruments: the Hospital Ethical Climate Survey (HECS), Extended Measure of Moral Distress for Healthcare Professionals (MMD-HP) Questionnaire, and Nurses' Moral Courage Scale (NMCS). Research suggests "simultaneous use of different instruments would provide a deeper understanding of elements forming ethical climate and how these factors relate to each other" (Koskenvuori et al., 2019, p. 342).

*Extended Measure of Moral Distress for Healthcare Professionals (MMD-HP)* (Donkers et al., 2021)

The MMD-HP is a version of the Moral Distress Scale that was revised to measure the perceptions of all healthcare providers and acute care settings (Epstein et al., 2019, p. 114). The MMD-HP addresses five main components of moral distress. First, moral distress occurs when a healthcare provider knows they are acting unethically but are powerless and unable to alter their circumstances. "This pressure to act unethically is the defining concept of the phenomenon" (p. 114). Second, moral distress occurs when providers are unable to be forthright and express concerns despite having knowledge relevant to the situation. Third, moral distress occurs when personal and professional beliefs clash within the provider but must act according to the professional standards. Fourth, moral distress occurs over time where each episode of moral

distress leaves a moral residue that is likely to accumulate and fester. Lastly, moral distress occurs at three levels: patient, unit, and system.

The MMD-HP originally consisted of 27 items (Epstein et al., 2019). MMD-HP items are scored by multiplying the frequency of occurrence by the level of distress (range 0-16) (Donkers et al., 2021; Epstein et al., 2019). “These composite item scores are summed to create an overall MMD-HP score (range 0-432), with higher scores indicating higher levels of moral distress” (p. 115). The narrative responses were not included in the composite score.

Donkers et al. (2021) developed the Extended MMD-HP by adding 10 pandemic-related questions (e.g., contamination fear, patient support) to the existing MMD-HP. The Extended MMD-HP consists of 42 items: 35 items reflecting different clinical situations and the option to provide two narrative responses regarding the provider’s experience with moral distress (i.e., suggest other clinical situations in which moral distress occurs). Additionally, the Extended MMD-HP contains 5 questions assessing intent to resign due to moral distress, the hospital’s prioritization of moral distress, sufficiency of measures used to attenuate moral distress, and suggestions for addressing moral distress (Donkers et al., 2021). Each item is rated on a 5-point Likert scale for the frequency of occurrence (0 = never; 4 = very frequently) and the level of distress (0 = none; 4 = very distressing)” (p. 3).

The MMD-HP was initially validated in a sample of healthcare providers in acute and intensive care settings in the U.S. 653 surveys were evaluated, 440 of which were completed by nurses (Epstein et al., 2019). Cronbach’s alpha suggested good reliability with a value of 0.93. Each provider group also demonstrated good reliability: nurse  $\alpha = 0.931$ , physician  $\alpha = 0.901$ , other  $\alpha = 0.936$  (p. 116). The Extended MMD-HP was evaluated on a sample of 504 intensive care providers working in Dutch acute and intensive care units (ICUs) during the COVID-19

pandemic. 355 of the providers were nurses. With the addition of the pandemic questions, Cronbach's alpha remained acceptable ( $\alpha = 0.85$ ; Donkers et al., 2021).

For this study, the first 35 items of the Extended MMD-HP Questionnaire were used because select items excluded M/S and stepdown nurses from answering. Additionally, select items were excluded due to overlap with items from the NMCS. Total scores ranged from 0-560. The Extended MMD-HP measured nurses experiences with moral distress during the COVID-19 pandemic, and mean scores demonstrate a high or low level of moral distress. Data from the MMD-HP were also analyzed to determine if a relationship exists between experiencing moral distress and acting with moral courage as well as a relationship between nurse perceptions of the ethical climate and experiences with moral distress. The instrument is copyrighted, and Ms. Donkers approved the use of her instrument for this study (See Appendix E). A full copy of the extended MMD-HP is included in Appendix F.

***Nurses' Moral Courage Scale (NMCS)*** (Numminen et al., 2019)

"The NMCS measures nurses' self-assessed level of moral courage" (Numminen et al., 2019, p. 2446). The NMCS was created in response to a lack of instruments measuring moral courage. Initially developed in the Finnish language, the NMCS items are based on a concept analysis and literature review analyzing the concept of moral courage. The NMCS consists of 21 items, another item for moral courage self-assessment using a Visual Analog Scale (VAS, 0-10), and an open-ended question asking the nurse to report a care situation demanding moral courage and what the response was. The NMCS items are categorized into four sub-scales: *compassion and true presence* (5 items), *moral responsibility* (4 items), *moral integrity* (7 items), and *commitment to good care* (5 items).



The first dimension, *compassion and true presence*, represents care situations in which the patient's condition and vulnerability compel the nurse to confront and overcome their own fear, forcing them to act morally courageous (Numminen et al., 2019). The second dimension, *moral responsibility*, reflects the courage required in addressing inherently morally uncertain care situations (p. 2446). *Moral responsibility* also addresses internal and external influences (e.g., professional healthcare hierarchies) and “situations where nurses particularly feel powerless needing courage to voice their opinions, such as in ethical decision-making within care teams” (p. 2446). The third dimension, *moral integrity*, “focuses on adhering to the principles and values of the profession and healthcare in general, particularly in situations when taking the risk of negative consequences from others is a possibility, thus focusing on the very core of moral courage” (p. 2447). The fourth dimension, *commitment to good care*, “deals with care situations in which good nursing care is threatened due to deficient resources or poor professional competence, detrimental and compromising practices, or coercion” (p. 2448).

Each item was randomized and measured using a 5-point Likert-type scale. The total NMCS score was based on the mean scores of the 21 items. Total scores ranged from 21-105. Demographic data including age, gender, and work experience were also collected. The NMCS was initially validated in a sample of Finnish nurses working in a variety of care units in a large university hospital (Numminen et al., 2019). Cronbach's alpha for the total scale was 0.93 and for the sub-scales was as follows: *compassion and true presence*, 0.81; *moral responsibility*, 0.81; *moral integrity*, 0.82; and *commitment to good care*, 0.73 (Numminen et al., 2021, p. 812).

For this study, the NMCS measured nurse experiences acting with moral courage in caring for COVID-19 patients, and mean scores demonstrate a high or low level of willingness to act with moral courage. The NMCS, in conjunction with the HECS and MMD-HP, were

analyzed to determine if the ethical climate and moral distress barred nurses from acting with moral courage. Data from the NMCS were also analyzed to determine if a relationship exists between nurses experiencing moral distress and willingness to act with moral courage as well as a relationship between perceptions of the ethical climate and willingness to act with moral courage. The instrument is copyrighted, and Ms. Numminen approved the use of her instrument for this study (See Appendix G). A full copy of the NMCS is included in Appendix H.

***Hospital Ethical Climate Survey (HECS)*** (Olson, 1998)

The HECS has been used extensively in ethical climate research. Due to a paucity of adequate instruments, Olson (1998) developed the HECS to measure nurse perceptions of the ethical climate in their work environment. Development of the HECS was based on Olson's personal experience in nursing practice and an integrative review of business and nursing ethics literature, which analyzed the concept of ethical climate in healthcare organizations (Olson, 1998). "Schneider's (1990) concept of types of organizational climates, and Brown's (1990) conditions for ethical reflection in organizations guided instrument development" (p. 346).

The purpose of the instrument is two-fold: 1) Results can help nurses better understand the influence of the work environment on clinical practice, and 2) Results can highlight areas for improvement and evaluate existing improvement measures (Olson, 1998).

The HECS consists of 26 items, which reflect five common characteristics of an ethical climate: Peers, Patients, Managers, Hospital, and Physicians. Items are measured on a 5-point Likert scale from 1 = *almost never true* to 5 = *almost always true* (Olson, 1998). Total scores range from 1-130. Olson's experience in nursing administration informed the items as well as findings from the literature "dealing with ethical beliefs or behavior of employees or with the

influence of the environment on” (p. 346). Additionally, item development was informed by findings from interviews with three RNs working in hospitals.

The HECS was initially validated in a sample of 360 RNs who worked in two separate acute care units in one large midwestern U.S city (Olson, 1998). “The hospitals were selected based on size, type, mission, and location” (p. 346). One hospital was not-for-profit, and one hospital was for-profit. Both were selected based on the belief that an organization’s values are implied through the mission statement, which may impose certain constraints and therefore impact employee behavior. Internal consistency reliability was calculated using Cronbach’s alpha. The whole HECS including subscales warranted an alpha of 0.91 (p. 345).

For this study, the HECS measured nurse perceptions of the ethical climate in units caring for COVID-19 patients, and mean scores for each nurse will demonstrate a negative or positive view of the ethical climate in which they work. Data from the HECS were also analyzed for relationships between nurse perceptions of the ethical climate and experiences with both moral distress and acts of moral courage during the pandemic. The instrument is copyrighted, and Dr. Olson approved the use of her instrument for this study (See Appendix I). A full copy of the HECS is included in Appendix J.

### ***Measurement of Variables***

The variables in this study will be operationally defined and measured in the following manner:

- *Ethical climate* will be measured by the HECS (26 items).
- *Moral distress* experienced in caring for COVID-19 patients will be measured by the extended MMD-HP (35 items).
- *Acts of moral courage* will be measured by the NMCS (21 items).

## **DATA COLLECTION: PROCESS**

Study approval from the University of Texas Medical Branch (UTMB) Institutional Review Board (IRB) was obtained prior to study start (See Appendix K). Upon IRB approval, the social media Flyer (See Appendix A) was posted and recruitment emails were sent to potential participants within the researcher's professional network. To increase recruitment efforts, the Flyer was amended (See Appendix L) and approved by IRB (See Appendix M) to include the survey link, thus allowing interested subjects to access the survey easily and quickly. A sample size of 350 was desired, but despite recruitment efforts, the response rate was low. The original Power Analysis was reassessed in conjunction with the Biostatistician, and it was determined that a sample size of 80 would suffice to achieve 80% power.

The study survey data were collected through Survey Monkey© and exported onto the researcher's password-protected laptop. Only the researcher knows the password to the laptop. Data collection took place over the course of three months between March 2023 and June 2023.

## **DATA ANALYSIS**

Statistical Package for Social Sciences (SPSS) version 28.0.1.1(15) was utilized for data analysis. Each individual survey datum was input into SPSS using the associated Likert scales. Descriptive statistics (i.e., measures of central tendency, standard deviation) and Pearson's correlation were used in analyzing the data. A statistical significance of  $p \leq .05$  was used as the benchmark. Narrative responses concerning experiences with moral distress and acts of moral courage in the care of COVID-19 patients were analyzed and interpreted according to Naturalistic Inquiry (Lincoln & Guba, 1985). Each aim and research question were analyzed as follows:

**AIM 1:** To examine if a relationship exists between nurses' experiences with moral distress and acts of moral courage in caring for COVID-19 patients.

**RQ1.1:** What are nurses' experiences with moral distress in caring for COVID-19 patients?

*Analysis:* Nurse experiences with moral distress were measured by the Extended MMD-HP (35 items). The distribution of scores is presented using descriptive statistics.

**RQ1.2:** What are nurses' experiences with acts of moral courage in caring for COVID-19 patients?

*Analysis:* Nurse experiences with acts of moral courage were measured by the NMCS (21 items). The distribution of scores is presented using descriptive statistics.

**RQ1.3:** Is there a relationship between nurses' experiences with moral distress and acts of moral courage in caring for COVID-19 patients?

*Analysis:* Pearson's correlation was used to measure the relationship between nurses' experiences with moral distress (Extended MMD-HP, 35 items) and acts of moral courage (NMCS, 21 items) in caring for COVID-19 patients.

**RQ1.4:** What are nurses' experiences with moral distress as a barrier to acting morally courageous in caring for COVID-19 patients?

*Analysis:* Nurse experiences with moral distress as a barrier were measured by the Extended MMD-HP (35 items) and NMCS (21 items). The distribution of scores is presented using descriptive statistics.

**AIM 2:** To examine if a relationship exists between nurses' perceptions of the ethical climate, experiences with moral distress, and acts of moral courage.

**RQ2.1:** What are nurses' perceptions of the ethical climate in units caring for COVID-19 patients?

*Analysis:* Nurse perceptions of the ethical climate were measured by the HECS (27 items). The distribution of scores is presented using descriptive statistics.

**RQ2.2:** Is there a relationship between nurses' perceptions of the ethical climate and experiences with moral distress in caring for COVID-19 patients?

*Analysis:* Pearson's correlation was used to measure the relationship between nurse perceptions of the ethical climate (HECS, 27 items) and experiences with moral distress (extended MMD-HP, 35 items).

**RQ2.3:** Is there a relationship between nurses' perceptions of the ethical climate and willingness to act with moral courage in caring for COVID-19 patients?

*Analysis:* Pearson's correlation analyses was used to measure nurse perceptions of the ethical climate (HECS, 27 items) and willingness to act with moral courage (NMCS, 21 items).

**RQ2.4:** What are nurses' experiences with the ethical climate as a barrier to acting morally courageous in caring for COVID-19 patients?

*Analysis:* Nurse experiences with the ethical climate as a barrier were measured by the NMCS (21 items) and HECS (27 items). The distribution of scores is presented using descriptive statistics.

## **ETHICAL CONSIDERATIONS**

The study was approved by the UTMB IRB in January 2023. Risks associated with study participation were unlikely, and any harm was expected to be minimal if not nonexistent. Any personal data shared by the participants were anonymous and securely located in the researcher's password-protected database and laptop. Participants were reminded their participation was voluntary and could withdraw from participation at any time by exiting the survey. Participant codes were assigned to the narrative responses to maintain the anonymous nature of the survey.

## **CHAPTER SUMMARY**

In Chapter three, the researcher presented the study methodology in the following manner: Research design; setting; sampling method including inclusion and exclusion criteria; data collection including descriptions of the instruments, measurement of variables, and online survey process; data analysis techniques for each aim and research question; ethical considerations.

In Chapter four, the researcher will present the study results as follows: Sample characteristics; Research question statistical analyses; Qualitative results.

## **CHAPTER FOUR: RESULTS**

Chapter four describes the results of this study which examined the moral distress and moral courage experiences of bedside nurses who provided direct patient care to COVID-19 patients during the pandemic. The influence of their ethical climates on moral distress and moral courage experiences was also explored. The two study aims were:

AIM 1: To examine if a relationship exists between nurses' experiences with moral distress and acts of moral courage in caring for COVID-19 patients.

AIM 2: To examine if a relationship exists between nurses' perceptions of the ethical climate, experiences with moral distress, and acts of moral courage.

The chapter will discuss the results in the following order: Sample characteristics; Quantitative results; Qualitative results.

### **SAMPLE CHARACTERISTICS**

One hundred and eighty-five (185) surveys were submitted. Twenty-four (24) were excluded on a qualification basis. Forty (40) were excluded due to entire sections being skipped and thirty-nine (39) skipped one or more items, making the surveys incomplete. Eighty-two (82) were qualified and complete, and therefore, included in the data analysis. Thirty (30) respondents answered the open-ended question, and two (2) were excluded due to illegibility. Thus, twenty-eight (28) narrative responses were analyzed.

Most respondents (79%) were female, and some (21%) were male. Fifty-seven (70%) respondents described themselves as White, nineteen (23%) were Black or African American, three (3.5%) were Asian or Asian American, and three (3.5%) were Hispanic or Latino. Thirty-seven (45%) respondents were between 21-35 years old, twenty-two (27%) were between 36-50,



nineteen (23%) were between 51-65, and four (5%) were 66 or older. Respondents lived across the U.S. (Table 3.1) with the majority coming from New York and Texas.

Table 3.1: Geographical Distribution of Subjects

<i>State</i>	<i>n</i>	<i>State</i>	<i>n</i>	<i>State</i>	<i>n</i>
Alabama	3	Louisiana	0	Ohio	5
Alaska	1	Maine	0	Oklahoma	0
Arizona	1	Maryland	1	Oregon	3
Arkansas	1	Massachusetts	2	Pennsylvania	1
California	4	Michigan	0	Rhode Island	0
Colorado	0	Minnesota	6	South Carolina	0
Connecticut	0	Mississippi	0	South Dakota	0
Delaware	0	Missouri	1	Tennessee	4
Florida	6	Montana	0	Texas	10
Georgia	2	Nebraska	0	Utah	2
Hawaii	0	Nevada	0	Vermont	0
Idaho	0	New Hampshire	0	Virginia	2
Illinois	5	New Jersey	1	Washington	2
Indiana	0	New Mexico	2	West Virginia	0
Iowa	2	New York	10	Wisconsin	1
Kansas	0	North Carolina	3	Wyoming	1
Kentucky	0	North Dakota	0		

Fifty-six (68%) held a Bachelor of Science in Nursing (BSN) degree, twenty (24%) held a Master's degree, and six (8%) held a Doctorate. Thirty-six (44%) had 3-8 years of nursing

experience, twenty-three (28%) had 9-18 years, ten (12%) had 19-30 years, and thirteen (16%) had 30 years or more. Fifty (61%) worked in teaching hospitals and thirty-two (39%) worked in non-teaching hospitals. Most respondents (90%) claimed patient care to be their primary role (Table 3.2). The respondents worked during varying phases of the pandemic with the majority practicing throughout the entire pandemic, including post-pandemic (Table 3.3).

Table 3.2: Sample Primary Roles

<i>Primary Role</i>	<i>n</i>
Patient care	74
Education	2
Management	6

Table 3.3: Pandemic Phases in which Respondents cared for COVID-19 Patients

<i>Variant Phase (Dates)</i>	<i>n</i>
Beginning (03/11/2020 – 12/29/2020)	19
Alpha/Beta/Gamma (12/29/2020 – 09/21/2021)	3
Delta (06/15/2021 – 04/14/2022)	1
Epsilon/Eta/Iota/Kappa (02/26/2021 – 09/21/21)	1
Omicron (11/26/2021 – Ongoing)	13
All or most phases (2020 – 2023)	45

## QUANTITATIVE RESULTS

**AIM 1: To examine if a relationship exists between nurses' experiences with moral distress and acts of moral courage in caring for COVID-19 patients.**

**RQ 1.1: What are nurses' experiences with moral distress in caring for COVID-19 patients?** The Extended Measure of Moral Distress for Healthcare Professionals Questionnaire (MMD-HP) mean score was  $177 (\pm 82)$  (Table 3.4), suggesting registered nurses (RNs) witnessed or personally experienced a below average amount of moral distress while caring for COVID-19 patients.

Table 3.4: Mean Scores and Standard Deviations (SDs) for Each Survey Component

<i>Survey Component</i>	<i>Mean <math>\pm</math> SD</i>
Hospital Ethical Climate Scale (HECS)	$94 \pm 17$
Extended Measure of Moral Distress for Healthcare Professionals (MMD-HP)	$177 \pm 82$
Nurses Moral Courage Scale (NMCS)	$87 \pm 14$

The Extended MMD-HP assessed two components of moral distress: Frequency and Level of Distress. The average response to moral distress experience frequency was 2 ("occasionally"). The average response to the level of distress caused by moral distress experiences was also 2 ("somewhat distressing"). Individual item analysis can be seen in Table 3.5.

Table 3.5: Mean Scores and Standard Deviations for Frequency and Level of Distress in the Extended MMD-HP

<i>Item</i>	<i>Frequency</i>	<i>Level of Distress</i>
1. Witness healthcare providers giving "false hope" to a patient or family.	$2 \pm 1$	$2 \pm 1$

2. Follow the family's insistence to continue aggressive treatment even though I believe it is not in the best interest of the patient.	3 ± 1	3 ± 1
3. Feel pressured to order or carry out orders for what I consider to be unnecessary or inappropriate tests and treatments.	2 ± 1	2 ± 1
4. Be unable to provide optimal care due to pressures from administrators or insurers to reduce costs.	2 ± 1	3 ± 2
5. Continue to provide aggressive treatment for a person who is most likely to die regardless of this treatment when no one will make a decision to withdraw it.	2 ± 1	3 ± 1
6. Be pressured to avoid taking action when I learn that a physician, nurse, or other team colleague has made a medical error and does not report it.	1 ± 1	2 ± 2
7. Be required to care for patients whom I do not feel qualified to care for.	2 ± 1	3 ± 1
8. Participate in care that causes unnecessary suffering or does not adequately relieve pain or symptoms.	2 ± 1	2 ± 1
9. Watch patient care suffer because of a lack of provider continuity.	2 ± 1	2 ± 1
10. Follow a physician's or family member's request not to discuss the patient's prognosis with the patient/family.	1 ± 1	2 ± 1
11. Witness a violation of a standard of practice or a code of ethics and not feel sufficiently supported to report the violation.	1 ± 1	2 ± 2
12. Participate in care that I do not agree with but do so because of fears of litigation.	1 ± 1	2 ± 1
13. Be required to work with other healthcare team members who are less experienced than patient care requires.	2 ± 1	2 ± 1
14. Witness low quality of patient care due to poor team communication.	2 ± 1	2 ± 1
15. Feel pressured to ignore situations in which patients have not been given adequate information to ensure informed consent.	1 ± 1	2 ± 1
16. Be required to care for more patients than I can safely care for.	3 ± 1	3 ± 1
17. Experience compromised patient care due to lack of resources/equipment/bed capacity.	3 ± 1	3 ± 1

18. Experience lack of administrative action or support for a problem that is compromising patient care.	3 ± 1	3 ± 1
19. Have excessive documentation requirements that compromise patient care.	3 ± 1	2 ± 1
20. Fear retribution if I speak up.	2 ± 1	2 ± 1
21. Feel unsafe/bullied amongst my own colleagues.	1 ± 1	2 ± 2
22. Be required to work with abusive patients/family members who are compromising quality of care.	2 ± 1	3 ± 1
23. Feel required to overemphasize tasks and productivity or quality measures at the expense of patient care.	2 ± 1	2 ± 1
24. Be required to care for patients who have unclear or inconsistent treatment plans or who lack goals of care.	2 ± 1	2 ± 1
25. Work within power hierarchies in teams, units, and my institution that compromise patient care.	2 ± 1	2 ± 1
26. Participate on a team that gives inconsistent messages to a patient/family.	2 ± 1	2 ± 1
27. Work with team members who do not treat vulnerable or stigmatized patients with dignity and respect.	2 ± 1	2 ± 1
28. Working with other healthcare team members whom I do not know well.	2 ± 1	1 ± 1
29. Be unable to allow patients/family members to have a dignified farewell.	2 ± 1	2 ± 1
30. Be unable to provide optimal emotional support to anxious and distressed patients/family members.	2 ± 1	3 ± 1
31. Feeling obligated to provide care to patients where my own health is at risk.	2 ± 1	2 ± 1
32. Feeling obligated to provide care to patients where the health of my loved ones is at risk.	2 ± 1	3 ± 1
33. Feeling unsafe due to a limited stock of protective equipment, such as masks, gowns, safety glasses, gloves, and/or disinfectants.	2 ± 1	2 ± 2
34. Be unable to provide family/patient with consistent information, for example due to lack of time or communication facilities.	2 ± 1	2 ± 1
35. Providing care to patients of whom the course of the disease and proper treatment is unclear.	2 ± 1	2 ± 1

**RQ 1.2: What are nurses' experiences with acts of moral courage in caring for COVID-19 patients?** The Nurses Moral Courage Scale (NMCS) mean score was 87 (± 14)

(Table 3.4), suggesting nurses witnessed or acted with moral courage. When asked to rank their overall sense of moral courage (0-10), the mean response was 8 ( $\pm 2$ ). The nurses were also asked to rank how easy it is to act morally courageous when they have to defend their professional ethical values with eight professional groups (Table 3.6). The first group Coworker (e.g., nurse), second group Colleague (e.g., Charge Nurse) and third group Manager averaged 4 (“fairly easy”). The fourth group, Physician, averaged 3 (“Neither difficult nor easy”). The fifth and sixth groups, Organization (e.g., administration) and External Bodies (e.g., State Board), averaged 3 (“Neither difficult nor easy”) as well. The seventh and eighth groups, Patient and Patient’s Family, averaged 4 (“fairly easy”).

Table 3.6: Mean Responses and Standard Deviations for Professional Bodies Items in the NMCS

<i>Professional Group</i>	<i>Mean <math>\pm</math> SD</i>
Coworker (e.g., RN)	4 $\pm$ 1
Colleague (e.g., charge nurse)	4 $\pm$ 1
Manager	4 $\pm$ 1
Physician	3 $\pm$ 1
Organization (e.g., administration)	3 $\pm$ 1
External bodies (e.g., State Board)	3 $\pm$ 1
Patient	4 $\pm$ 1
Patient’s next of kin	4 $\pm$ 1

When asked to rate the difficulty or ease of bringing up ethical issues for discussion (Table 3.7, Item 31), nurse responses averaged 4 (“Fairly easy”). When asked to rate the difficulty or ease of filing a complaint at work (Table 3.7, Item 32), nurse responses averaged 4 (“Fairly easy”). When asked to rate the difficulty or ease of blowing the whistle to an external organization (Table 3.7, Item 33), nurse responses averaged 3 (“Neither difficult nor easy”).

Table 3.7: Mean Responses and Standard Deviations for Discussing Ethical Issues in the NMCS

<i>Item</i>	<i>Mean ± SD</i>
31. I would bring up the problem for discussion with others participating in the care/with the care team.	4 ± 1
32. I would file a complaint with the organization where I work.	4 ± 1
33. I would 'blow the whistle' to an outside body (e.g., union, media, compliance department).	3 ± 1

**RQ 1.3: Is there a relationship between nurses' experiences with moral distress and acts of moral courage in caring for COVID-19 patients?** Through Pearson correlation analysis (Table 3.8), a weak negative relationship was found between nurse experiences with moral distress and acting with moral courage; however, the results were not statistically significant ( $r = -.108, p = .336$ ).

**RQ 1.4: What are nurses' experiences with moral distress as a barrier to acting morally courageous in caring for COVID-19 patients?** The NMCS mean score of 87 ( $\pm 14$ ) and the Extended MMD-HP mean score of 177 ( $\pm 82$ ) (Table 3.4) suggests the nurses experienced more moral courage than moral distress and that moral distress did not seem to prevent the nurses from experiencing moral courage.

**AIM 2: To examine if a relationship exists between nurses' perceptions of the ethical climate, experiences with moral distress, and acts of moral courage.**

**RQ 2.1: What are nurses' perceptions of the ethical climate in units caring for COVID-19 patients?** The mean score on the Hospital Ethical Climate Scale (HECS) was 94 ( $\pm 17$ ) (Table 3.4). This suggests nurses perceived their workplace ethical climates to be positive.

**RQ 2.2: Is there a relationship between nurses' perceptions of the ethical climate and experiences with moral distress in caring for COVID-19 patients?** The HECS/Extended

MMD-HP negative correlation coefficient ( $r = -.425, p = <.001$ ) demonstrates a statistically significant, inverse relationship between nurse experiences with moral distress and perceptions of the ethical climate.

**RQ 2.3: Is there a relationship between nurses' perceptions of the ethical climate and willingness to act with moral courage in caring for COVID-19 patients?** The HECS/NMCS correlation coefficient ( $r = .555, p = <.001$ ) demonstrates a statistically significant, moderately strong relationship between perceptions of the ethical climate and acts of moral courage.

**RQ 2.4: What are nurses' experiences with the ethical climate as a barrier to acting morally courageous in caring for COVID-19 patients?** The NMCS mean score of 87 ( $\pm 14$ ) and the HECS mean score of 94 ( $\pm 17$ ) means nurses perceived their ethical climates positively and witnessed or experienced a high level of moral courage. This suggests nurses were not barred from acting with moral courage by their ethical climates.

## **QUALITATIVE RESULTS**

Twenty-eight (34%) respondents provided narrative responses to the open-ended question, "Please describe one example of an ethical problem situation you encountered in caring for COVID-19 patients that required moral courage and how you acted to solve the situation." Three categories of experiences emerged: Nurses were forced into ethically compromising situations; Nurses struggled to act morally courageous but acted nonetheless; Nurses acted with moral courage and achieved positive resolution to their ethical issues.

Nurses were forced into ethically compromising situations during the pandemic. Nurses felt powerless in resolving ethical dilemmas. Resource allocation and COVID-19 guidelines



(e.g., visitation policies) led to negative nurse outcomes due to a lack of resource support or empowerment. Nurses were also expected to self-sacrifice for patient care.

*RN3:* I was forced to obey the order of not allowing visitors in the building.

*RN36:* Many providers (most physicians) would not go into the room to see the patients but required us nurses to get information for them...physicians were “above us,” not having to go in the room.

*RN45:* I’ve given up trying to resolve ethical issues because the hospital doesn’t want to hear it and they’ll figure out a way to fire you.

*RN57:* Patient’s family member was translating for patient and would not tell him he was COVID positive...Said COVID was fake.

*RN59:* I’m a travel nurse. I have a hard time because I’m afraid of being blackballed.

*RN78:* [The provider] had a responsibility to the patient and did not fulfill it because [the provider] didn’t want to go into the COVID room.

*RN93:* I did not agree with the policy of no family visitors for end-of-life care for COVID patients. I would always make an attempt for next of kin to visit their dying family member...it is immoral and unethical.

*RN107:* Not nearly enough nurses to care for COVID patients. Discussed with administration – no change.

*RN165:* My moral courage was challenged to continue to provide ethical and compassionate care for the patient, even though the family insisted we were not providing “adequate care” for the patient who “only had a bad cold”

Nurses struggled to act morally courageous during the pandemic but acted, nonetheless.

The pandemic created unique issues for nurses, such as COVID-19 denial. Some nurses abandoned their moral courage while others attempted but failed to achieve solutions to ethical issues.

*RN32:* My hospital unit was forced to take COVID patients, and the rooms did not have the -proper HEPA filters needed to care for these patients safely. I reported our unit to the State Board.

*RN72:* Coworker (RN) gave wrong medication. I reported it.

*RN74:* Upper management began making COVID related policy decisions that affected my unit and my patients without discussing or gaining input from those affected. As the manager, I was unable to communicate effectively to change their behaviors, so I eventually left the organization.

*RN83:* Unable to transfer to higher level of care due to bed shortages – participated in frank discussion with patient and family.

*RN88:* I found a provider prescribed a medication that there was no evidence-based reason to prescribe. I reported this anonymous through our hospital reporting system.

*RN103:* While doing travel nursing there were for-profit hospitals and providers who refused to give adequate care to patients without insurance. I would continue to communicate ongoing patient issues and document the providers lack of responsiveness and appropriate intervention.

*RN125:* Lab technicians were not being paid for all their hours at work and I reported it.

*RN131:* Knowing someone needed help but was COVID positive. Pushing away my fears to help while dealing with the fact I could be exposing my family inadvertently.

*RN139:* I have been out of gloves and masks on several occasions. Many times, I brought my own in or went to another department to get it. I never told on anyone. Several times I witnessed my coworkers taking extra.

Nurses acted morally courageous and achieved positive resolution. They acted with moral courage by speaking up for better patient care, reporting ethical issues, advocating for themselves, and demonstrating commitment to the profession of patient care.

*RN8:* I spoke out several times and was able to keep a lot of patients off of the ventilators, which saved several lives.

*RN53:* [COVID patient required wound care for a bedsore due to prolonged hospitalization] I contacted the resident and discussed this with him. We developed a plan for premedication to occur prior to the wound treatment. I was able to stay with the patient for emotional and physical support during the procedure and follow up with additional medication if needed.

*RN121:* Communication with family members was impossible. I worked with a team member to petition administration for iPad and dedicated communication nurses.

*RN140:* There wasn't enough PPE, but my superior insisted I go ahead and save the situation at my risk in which I declined.

*RN170:* [My patient's] family expressed anger in not being able to visit her as COVID-19 was not real. I continued to re-enforce information about the disease and adherence to protocols that we are bound to. I continued to treat this patient and escalate cares as appropriate.

*RN181:* I had a physician come in and turn my patient's non-rebreather down from 8 to 4L to "see how well they tolerate a lower O2." I immediately went into the room and turned it up to 6L at minimum and assessed the patient...I made sure to inform that physician, as well as other nurses and management, that right now is a very inappropriate time to be titrating O2 on your own...The next week we had laminated papers to hang on each patient's door stating what O2 they were on, and what specifications were required for that device. We also made it standard practice to require at minimum two qualified professionals in the room when changing, replacing, or titrating any oxygen device.

## **CHAPTER SUMMARY**

In Chapter four, the researcher presented the results of the study which examined the moral distress and moral courage experiences of bedside nurses who provided direct patient care to COVID-19 patients during the pandemic. The influence of their ethical climates on their moral distress and moral courage experiences was also presented. The results were presented in the following order: Sample characteristics; Quantitative results; Qualitative results.

In Chapter five, the researcher will provide a discussion of the study results in relation to the literature. The researcher will also discuss the following: Study limitations; Implications for nursing; Recommendations for future research.

## **CHAPTER FIVE: DISCUSSION, CONCLUSIONS & RECOMMENDATIONS**

Chapter five provides a discussion of the study results and their relation to relevant literature. The study limitations, implications for nursing and recommendations for future research are also discussed.

### **DISCUSSION**

The results of this study indicated registered nurses (RNs) experienced low-level moral distress while caring for COVID-19 patients during the pandemic. Nurses perceived their senses of moral courage to be high. Nurses also perceived their ethical climates to be positive. The data suggests there is a relationship between the ethical climate and nurse experiences with moral distress as well as nurse willingness to act with moral courage. This study was the first to examine the relationship between nurse experiences with moral distress, acts of moral courage, and ethical climate perceptions in the United States (U.S.) during the COVID-19 pandemic.

#### ***Nurse Experiences with Moral Distress in Caring for COVID-19 Patients***

In the present study, nurse experiences with moral distress in caring for COVID-19 patients were below the average amount reported in other studies about COVID-19 nurses. Based on the study results, nurses occasionally experienced morally distressing situations and described the typical moral dilemma as being somewhat distressing. These results support a similar study by Lake et al. (2021) who examined moral distress in pandemic intensive care unit (ICU) nurses, and they found moral distress occurred occasionally with moderate distress.

Epstein et al. (2019) outlined the five components of moral distress, and all were observed within the nurses' narrative responses from this study. *Complicity in wrongdoing* was exemplified at the *system level* by the nurses (RN3, RN140) who were forced to obey orders they

did not agree with. Similarly, nurses (RN93) who were forced to comply and enforce visitation policies experienced moral distress because it was a *wrongdoing associated with professional values*. This is because adhering to the policies contradicted the nurse's moral imperative to minimize suffering. A handful of nurses (RN74, RN103, RN107) remarked that they tried to advocate for better patient care by relaying issues to administration, but administration failed to provide a resolution, thus demonstrating a *lack of voice* at the *system level* among the nurses. Additionally, one nurse (RN45) implied they would remain silent on issues when they claimed administration would try to fire nurses who challenged them. The *repeated experiences* component was shown at the *unit level* by a couple of nurses (RN36, RN78) who perpetually exposed themselves to COVID-19 because their patients' physicians were unwilling to risk exposure themselves. *Patient level* moral distress occurred when a handful of nurses reported caring for patients who denied COVID-19's existence (RN57, RN165, RN170).

Even though nurses experience ethical dilemmas due to the inherently moral nature of nursing, the pandemic exacerbated existing issues and caused new ones (Falcó-Pegueroles et al., 2021; Firouzkouhi et al., 2021; Latimer et al., 2023; O'Mathúna et al., 2023). Moral distress research is not a novel subject, and nurses are accustomed to the concept. But the visitation policies, for example, demonstrate a new conflict pandemic nurses had to maneuver. O'Mathúna et al. (2023) analyzed U.S. frontline nurses' ethics experiences during the pandemic, and they found the most common cause of moral distress and ethical dilemmas related to the balance between nurse safety and patient care. Liu et al. (2022) found the same results in a study of pandemic nurses in China.

Throughout the literature, nurses reported feeling a sense of duty to caring for COVID-19 patients, which is why they were willing to risk their own health and safety (Schroeder et al.,

2020; Sperling, 2021). Schroeder et al. (2020) found nurses experienced anxiety at the beginning, but after consulting a leader, such as a nurse manager, the anxiety was lessened. Additionally, they found nurses developed a greater sense of comradery and teamwork, but “most felt that caring for a patient with COVID-19 was no different than taking care of any other patient in isolation” (p. 4).

O’Mathúna et al. (2023) found the most common causes of ethical dilemmas involved nurse safety versus patient care, decisions made by other professionals, and resource management. Similarly, the results of the present study found nurses experienced moral distress when administration did not consider the nurses’ perspectives when making pandemic policies (*RN74, RN93*). Schroeder et al. (2020) found in their study of COVID-19 nurses that even though nurses believed they must care for patients regardless of the illness, they experienced an increase in responsibilities and exposure due to other clinical team members attempted avoidance. As seen in the present study and the literature (Jia et al., 2021), nurses reported having to assume physician responsibilities when physicians limited their exposure by refusing to enter patient rooms (*RN36, RN78*), thus requiring the nurse to sacrifice their safety.

O’Mathúna et al. (2023) and many other studies suggest the insufficient resources created anxiety in nurses due to the decision between protecting their own health and family versus caring for COVID-19 patients as well as managing resource shortages (Cadge et al., 2021; Falcó-Pegueroles et al., 2021; Lake et al., 2021; Liu et al., 2022; Sperling, 2021). Like the results of the present study, Peng et al. (2023) found in their study of pandemic nurses in China that moral distress scores were low; however, personal protective equipment (PPE) workarounds increased moral distress. In response to difficulty accessing PPE, Lake et al. (2021) found nurses would workaround the issue by reusing or extending the use of certain PPE items. In the present study,

RN139 reported that they witnessed coworkers working around the PPE issue, which further supports the existing research.

Previous research reports nurses experienced unparalleled stress and psychological consequences due to ethical dilemmas faced during the COVID-19 pandemic (Norful et al., 2021; Schroeder et al., 2020). Goktas, Aktug, & Gezginci (2023) found in a study of critical care nurses in Turkey that the nurses had high levels of moral courage and most of them reported the pandemic did not present more moral distress than usual. This contradicts a wide body of literature claiming the pandemic presented an exhausting amount of ethical stress (American Nurses Foundation [ANF], 2022; Gray et al, 2021; MHA, 2020). Burnout is repeated, prolonged exposure to physical, emotional, or moral distress (Merriam-Webster, 2023). The third-of-three ANF (2022) surveys reported a 350% increase in burnout since the first survey. Therefore, it can be argued that the pandemic exacerbated the existing issue of moral distress in nursing. However, the present study found low moral distress and high moral courage scores, suggesting the nurses may have experienced a minimal amount of moral distress during the pandemic due to their strong senses of moral courage.

### ***Nurse Experiences with Acts of Moral Courage in Caring for COVID-19 Patients***

The results of the present study reflect that nurses believe they almost always act with moral courage when it is required, which is consistent with existing literature (Khoshmehr et al., 2020). However, the correlation between moral distress and moral courage was not significant ( $p = .336$ ).

When asked to rate the difficulty or ease of bringing up ethical issues for discussion with various professional groups (i.e., Coworker, Colleague, Manager, Patient, Patient's next of kin), the nurses claimed a high willingness to communicate ethical dilemmas with them. The nurses

indicated that it was neither difficult nor easy to employ moral courage with the other professional groups (i.e., Physician, Organization, External Bodies). Additionally, the nurses found whistleblowing to be neither difficult nor easy, which corroborates the finding that it is neither difficult nor easy to act morally courageous with Organizations and External Bodies, the entities that carry a greater risk when reporting issues (e.g., employment termination, license revocation). However, the nurses indicated a high willingness to report issues, which is affirmative given the anonymous nature of reporting systems. Therefore, nurse experiences with moral courage in caring for COVID-19 patients were largely positive.

As described by Kleemola et al. (2020), the four domains of moral courage are *verbal communication*, *immediate action*, *written notification*, and *failure to act*. The present study found examples of all four domains in the narrative responses. Nurses verbally relayed concerns (RN74, RN107) documented them (RN103), or used a reporting system (RN32, RN72, RN88, RN125). Some nurses took immediate action (RN8, RN53, RN121, RN139), including physical intervention (RN181), but a couple chose not to act (RN45, RN59). Peng et al. (2022) found nurses with high levels of moral courage approach ethical dilemmas by overcoming fear and refusing to comply with unethical demands. Similarly, LaSala and Bjarnason (2010) found nurses who act morally courageous are willing to risk experiencing horizontal violence (e.g., bullying, employment termination). The present study corroborates these findings in that a handful of nurses refused to experience moral distress by acting on their moral courage (RN8, RN32, RN72, RN74, RN88, RN103, RN121, RN140, RN181).

The present study found that moral distress did not act as a barrier to nurse acts of moral courage while caring for COVID-19 patients, which is consistent with studies demonstrating pandemic nurses did what was right regardless of the potentially adverse consequences



(O'Mathúna et al., 2023; Sperling, 2021). Morley et al. (2019) argued organizational policies can constrain the nurse's moral identity, inhibiting their ability to act upon their core values as autonomous moral agents (Morley et al., 2019). "Compromised moral integrity causes an emotional distress response, such as avoidance, frustration, and anger" (Morley et al., 2019, p. 658). Two nurses from the present study reported avoiding discussion over ethical dilemmas due to fear of termination, which also supports existing research.

### ***Nurse Perceptions of Ethical Climates in Units Caring for COVID-19 Patients***

The present study found nurse perceptions of their ethical climates to be largely positive, suggesting nurses were supported by their environments. A supportive, positive ethical climate is defined by mutual respect and team cohesion, which was evidenced during the pandemic and in this present study. *RN97* corroborated this in describing their workplace, "Teaching facility with good order sets and involved staff and MDs. Good care and support. We had each other's back." Like the present study, Latimer et al. (2023) used the MMD-HP and HECS as some of their instruments for a study on nurse perceptions of the relationship between organizational support and moral distress during the pandemic. They found the same results: High ethical climate scores, low moral distress scores. Thus, the results of the present study continue to support the existing literature.

However, the results of the present study contradict some prior related research that suggested nurses were not supported by their work environments during the pandemic (ANF, 2022; ANF, 2023; MHA, 2020; Trusted Health, 2021). Sperling (2021) studied unfair work assignments among Israeli nurses during the pandemic and found an unsupportive ethical climate was shown to decrease job satisfaction, increase leave intentions, increase compassion fatigue, decrease resilience, and increase burnout. Akin to the pandemic literature, it was reported that

PPE was insufficient or unsuitable and ethical dilemmas stemmed from the war between patient care and personal safety. The nurses from the present study reported performing unfair assignments, such as work on behalf of physicians. Yet Sperling (2021) only found 30.6% of nurses performed unfair assignments, 77.8% reported no such unfairness (p. 1102).

***Relationships Between Nurse Perceptions of the Ethical Climate, Experiences with Moral Distress, and Acting with Moral Courage in Caring for COVID-19 Patients***

Previous research shows moral courage in nursing improves quality of care (Morley et al., 2019), professional empowerment (Hu et al., 2022), and psychological well-being (Ali Awad & Al-anwer Ashour, 2022; Khodaveisi et al., 2021; Numminen et al., 2021; Peng et al., 2022). The present study found a moderately strong relationship between perceptions of the ethical climate and acts of moral courage, which suggests nurses may be more inclined to act with moral courage in an ethical, supportive environment. This is consistent with existing literature demonstrating the powerful influence of the ethical climate on moral courage. One aspect of the ethical climate that appeared throughout the narrative responses was the effect of ethical leadership. Nurses from the present study reported feeling comfortable employing moral courage among their colleagues and leaders. Ali Awad and Al-anwer Ashour (2022) found a significant, positive relationship between ethical leadership and moral courage, showing nurse leaders can empower their colleagues to act morally courageous. Khoshmehr et al. (2020) and Hu et al. (2022) echoed this in their findings, which showed empowerment encourages nurses to act morally courageous.

Based on the highly positive views of the ethical climate and high willingness to act with moral courage, the results of the present study suggest nurses did not perceive their ethical climates to be barriers to moral courage. Namadi Shahbaz and Jasemi (2023) studied moral

courage inhibitors among Iranian nurses and found two types of constraints: Individual (e.g., lack of assertiveness, self-doubt, powerlessness) and organizational (e.g., physician dominance, suppression, lack of support or reward system). Khodaveisi et al. (2020) found job insecurity to be a constraint to acting with moral courage. Results of the present study reflected that there were several organizational constraints in the narrative responses: physicians who refused to go in patient rooms (*RN36, RN78*); visitation policies (*RN3, RN93*); administrative changes without nurse buy-in (*RN74*); insufficient resources (*RN83, RN107, RN139*). Research into internal constraints is limited because moral distress is often perceived as an outcome of organizational constraints. However, Numminen, Repo and Leino-Kilpi (2017) identified seven core personality traits required for moral courage: true presence, moral integrity, responsibility, honesty, advocacy, commitment and perseverance, and personal sacrifice. The lack of one or more of these traits could inhibit moral courage.

The present study found a moderately strong relationship between nurse experiences with moral distress and perceptions of the ethical climate. This suggests moral distress is minimized when the ethical climate is perceived positively. Previous research has shown a negative correlation between the ethical climate and moral distress, which suggests one of two possibilities: moral distress increases when the ethical climate is seen negatively, or moral distress decreases when the ethical climate is seen positively (Donkers et al., 2021; Koskenvuori et al., 2019). Revisiting Latimer et al. (2023), they studied ICU nurses specifically and found the ICU was associated with significantly higher levels of moral distress. This could be attributed to the increased acuity of the COVID-19 patients, and ICUs were best equipped to handle the most critical patients, thus inundating them quickly.

Ethical Climate Theory (ECT) by Victor and Cullen (1987) suggests ethical action is determined by either egoism, benevolence, or principle, which are observed at the individual, organizational, and societal levels. Nurses are benevolent, compassionate individuals, and they require organizational support and empowerment to do their jobs effectively, which demands that organizations prioritize nurse well-being. While nurses also adhere to organizational and other professional standards, acts of moral courage may involve opposing rules and regulations. This contradicts ethical climates prioritizing *rules* or *law and code* because by choosing moral courage, the nurse is not prioritizing rules at that moment. They are more likely prioritizing their patient's or own safety. For example, one nurse (RN140) from the present study shared, "There wasn't enough PPE, but my superior insisted I go ahead and save the situation at my risk in which I declined." Despite potential consequences from management, this nurse refused to comply with an unethical demand, which is an example of moral courage.

## **LIMITATIONS**

The results of the present study help fill a gap in existing literature by highlighting the relationships between the ethical climate and experiences with moral distress and moral courage during the COVID-19 pandemic. However, this study had several limitations. First, the sampling method presented some issues. The convenience sampling method may not have gathered the most robust sample, and some Internet outlets (e.g., Facebook groups, professional networks) did not approve the researcher's request to recruit. Despite broadcasting the recruitment material to nearly one million nurses, the response rate was low. This could be due to inactive or infrequently monitored email and social media accounts.

Secondly, the online survey had two glaring errors. The first error occurred when the researcher failed to add "Minnesota" to the initial list of states. Once the researcher was alerted

to the missing state, it was promptly added. It is possible that some participants from Minnesota either selected a different state to continue with the survey, or did not advance beyond the state question and, therefore, did not complete the survey. The second error occurred after data collection was complete when the researcher discovered a qualifying question about the nurse's specialty (e.g., M/S, stepdown, critical care) was missing. Critical care nurses were initially excluded from the study; however, an amendment was submitted and approved by the IRB (See Appendix N) to include critical care nurses into the sample.

Third, the self-reporting of data may have been a limitation. Due to the sensitive nature of experiencing or witnessing moral distress, participants may have been reluctant to respond. On the other hand, scorned nurses may have been more inclined to air grievances, thus creating the issue of response bias.

Finally, the results may not be generalizable. The sample was limited to medical-surgical (M/S), stepdown, and critical care nurses caring for COVID-19 patients in adult hospital units. Pediatric nurses, public health nurses, and nursing administrators may not find these results relevant. Additionally, while the HECS measures all healthcare provider perspectives and acute settings, it was not tested among healthcare providers in emergency and long-term care specialties.

## **IMPLICATIONS FOR NURSING**

The results of this study helped fill a literature gap about the relationships between ethical climate perceptions and experiences with moral distress and moral courage during the COVID-19 pandemic. Nursing research explores perceptions, which provide valuable insight and expand upon important topics; however, nursing is a profession that requires action. Furthermore, moral

courage literature continues to expand globally. The present study may encourage other researchers to explore the moral responses and actions of nurses in any number of settings.

The healthcare system continues to rebound from the deleterious effects of the COVID-19 pandemic. It is possible that the definition of ethical climate may have changed with the pandemic. The present study concludes that nurses require personal (e.g., empowerment) and organizational support (e.g., adequate resources). It was found that the pandemic encouraged workarounds, which further complicated resource support. It is also possible that the pandemic's exacerbation of existing issues may lessen but return ethical climates to a previously unacceptable level of distress.

The present study implies that moral distress is inevitable, but the response is variable. Nurses need support to combat the workplace stress and attenuate experiences with moral distress. The trauma caused by the pandemic will take time to heal, and there continues to be a great need for psychological support among pandemic nurses. Going forward, hospital systems need to prioritize nurse psychological support and well-being in order to have quality patient care and positive outcomes.

## **RECOMMENDATIONS FOR FUTURE RESEARCH**

Future research should explore the relationships between the ethical climate, moral distress, and moral courage. The ethical climate should be examined for any long-term effects of the pandemic, and each nursing specialty should also be examined individually, including public and community health nurses. Schroeder et al. (2020) found float pool nurses were especially challenged by the rapid changes in practice. Critical care nurses may not have had the same experiences with moral courage as public health nurses. Thus, future research should compare the ethical climate, moral distress, and moral courage relationships among nurses in inpatient

versus outpatient, teaching versus non-teaching, and urban versus rural hospitals. Differences between urban and rural hospitals should also be explored since rural hospitals had even fewer resources than urban ones.

Based on the data, nurses are more likely to act morally courageous when they positively perceive the ethical climate. Nurses are also less likely to experience moral distress when they employ moral courage. It can be argued that the ethical climate can be a barrier to moral courage if the ethical climate does not empower nurses to act with moral courage. It can also be argued that moral distress can be a barrier to acting with moral courage. But future research should examine which comes first: the experience with moral distress or acting with moral courage. Research should also determine if repeated moral distress experience bolsters moral courage resolve.

Studies regarding ethical climate and moral courage have been conducted in multiple countries including Iran, Korea, Finland, Netherlands, China, Spain, Italy, Turkey, and Egypt (Ali Awad & Al-anwer Ashour, 2022; Falcó-Pegueroles et al., 2021; Goktas, Aktug & Gezginci, 2023; Huang et al., 2023; Lee et al., 2022; Liu et al., 2022; Numminen et al., 2017; Pakizekho & Barkhordari-Sharifabad, 2022; Sperling, 2021). It is possible that cultural contexts may inform research results; thus, future research in the U.S. should further explore nurse experiences with moral courage during the pandemic and post-pandemic.

In the present study, many nurses either worked throughout the pandemic or at the beginning. Studies have found that years of experience and age correlate to higher moral courage and lower moral distress (Huang et al., 2023; Khoshmehr et al., 2020; Konings et al., 2022). The initial phase of work during the pandemic was characterized by uncertainty and fear; however, it is possible nurses who cared for patients during the acquired immunodeficiency syndrome

(AIDS) epidemic first experienced a similar uncertainty and fear. Therefore, that demographic may have been more psychologically prepared for the COVID-19 pandemic. Future research should examine this demographic of nurses for their pandemic experiences.

Lastly, many pandemic studies were qualitative. More quantitative research should be done to further quantify nurse perceptions of the ethical climate and experiences with moral distress and moral courage.

## **CONCLUSION**

Moral distress and ethical climate in nursing have been extensively studied in various settings and that research continued to through the pandemic. Moral courage is a growing concept within nursing research; however, no study to date has explored the relationships between nurse moral distress, moral courage, and the ethical climate during the care of COVID-19 patients. This descriptive study examined nurses' acts of moral courage, their relationship to moral distress experienced in caring for COVID-19 patients, and their relationship to the nurse's perception of the ethical climate. Quantitative, survey data was analyzed using Statistical Package for Social Sciences (SPSS) for the following statistics: Pearson's correlation and tests of central tendency (i.e., means, standard deviations). Qualitative data was analyzed using Naturalistic Inquiry (Lincoln & Guba, 1985). The present study determined the COVID-19 pandemic incited some moral distress in nurses, yet they remained morally courageous and felt supported by their ethical climates. The results of the present study have implications for healthcare organizations, policies, nurse leaders, and registered nurses worldwide.



# APPENDIX A: Study Instrument for Examining Nurses' Moral Distress, Acts of Moral Courage, and Influence of Ethical Climate in Caring for COVID-19 Patients During the Pandemic



## 1. Welcome to our survey!

The survey will take approximately 15 minutes to complete. By completing this survey, you are confirming that you voluntarily agree and consent to participating as a subject in this study. Remember: your responses will remain anonymous.



## 2. Demographic Information (11 questions)

The following questions ask about your background and experience in caring for COVID-19 patients. Please select one response only.

1. U.S. State in which you are employed:

2. Years of nursing experience:

- ☐ 3-8 years  
☐ 9-18 years  
☐ 19-30 years  
☐ 30+ years

3. Ethnicity:

4. What is your age?

- ☐ 21-35  
☐ 36-50  
☐ 51-65  
☐ 66+

5. How do you identify:

- ☐ Female  
☐ Male  
☐ Other  
☐ Prefer not to disclose

6. What is the highest degree you have earned?

- ☐ Associate's degree
- ☐ Bachelor's degree
- ☐ Master's degree
- ☐ Doctorate

7. What is your primary role on your unit?

- ☐ Patient care
- ☐ Education
- ☐ Management

8. What type of hospital do you currently work in?

- ☐ Teaching
- ☐ Non-teaching

9. Did your hospital admit and care for patients with COVID-19 during the pandemic?

- ☐ Yes
- ☐ No

10. Have you participated in the direct care of a patient diagnosed with COVID-19?

- ☐ Yes
- ☐ No

11. When did you take care of COVID-19 patients (e.g., beginning of the pandemic ~March 2020, the Omicron surge ~December 2021, post-pandemic ~Fall 2022)?



### 3. Extended Measure of Moral Distress in Healthcare Professionals (MMD-HP, 35 questions)

**Moral distress occurs when professionals cannot carry out what they believe to be ethically appropriate actions because of constraints or barriers. This survey lists situations that occur in clinical practice. If you have experienced these situations, they may or may not have been morally distressing to you.**

Please indicate how frequently you have experienced each item and rank how distressing these situations were for you. If you have never experienced a particular situation, select "0" (never) for frequency and indicate your level of distress if it were to happen to you.

Frequency

Level of Distress

1. Witness healthcare providers giving "false hope" to a patient or family.	<input type="text"/>	<input type="text"/>
2. Follow the family's insistence to continue aggressive treatment even though I believe it is not in the best interest of the patient.	<input type="text"/>	<input type="text"/>
3. Feel pressured to order or carry out orders for what I consider to be unnecessary or inappropriate tests and treatments.	<input type="text"/>	<input type="text"/>
4. Be unable to provide optimal care due to pressures from administrators or insurers to reduce costs.	<input type="text"/>	<input type="text"/>
5. Continue to provide aggressive treatment for a person who is most likely to die regardless of this treatment when no one will make a decision to withdraw it.	<input type="text"/>	<input type="text"/>
6. Be pressured to avoid taking action when I learn that a physician, nurse, or other team colleague has made a medical error and does not report it.	<input type="text"/>	<input type="text"/>
7. Be required to care for patients whom I do not feel qualified to care for.	<input type="text"/>	<input type="text"/>
8. Participate in care that causes unnecessary suffering or does not adequately relieve pain or symptoms.	<input type="text"/>	<input type="text"/>
9. Watch patient care suffer because of a lack of provider continuity.	<input type="text"/>	<input type="text"/>
10. Follow a physician's or family member's request not to discuss the patient's prognosis with the patient/family.	<input type="text"/>	<input type="text"/>
11. Witness a violation of a standard of practice or a code of ethics and not feel sufficiently supported to report the violation.	<input type="text"/>	<input type="text"/>
12. Participate in care that I do not agree with but do so because of	<input type="text"/>	<input type="text"/>

fears of litigation.

13. Be required to work with other healthcare team members who are less experienced than patient care requires.	<input type="text"/>	<input type="text"/>
14. Witness low quality of patient care due to poor team communication.	<input type="text"/>	<input type="text"/>
15. Feel pressured to ignore situations in which patients have not been given adequate information to ensure informed consent.	<input type="text"/>	<input type="text"/>
16. Be required to care for more patients than I can safely care for.	<input type="text"/>	<input type="text"/>
17. Experience compromised patient care due to lack of resources/equipment/bed capacity.	<input type="text"/>	<input type="text"/>
18. Experience lack of administrative action or support for a problem that is compromising patient care.	<input type="text"/>	<input type="text"/>
19. Have excessive documentation requirements that compromise patient care.	<input type="text"/>	<input type="text"/>
20. Fear retribution if I speak up.	<input type="text"/>	<input type="text"/>
21. Feel unsafe/bullied amongst my own colleagues.	<input type="text"/>	<input type="text"/>
22. Be required to work with abusive patients/family members who are compromising quality of care.	<input type="text"/>	<input type="text"/>
23. Feel required to overemphasize tasks and productivity or quality measures at the expense of patient care.	<input type="text"/>	<input type="text"/>
24. Be required to care for patients who have unclear or inconsistent treatment plans or who lack goals of care.	<input type="text"/>	<input type="text"/>
25. Work within power hierarchies in teams, units, and my institution that compromise patient care.	<input type="text"/>	<input type="text"/>
26. Participate on a team		

that gives inconsistent messages to a patient/family.	<input type="text"/>	<input type="text"/>
27. Work with team members who do not treat vulnerable or stigmatized patients with dignity and respect.	<input type="text"/>	<input type="text"/>
28. Working with other healthcare team members whom I do not know well.	<input type="text"/>	<input type="text"/>
29. Be unable to allow patients/family members to have a dignified farewell.	<input type="text"/>	<input type="text"/>
30. Be unable to provide optimal emotional support to anxious and distressed patients/family members.	<input type="text"/>	<input type="text"/>
31. Feeling obligated to provide care to patients where my own health is at risk.	<input type="text"/>	<input type="text"/>
32. Feeling obligated to provide care to patients where the health of my loved ones is at risk.	<input type="text"/>	<input type="text"/>
33. Feeling unsafe due to a limited stock of protective equipment, such as masks, gowns, safety glasses, gloves, and/or disinfectants.	<input type="text"/>	<input type="text"/>
34. Be unable to provide family/patient with consistent information, for example due to lack of time or communication facilities.	<input type="text"/>	<input type="text"/>
35. Providing care to patients of whom the course of the disease and proper treatment is unclear.	<input type="text"/>	<input type="text"/>



#### 4. Nurses' Moral Courage Scale (NMCS, 34 questions)

**Moral courage can be defined as a nurses' ability to defend their professional ethical principles and to act in accordance with them despite the anticipated or real adverse consequences caused by acting so. Moral courage always presupposes rational deliberation. Morally courageous action represents a "golden mean" between rashness and cowardice. In situations where moral courage is required there are**

**usually three actors: 1) The defender of the morally right action (e.g., the nurse), 2) The object of moral wrongdoing (e.g., the patient), and 3) The perpetrator/approver of the moral wrongdoing (e.g., colleague, organization).**

Please assess your own moral courage in your nursing practice and select the answer that best describes yourself.

\*In the questions below, the expression “someone else” refers to any of the following: colleagues, other healthcare professionals, physicians, patient, patient’s family, or the organization where the nurse works.

	Does not describe me at all	Describes me fairly little	Describes me on average	Describes me fairly well	Describes me very well
1. I adhere to professional ethical principles even if I were to be bullied for it in my work unit.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. I discuss the fears caused by the illness with my patient even if it would lead me to face my own inner fears.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. I bring up for discussion the patient’s right to good care if someone else* insists that I compromise on adherence to the ethical principles of healthcare.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. If someone else* acts unethically, I bring it up for discussion even if I were to get negative feedback for it in my work community.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. If I observe evident shortcomings in someone else’s* professional competence, I bring it up for discussion.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. I participate in care team’s ethical decision-making despite the fact that ethical problem situations often involve uncertainty as to the right answer.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

7. I participate in care team's ethical decision-making regardless of someone else* disagreeing with the answer I consider to be right.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. If the resources required for ensuring good care are inadequate (e.g., staff), I bring it up for discussion.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. I bring up for discussion an ethical problem situation that arises in nursing care even if someone else* wants to remain silent about it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. Regardless of the care situation, I try to encounter each patient as a dignified human being even if someone else* were to disagree with my doing so.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. If someone else* acts professionally dishonest (e.g., steals medication), I bring it up for discussion.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. If someone else* tries to cover up an evident care mistake they have made, I bring it up for discussion.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. I bring up my honest opinion concerning even difficult ethical issues in nursing care (e.g., commencing treatment against the patient's will).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. I am even prepared to break prevalent care practices to advocate for my patient (e.g., to exceed the standard length of time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

prescribed for a care procedure if it is inadequate for good care).

15. In order to ensure good care for my patient, I do not avoid even difficult care situations.

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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16. I bring up for discussion the patient's right to good care if someone else\* compromises on adherence to the ethical principles of healthcare.

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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17. I support a suffering patient by being truly present for them even if it were to lead me to encounter my own inner fears.

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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18. I do not compromise on my patient's right to good care even though someone else\* were to bully me into doing so.

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
-----------------------	-----------------------	-----------------------	-----------------------	-----------------------

19. I admit my own mistakes in care (e.g., administering the wrong medication to a patient).

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
-----------------------	-----------------------	-----------------------	-----------------------	-----------------------

20. Regardless of the care situation, I seek to create a genuine human encounter with the patient even though a more superficial relationship would be easier for me.

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
-----------------------	-----------------------	-----------------------	-----------------------	-----------------------

21. I act in accordance with professional ethical principles even if someone else\* were to insist that I do otherwise.

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
-----------------------	-----------------------	-----------------------	-----------------------	-----------------------



22. Please assess your own moral courage as a whole on the following 0-10 scale. 10 = I always act morally courageous when the care situation requires it; 0 = I never act morally courageous even though the care situation would require it.

- ☐ 0  
☐ 1  
☐ 2  
☐ 3  
☐ 4  
☐ 5  
☐ 6  
☐ 7  
☐ 8  
☐ 9  
☐ 10

Please assess how easy it is for you to act morally courageous when you have to defend your professional ethical values with the professional groups or bodies listed below:

	Very difficult	Fairly difficult	Neither difficult nor easy	Fairly easy	Very easy
23. Coworker (e.g., RN)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24. Colleague (e.g., charge nurse, ACP)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25. Manager	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
26. Physician	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
27. Organization (e.g., administration)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
28. External bodies (e.g., state board of nursing)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
29. Patient	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
30. Patient's next of kin	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please assess how easy it is for you to bring up a serious ethical problem (e.g., systematic mistreatment of patients) in order to defend nursing values, which you consider right using the actions stated below:

	Very difficult	Fairly difficult	Neither difficult nor easy	Fairly easy	Very easy
31. I would bring up the problem for discussion with others participating in the care/with the care team.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
32. I would file a complaint with the organization where I work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
33. I would 'blow the whistle' to an outside body (e.g., union, media, compliance department).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

34 (optional). Please describe one example of an ethical problem situation you encountered in caring for COVID-19 patients that required moral courage and how you acted to solve the situation.



#### 5. Hospital Ethical Climate Survey (HECS, 26 questions)

**This survey presents a series of statements relating to various practices within your work setting. Please respond in terms of how it is in your current job on your current unit. It is important that you respond in terms of how it really is on your unit, not how you would prefer it to be.**

As you read and respond to each statement, think of some difficult patient care issues you have faced. For those items that refer to your manager, think of your immediate manager (nurse manager, assistant nurse manager, shift supervisor).

	Almost never true	Seldom true	Sometimes true	Often true	Almost always true
1. My peers listen to my concerns about patient care.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Patients know what to expect from their care.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. When I'm unable					

to decide what's right or wrong in a patient care situation, my manager helps me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Hospital policies help me with difficult patient care issues/problems.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Nurses and physicians trust one another.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Nurses have access to the information necessary to solve a patient care issue/problem.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. My manager supports me in my decisions about patient care.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. A clear sense of the hospital's mission is shared with nurses.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Physicians ask nurses for their opinions about treatment decisions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. My peers help me with difficult patient care issues/problems.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. Nurses use the information necessary to solve a patient care issue/problem.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. My manager listens to me talk about patient care issues/problems.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. The feelings and values of all parties involved in a patient care issue/problem are taken into account when choosing a course of action.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. I participate in treatment decisions for my patients.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. My manager is someone I can trust.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

16. Conflict is openly dealt with, not avoided.

☐ ☐ ☐ ☐ ☐

17. Nurses and physicians here respect each other's' opinions, even when they disagree about what is best for patients.

☐ ☐ ☐ ☐ ☐

18. I work with competent colleagues.

☐ ☐ ☐ ☐ ☐

19. The patient's wishes are respected.

☐ ☐ ☐ ☐ ☐

20. When my peers are unable to decide what's right or wrong in a particular patient care situation, I have observed that my manager helps them.

☐ ☐ ☐ ☐ ☐

21. There is a sense of questioning, learning, and seeking creative responses to patient care problems.

☐ ☐ ☐ ☐ ☐

22. Nurses and physicians respect one another.

☐ ☐ ☐ ☐ ☐

23. Safe patient care is given on my unit.

☐ ☐ ☐ ☐ ☐

24. My manager is someone I respect.

☐ ☐ ☐ ☐ ☐

25. I am able to practice nursing on my unit as I believe it should be practiced.

☐ ☐ ☐ ☐ ☐

26. Nurses are supported and respected in this hospital.

☐ ☐ ☐ ☐ ☐



6. Thank you for your participation!

**You have completed the survey.**

## APPENDIX B: Social Media Flyer (Version 1)



**Pandemic Nurses:** Share your experience with advocating for your COVID-19 patients! I am conducting a study on nurses' experiences with moral distress and moral courage during the pandemic. The extent to which the ethical climate influenced the experiences is also being explored.

Subjects may participate if they hold a BSN, current RN license, at least 3 years of work experience, and provided direct patient care to COVID-19 patients.

If you are interested in participating, please contact me at [emwillco@utmb.edu](mailto:emwillco@utmb.edu). An online survey will be emailed to you, which will take 15-20 minutes to complete. Consent is implied upon survey completion; however, participation is voluntary, and you may withdraw from the study at any time. Thank you for your consideration.

## APPENDIX C: Fast Fact Sheet



### FAST FACT SHEET

IRB#: 22-0129

**Study Name:** Examining Nurses' Moral Distress, Acts of Moral Courage, and Influence of Ethical Climate in Caring for COVID-19 Patients During the Pandemic

**Contact Information:**

Principal Investigator: Emily Willcott – [emwillco@utmb.edu](mailto:emwillco@utmb.edu)

**What is the purpose of this research study?** The purpose of the study is to examine the extent to which nurses experienced moral distress and responded with moral courage in caring for COVID-19 patients, and to assess the extent to which the ethical climate influenced nurse experiences with moral distress and moral courage.

**What are the Research Procedures?** If you chose to participate, you will be asked to complete an online survey within 1 month of receiving it. This will take approximately 15-25 minutes.

**What are the Risks and Benefits?** Any time information is collected; there is a potential risk for loss of confidentiality. Every effort will be made to keep your information confidential; however, this cannot be guaranteed. You may not receive any personal benefits from being in this study. We hope the information learned from this study will benefit other people with similar conditions in the future.

**Costs and Compensation:** N/A

**How will my information be protected?** Information we learn about you in this study will be handled in a confidential manner. If we publish the results of the study in a scientific journal or book, we will not identify you. All data collected in this study will be kept confidential and only available to the PI.

**Who can I contact with questions about this research study?** This study has been approved by the UTMB Institutional Review Board (IRB). If you have any complaints, concerns, input or questions regarding your rights as a subject participating in this research study or you would like more information about the protection of human subjects in research, you may contact the IRB Office via email [irb@utmb.edu](mailto:irb@utmb.edu).

For questions about the study, contact Emily Willcott at the email listed above.

Before you agree to participate, make sure you have read (or been read) the information provided above; your questions have been answered to your satisfaction; you have been informed that your participation is voluntary, and you have freely decided to participate in this research.

**This form is yours to keep.**

## APPENDIX D: Demographic Data Collection Form

<b>Demographic Information:</b> The following questions ask about your professional background and experience in caring for COVID-19 patients. Please circle one response only.	
U.S. State in which you are employed:  _____	What is your primary role on your unit?  1. Patient care 2. Education 3. Management
Years of nursing experience:  _____	What type of setting do you currently work in?  1. Tertiary teaching hospital 2. Hospital – non-teaching
Ethnicity: 1. Caucasian 2. African American 3. Hispanic 4. Asian 5. Other	Does your hospital admit and care for patients with COVID-19?  1. Yes 2. No
What is your age?  _____	Have you participated in the direct care of a patient diagnosed with COVID-19?  1. Yes 2. No
Are you:  1. Female 2. Male 3. Other	When did you take care of COVID patients (i.e., beginning of the pandemic ~March 2020, during the Delta surge ~July 2021, Omicron surge ~December 2021)?  _____
What is the highest degree you have earned?  1. Associate degree 2. Bachelor's degree 3. Master's degree 4. Doctorate	Thank you for your participation!

## **APPENDIX E: Permission to use the Extended Measure of Moral Distress for Healthcare Professionals (Extended MMD-HP)**

From: Donkers, Moniek (Stud. FHML / Alumni FHML)  
m.donkers@student.maastrichtuniversity.nl  
Subject: Re: MMD-HP Permission  
Date: Jan 17, 2022 at 1:58:01 PM

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**WARNING:** This email originated from outside of UTMB's email system. Do not click links or open attachments unless you recognize the sender and know the content is safe.

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Dear Ms. Willcott,

Thank you for your email and considering using the extended MMD-HP for your dissertation. I hereby give you my permission to use the extended questionnaire. You can find a copy of the full questionnaire that is used in the Supplementary Information section of our article publication.

Good luck with your dissertation.

Kind regards,

Moniek Donkers

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## APPENDIX F: Extended Measure of Moral Distress for Healthcare

### Professionals Questionnaire (Extended MMD-HP)

Moral distress occurs when professionals cannot carry out what they believe to be ethically appropriate actions because of constraints or barriers. This survey lists situations that occur in clinical practice. If you have experienced these situations, they may or may not have been morally distressing to you. Please indicate how frequently you have experienced each item. Also, rank how distressing these situations are for you. If you have never experienced a particular situation, select "0" (never) for frequency. Even if you have not experienced a situation, please indicate how distressed you would be if it occurred in your practice. Note that you will respond to each item by checking the appropriate column for two dimensions: Frequency and Level of Distress.

Items	Frequency	Level of Distress
	Never (0) - Very frequently (4)	None (0) Very distressing (4)
1. Witness healthcare providers giving "false hope" to a patient or family.		
2. Follow the family's insistence to continue aggressive treatment even though I believe it is not in the best interest of the patient.		
3. Feel pressured to order or carry out orders for what I consider to be unnecessary or inappropriate tests and treatments.		
4. Be unable to provide optimal care due to pressures from administrators or insurers to reduce costs.		
5. Continue to provide aggressive treatment for a person who is most likely to die regardless of this treatment when no one will make a decision to withdraw it.		
6. Be pressured to avoid taking action when I learn that a physician, nurse, or other team colleague has made a medical error and does not report it.		
7. Be required to care for patients whom I do not feel qualified to care for.		
8. Participate in care that causes unnecessary suffering or does not adequately relieve pain or symptoms.		

- 
9. Watch patient care suffer because of a lack of provider continuity.
  10. Follow a physician's or family member's request not to discuss the patient's prognosis with the patient/family.
  11. Witness a violation of a standard of practice or a code of ethics and not feel sufficiently supported to report the violation.
  12. Participate in care that I do not agree with but do so because of fears of litigation.
  13. Be required to work with other healthcare team members who are less experienced than patient care requires.
  14. Witness low quality of patient care due to poor team communication.
  15. Feel pressured to ignore situations in which patients have not been given adequate information to ensure informed consent.
  16. Be required to care for more patients than I can safely care for.
  17. Experience compromised patient care due to lack of resources/equipment/bed capacity.
  18. Experience lack of administrative action or support for a problem that is compromising patient care.
  19. Have excessive documentation requirements that compromise patient care.
  20. Fear retribution if I speak up.
  21. Feel unsafe/bullied amongst my own colleagues.
  22. Be required to work with abusive patients/family members who are compromising quality of care.
  23. Feel required to overemphasize tasks and productivity or quality measures at the expense of patient care.
  24. Be required to care for patients who have unclear or inconsistent treatment plans or who lack goals of care.
  25. Work within power hierarchies in teams, units, and my institution that compromise patient care.
  26. Participate on a team that gives inconsistent messages to a patient/family.
  27. Work with team members who do not treat vulnerable or stigmatized patients with dignity and respect.
-

- 
28. Working with other healthcare team members whom I do not know well.
  29. Be unable to allow patients/family members to have a dignified farewell.
  30. Be unable to provide optimal emotional support to anxious and distressed patients/family members.
  31. Feeling obligated to provide care to patients where my own health is at risk.
  32. Feeling obligated to provide care to patients where the health of my loved ones is at risk.
  33. Feeling unsafe due to a limited stock of protective equipment, such as mouth masks, gowns, safety glasses, aprons, gloves and/or disinfectants.
  34. Be unable to provide family/patient with consistent information, for example due to lack of time or communication facilities.
  35. Providing care to patients of whom the course of the disease and proper treatment is unclear.

If there are other situations in which you have felt moral distress, please write and score them here:

- 1.
  - 2.
- 

Have you ever left or considered leaving a clinical position due to moral distress?

- ☐ No, I have never considered leaving or left a position.
- ☐ Yes, I considered leaving but did not leave.
- ☐ Yes, I left a position.

Are you considering leaving your position now due to moral distress?

- ☐ Yes
- ☐ No

Is there paid attention to moral distress in your hospital during the COVID-19 crisis?

- ☐ Yes
- ☐ No
- ☐ I don't know

If yes: in what way has moral distress been addressed?

In your opinion, has moral distress been addressed sufficiently in your hospital during the COVID-19 crisis?

- ☐ Yes
- ☐ No

How do you think moral distress could be better addressed?

**Extended Ethical Decision-Making Climate Questionnaire (EDMCQ)**

The following questions are about the ethical climate in your department at the time of the COVID-19 crisis.

The statements below are about the *team climate* in your department at the time of the COVID-19 crisis. Indicate to what extent you agree with the statement.

In my ICU....

1. ... There are regular opportunities for open informal dialogue between healthcare providers.
2. ... There is regular structured and formal dialogue between the various disciplines within the team to discuss patient care.
3. ... We regularly reflect on the quality of care provided from the various points of view of the staff.
4. ... The teams are well coordinated/managed.
5. ... There is an open and constructive culture in the department such that criticism can be easily expressed.
6. ... Discussions about patients lead to greater understanding and agreements.
7. ... I am always regarded and addressed by everyone in the team as a full-fledged team member.
8. ... Team members from another discipline respect my work.
9. ... I have confidence in the professional competence of my team members.
10. ... the culture in the department makes it easy to learn from the mistakes of others.

Any comments on the above statements:

Below are some questions about the *leadership culture* in your department.

Indicate how often the situation occurs at the time of the COVID-19 crisis.

In my ICU...

1. ... Physicians in charge make accurate and timely decisions.
2. ... Physicians in charge take full charge when emergencies arise.
3. ... Physicians in charge are not hesitant about taking initiative in the group.
4. ... Physicians in charge help team members settle their differences.
5. ... Physicians in charge trust the team members to exercise good judgement.
6. ... Physicians in charge permit the team members to use their own judgement in solving problems.
7. ... Physicians in charge encourage initiative in the team members.
8. ... Physicians in charge treat all team members as their equals.
9. ... Physicians in charge are well aware of their own emotions and attitudes.
10. ... Physicians in charge are well aware of their role model function.
11. ... Physicians in charge dare to show their vulnerability.

Any comments on the above statements:

Below are some questions about *end-of-life care* at the time of the COVID-19 crisis.

Indicate to what extent you agree with the statement.

In my ICU...

1. ... my colleagues understand my ideas / feelings about difficult end-of-life decisions.
2. ... different opinions and values are tolerated.
3. ... we talk about moral and ethical problems.
4. ... There is a structured, formal debriefing after difficult patient care situation.
5. ... Nurses are present during the communication of end-of-life information to the family.
6. ... Nurses are involved in end-of-life decision-making.
7. ... Nurses and physicians collaborate well with one another during end-of-life situations.
8. ... Death is perceived as a treatment failure, so decisions to withdraw or withhold therapy are rarely made.
9. ... EOL decisions are frequently postponed.
10. ... Patients with little chance of recovery are frequently admitted.
11. ... Patients with little chance of recovery do frequently occupy an ICU bed which other patients would benefit more from

Any comments on the above statements:

The statements below are about the *psychosocial health* in your department at the time of the COVID-19 crisis. Indicate to what extent you agree with the statement.

In my ICU...

1. ... I can vent my heart.
2. ... experiences and concerns are shared with each other.
3. ... sufficient attention is paid to the impact of the situation on each other.
4. ... Colleagues regularly inquire about my concerns and needs.
5. ... I know where I can go for professional psychosocial support.
6. ... Differences in personal or family circumstances of colleagues are respected.
7. ... Differences in culture and religion of colleagues are respected.
8. .... I have enough breaks to eat, drink and relax.
9. .... I have enough time for relaxation next to work.
10. ... there is calmness, control and overview in the department.
11. .... I can adequately focus on my work during my shifts.
12. .... I have enough sleep to be rested at work.

## **APPENDIX G: Permission to use Nurses' Moral Courage Scale (NMCS)**

Helsinki, March 8, 2022

Dear Emily Willcott,

I hereby grant you the permission to use my instrument, The NMCS (Nurses' Moral Courage Scale/Numminen©2017) in your study "*Examining Nurses' Acts of Moral Courage and their Relationships to Moral Distress and the Ethical Climate During the COVID-19 Pandemic*"

Sincerely,

Olivia Numminen RN, PhD in Nursing Science, researcher  
Department of Nursing Science, University of Turku, Finland  
[oh.numminen@gmail.com](mailto:oh.numminen@gmail.com)

## APPENDIX H: Nurses' Moral Courage Scale (NMCS)

In nursing, moral courage can be defined as nurses' ability to defend their professional ethical principles and to act in accordance with them despite the anticipated or real adverse consequences caused by acting so. Moral courage always presupposes rational deliberation. Morally courageous action represents a "golden mean" between rashness and cowardice. In situations where moral courage is required there are usually three actors: 1) The defender of the morally right action (e.g., the nurse), 2) The object of moral wrongdoing (e.g., the patient), and 3) The perpetrator/approver of the moral wrongdoing (e.g., colleague, organization).

I ask you to assess your own moral courage in your nursing practice. The questionnaire consists of (A) sociodemographic questions and (B) questions assessing moral courage. **There are no right or wrong answers to the questions.** Please choose and circle the alternative that you think best describes yourself.

1. Age \_\_\_\_\_ years

2. Gender                      1) Female          2) Male

3. Your highest degree

- 1) Nurse/midwife/public health nurse - college/university of applied sciences
- 2) Bachelor/Master of Nursing Science
- 3) Licentiate/PhD of Nursing Science
- 4) Other, what \_\_\_\_\_

4. How long have you worked in the health care sector after graduating from basic professional education?

\_\_\_\_\_ years \_\_\_\_\_ months

5. Your present work role

- 1) Staff nurse          2) Assistant ward manager          3) Ward manager
- 4) Other, what \_\_\_\_\_

6. In which department of the Helsinki University Hospital do you work at present?

- 1) Department for Children and Adolescents
- 2) Department of Operating rooms, Intensive care and Pain management
- 3) Department of Psychiatry
- 4) Department of Head and Neck Care
- 5) Other, what \_\_\_\_\_

**7. From the viewpoint of my work, my knowledge base in health care ethics is**

- 1) Unsatisfactory      2) Satisfactory      3) Good      4) Excellent

**8. Have you obtained your knowledge base in health care ethics?**

- 1) During professional health care education      Yes      No  
2) In other ethics education (e.g., courses, theme sessions, continuing education)      Yes      No  
3) Through self-study (e.g., from literature, professional journals)      Yes      No  
4) In nursing practice      Yes      No  
5) In some other way, how
- 
- 

**9. Have you actively taken part in any activity and/or development work related to health care ethics within your work unit/organization (e.g., ethics committee)?**

- 1) Yes      2) No

If you answered 'yes', please describe briefly what activity you have taken part in and in what way.

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**10. In your nursing practice, have you encountered situations where you felt that you should have shown moral courage?**

- 1) Never      2) Seldom      3) Sometimes      4) Quite often      5) Very often

**B. Moral courage in nursing**

**With the following questions (11-31) I ask you to assess your own moral courage in nursing care. Please answer each question on a scale from 1 to 5, choosing the alternative that best describes yourself. For each question, please circle only one alternative:**

- 1 = Does not describe me at all      2 = Describes me fairly little  
3 = Describes me on average      4 = Describes me fairly well  
5 = Describes me very well

**Before answering, please read once more the definition of moral courage:**

**In nursing, moral courage can be defined as nurses' ability to defend their professional ethical principles and to act in accordance with them despite the anticipated or real negative consequences caused by defending or acting in accordance with them. Moral courage always presupposes rational deliberation. Morally courageous action represents a**



**“golden mean” between rashness and cowardice. In situations where moral courage is required there are usually three actors represent: 1) The defender of the morally right action (e.g., the nurse), 2) The object of moral wrongdoing (e.g. the patient), and 3) The perpetrator/approver of the moral wrongdoing (e.g. colleague, organization).**

**N.B. In the questions below, the expression “someone else\*” refers to any of the following: colleagues, other health care professionals, physicians, patient’s next of kin, the patient, or the organization where the nurse works.**

		<b>Does not describe me at all</b>	<b>Describes me fairly little</b>	<b>Describes me on average</b>	<b>Describes me fairly well</b>	<b>Describes me very well</b>
<b>11.</b>	I adhere to professional ethical principles even if I were to be bullied for it in my work unit	1	2	3	4	5
<b>12.</b>	I discuss the fears caused by the illness with my patient even if it would lead me to face my own inner fears.	1	2	3	4	5
<b>13.</b>	I bring up for discussion the patient’s right to good care if someone else* insists that I compromise on adherence to the ethical principles of health care (human dignity, autonomy, justice and justified care)	1	2	3	4	5
<b>14.</b>	If someone else* acts unethically I bring it up for discussion even if I were to get negative feedback for it in my work community	1	2	3	4	5
<b>15.</b>	If I observe evident shortcomings in someone else’s* professional competence I bring it up for discussion	1	2	3	4	5
<b>16.</b>	I participate in care team’s ethical decision-making despite the fact that ethical problem situations often involve uncertainty as to the right answer	1	2	3	4	5
		<b>Does not describe</b>	<b>Describes me fairly little</b>	<b>Describes me on average</b>	<b>Describes me fairly well</b>	<b>Describes me very well</b>

		me at all				
17.	I participate in care team's ethical decision-making regardless of someone else* disagreeing with the answer that I consider right	1	2	3	4	5
18.	If the resources required for ensuring good care are inadequate (e.g., inadequate staff) I bring it up for discussion	1	2	3	4	5
19.	I bring up for discussion an ethical problem situation that arises in nursing care even if someone else* wants to remain silent about it	1	2	3	4	5
20.	Regardless of the care situation, I try to encounter each patient as a dignified human being even if someone else* were to disagree with my doing so	1	2	3	4	5
21.	If someone else* acts professionally dishonestly (e.g., steals medication from the ward) I bring it up for discussion	1	2	3	4	5
22.	If someone else* tries to cover up an evident care mistake he/she has made I bring it up for discussion	1	2	3	4	5
23.	I bring up my honest opinion concerning even difficult ethical issues in nursing care (e.g., commencing treatment against the patient's will)	1	2	3	4	5
24.	I am even prepared to break prevalent care practices to advocate my patient (e.g. to exceed the standard length of time prescribed for a care procedure if it is inadequate for good care)	1	2	3	4	5
25.	In order to ensure good care for my patient I do not avoid even difficult care situations	1	2	3	4	5
26.	I bring up for discussion the patient's right to good care if someone else* compromises on adherence to the ethical principles	1	2	3	4	5

	of health care (human dignity, autonomy, justice and justified care)					
27.	I support a suffering patient by being truly present for him/her even if it were to lead me to encounter my own inner fears	1	2	3	4	5
28.	I do not compromise on my patient's right to good care even though someone else* were to bully me into doing so	1	2	3	4	5
29.	I admit my own mistakes in care (e.g. administering the wrong medication to a patient)	1	2	3	4	5
30.	Regardless of the care situation, I seek to create a genuine human encounter with the patient even though a more superficial relationship would be easier for me	1	2	3	4	5
31.	I act in accordance with professional ethical principles even if someone else* were to insist that I do otherwise	1	2	3	4	5

**32. Please assess your own moral courage as a whole on the following 1-10 scale by circling the number that best describes your perception of yourself.**

I always act morally courageously when the care situation requires it = 10

I never act morally courageously even though the care situation would require it = 0

0 | 1 2 3 4 5 6 7 8 9 10

**33. Please also assess on a 1-5 scale how easy it is for you to act morally courageously when you have to defend your professional ethical values with the professional groups or bodies stated below.**

		Very difficult	Fairly difficult	Neither difficult nor easy	Fairly easy	Very easy
1	Coworker (e.g., practical nurse)	1	2	3	4	5
2	Colleague (e.g., another nurse)	1	2	3	4	5

3	Line manager (e.g. ward manager)	1	2	3	4	5
4	Physician	1	2	3	4	5
5	Organization (e.g., executive nurse, administration)	1	2	3	4	5
6	Body outside the organization (e.g., authorities)	1	2	3	4	5
7	Patient	1	2	3	4	5
8	Patient's next of kin	1	2	3	4	5

**34. On a 1-5 scale, please assess once more how easy it is for you to bring up a serious ethical problem (e.g., systematic mistreatment of patients) in order to defend nursing values, which you consider right using the actions stated below.**

		Very difficult	Fairly difficult	Neither difficult nor easy	Fairly easy	Very easy
1	I would bring up the problem for discussion with others participating in the care/with the care team	1	2	3	4	5
2	I would file a notification with the organization where I work	1	2	3	4	5
3	I would 'blow the whistle' to an outside body (e.g., trade union/authority/media)	1	2	3	4	5
4	I would act differently, as follows:	1	2	3	4	5

**35. Please describe briefly one example of a problem situation you have encountered in your work that required moral courage and how you acted to solve the situation.**

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***Many thanks for answering!***

## **APPENDIX I: Permission to use Hospital Ethical Climate Survey (HECS)**

January 17, 2022

Emily Willcott, MS, RN  
Student, PhD Program in Nursing  
Graduate School of Biomedical Sciences  
University of Texas Medical Branch  
Galveston, TX

Dear Emily:

Thank you for your interest in using the Hospital Ethical Climate Survey (HECS) in your research on the relationship between the ethical climate and acts of moral courage while nursing during the pandemic. You have my permission to use the HECS for data collection.

I would be interested in knowing the results of our research when completed.

Thanks.

Sincerely,

A handwritten signature in black ink that reads "Linda L. Olson". The signature is fluid and cursive, with a long horizontal stroke at the end.

Linda L. Olson, PhD, RN, NEA-BC, FAAN

## APPENDIX J: Hospital Ethical Climate Survey (HECS)

Directions: Here is a series of statements relating to various practices within your work setting. Please respond in terms of how it is in your current job on your current unit. As you read and respond to each statement, think of some difficult patient care issues you have faced. For those items that refer to your manager, think of your immediate manager (nurse manager, assistant nurse manager, shift supervisor). It is important that you respond in terms of how it really is on your unit, not how you would prefer it to be. It is essential to answer every item. There are no right or wrong answers, so please respond honestly. Remember, all your responses will remain anonymous.

Please read each of the following statements. Then, circle one of the numbers on each line to indicate your response: (1) = Almost Never True, (2) = Seldom True, (3) = Sometimes True, (4) = Often True, (5) = Almost Always True.

- |   |   |   |   |   |   |
|---|---|---|---|---|---|
| 1. My peers listen to my concerns about patient care. . . . .   | 1 | 2 | 3 | 4 | 5 |
| 2. Patients know what to expect from their care . . . . .   | 1 | 2 | 3 | 4 | 5 |
| 3. When I'm unable to decide what's right or wrong in<br>a patient care situation, my manager helps me. . . . . | 1 | 2 | 3 | 4 | 5 |
| 4. Hospital policies help me with difficult patient care<br>issues/problems . . . . .                           | 1 | 2 | 3 | 4 | 5 |
| 5. Nurses and physicians trust one another. . . . .   | 1 | 2 | 3 | 4 | 5 |
| 6. Nurses have access to the information necessary to<br>solve a patient care issue/problem. . . . .            | 1 | 2 | 3 | 4 | 5 |
| 7. My manager supports me in my decisions about<br>patient care . . . . .                                       | 1 | 2 | 3 | 4 | 5 |
| 8. A clear sense of the hospital's mission is shared<br>with nurses . . . . .                                   | 1 | 2 | 3 | 4 | 5 |
| 9. Physicians ask nurses for their opinions about<br>treatment decisions . . . . .                              | 1 | 2 | 3 | 4 | 5 |
| 10. My peers help me with difficult patient care<br>issues/problems . . . . .                                   | 1 | 2 | 3 | 4 | 5 |
| 11. Nurses use the information necessary to solve a<br>patient care issue/problem. . . . .                      | 1 | 2 | 3 | 4 | 5 |
| 12. My manager listens to me talk about patient care<br>issues/problems . . . . .                               | 1 | 2 | 3 | 4 | 5 |

13. The feelings and values of all parties involved in a patient care issue/problem are taken into account when choosing a course of actions . . . . .	1	2	3	4	5
14. I participate in treatment decisions for my patients . . .	1	2	3	4	5
15. My manager is someone I can trust . . . . .	1	2	3	4	5
16. Conflict is openly dealt with, not avoided . . . . .	1	2	3	4	5
17. Nurses and physicians here respect each other's opinions, even when they disagree about what is best for patients. . . . .	1	2	3	4	5
18. I work with competent colleagues. . . . .	1	2	3	4	5
19. The patient's wishes are respected. . . . .	1	2	3	4	5
20. When my peers are unable to decide what's right or wrong in a particular patient care situation, I have observed that my manager helps them . . . . .	1	2	3	4	5
21. There is a sense of questioning, learning, and seeking creative responses to patient care problems . . . . .	1	2	3	4	5
22. Nurses and physicians respect one another. . . . .	1	2	3	4	5
23. Safe patient care is given on my unit. . . . .	1	2	3	4	5
24. My manager is someone I respect . . . . .	1	2	3	4	5
25. I am able to practice nursing on my unit as I believe it should be practiced . . . . .	1	2	3	4	5
26. Nurses are supported and respected in this hospital . . .	1	2	3	4	5

## APPENDIX K: IRB Approval Letter



### Institutional Review Board

301 University Blvd.


Galveston, TX 77555-0158

[Submission Page](#)

19-Jan-2023

### **MEMORANDUM**

TO: Emily Willcott  
Grad School Biomedical Science GSBS9999

FROM:   
Alexander Duarte, MD  
Vice-Chairman, IRB #2

RE: Exempt from IRB Review

IRB #: IRB # 22-0129

Submission Number: 22-0129.003

TITLE: Examining Nurses' Moral Distress, Acts of Moral Courage, and Influence of Ethical Climate in Caring for COVID-19 Patients During the Pandemic

The UTMB Institutional Review Board (IRB) reviewed the above-referenced research project and determined this request met the criteria for exemption from review by the IRB in accordance with the 45 CFR 46.104. This determination was made on **18-Jan-2023**.

Further review of this project by the IRB is not required unless the protocol changes in the use of human subjects. In that case, the project must be resubmitted to the IRB for review. Please inform the IRB when this research project is completed.

If you have any questions, please do not hesitate to contact the IRB office via email at [IRB@utmb.edu](mailto:IRB@utmb.edu).

Exemption Category

Category 2



## APPENDIX L: Social Media Flyer (Version 2)

### Research participants needed for a study about nurses using moral courage to advocate for COVID-19 patients

Are you a nurse who cared for COVID-19 patients during the pandemic? Did you experience or witness nurses using moral courage to combat moral distress? If you answered yes, then I want to hear your story and gather your input for my research study. It aims to explore nurse experiences with employing moral courage in response to moral distress during the pandemic. The potential influence of the ethical climate is also being examined.

Subjects must be BSN-prepared, currently licensed as an RN with at least 3 years of work experience and first-hand experience with COVID-19 patient care.

If you are interested, click on the link [here](#) to begin the survey. It is voluntary, anonymous, and will take about 15-20 minutes to complete. Email me at [emwillco@utmb.edu](mailto:emwillco@utmb.edu) if you have any questions. Thank you for your consideration!



## APPENDIX M: FLYER AMENDMENT APPROVAL LETTER



Institutional Review Board  
301 University Blvd.  
Galveston, TX 77555-0158  
[Submission Page](#)

03-Apr-2023

### **MEMORANDUM**

TO: Emily Willcott  
Grad School Biomedical Science GSBS9999

FROM:   
Adrienne Richardson  
IRB Staff

RE: Amendment/Miscellaneous Request Approval

IRB #: IRB # 22-0129

Submission Number: 22-0129.004

TITLE: Examining Nurses' Moral Distress, Acts of Moral Courage, and Influence of Ethical Climate in Caring for COVID-19 Patients During the Pandemic

DOCUMENTS: Miscellaneous Request Form  
Email Script  
Follow-Up Email Script  
Social Media Post  
Signature Page

The **Miscellaneous** request to the above referenced study has been reviewed via an expedited review procedure on **03-Apr-2023** and approved by the UTMB Institutional Review Board (IRB) in accordance with 45 CFR 46.110(a)-(b)(2).

The approval period for this modified research protocol begins on **03-Apr-2023**. Amendment approvals do not change the approval period of the protocol. Therefore, the expiration date will remain the same as was determined for the protocol at the time of initial or continuing review.

If you have any questions, please do not hesitate to contact the IRB office via email at [IRB@utmb.edu](mailto:IRB@utmb.edu).

#### Description of Changes/Submission

Revised Email Scripts and Social Media Post for recruitment.

## APPENDIX N: SAMPLE AMENDMENT APPROVAL LETTER



### Institutional Review Board

301 University Blvd.

Galveston, TX 77555-0158

[Submission Page](#)

07-Jul-2023

### **MEMORANDUM**

TO: Emily Willcott  
Grad School Biomedical Science GSBS9999

FROM:   
Alexander Duarte, MD  
Vice-Chairman, IRB #2

RE: Amendment/Miscellaneous Request Approval

IRB #: IRB # 22-0129

Submission Number: 22-0129.007

TITLE: Examining Nurses' Moral Distress, Acts of Moral Courage, and Influence of Ethical Climate in Caring for COVID-19 Patients During the Pandemic

DOCUMENTS: Request for Protocol/Consent Change  
22-0129 Protocol 2.0 Clean  
22-0129 Protocol 2.0 Tracked

The **Protocol/Consent Change** request to the above referenced study has been reviewed via an expedited review procedure on **07-Jul-2023** and approved by the UTMB Institutional Review Board (IRB) in accordance with 45 CFR 46.110(a)-(b)(2).

The approval period for this modified research protocol begins on **07-Jul-2023**. Amendment approvals do not change the approval period of the protocol. Therefore, the expiration date will remain the same as was determined for the protocol at the time of initial or continuing review.

If you have any questions, please do not hesitate to contact the IRB office via email at [IRB@utmb.edu](mailto:IRB@utmb.edu).

### Description of Changes/Submission

The inclusion criteria section of the protocol was modified to add critical care nurses.

## REFERENCES

- Aggarwal, R. & Ranganathan, P. (2019). Study designs: Part 2 – Descriptive studies. *Perspectives in Clinical Research*, 10(1), 34-36.  
[https://doi.org/10.4103/picr.PICR\\_154\\_18](https://doi.org/10.4103/picr.PICR_154_18)
- Ali Awad, N.H., & Al-anwer Ashour, H.M. (2022). Crisis, ethical leadership and moral courage: Ethical climate during COVID-19. *Nursing Ethics*, 29(6), 1441-1456.  
<https://doi.org/10.1177/09697330221105636>
- American Nurses Foundation. (2022). *COVID-19 impact assessment survey year two*.  
<https://www.nursingworld.org/~492857/contentassets/872ebb13c63f44f6b11a1bd0c74907c9/covid-19-two-year-impact-assessment-written-report-final.pdf>
- American Nurses Foundation. (2021). *Mental health and wellness survey report*.  
<https://www.nursingworld.org/~4aa484/globalassets/docs/ancc/magnet/mh3-written-report-final.pdf>
- Armani, F. & Armani, G. (2019, October 18). *Psychological Safety: Models and Experiences*. InfoQ. <https://www.infoq.com/articles/psychological-safety-models-experiences/>
- Atabay, G., Cangarli, B.G., & Penbek, S. (2015). Impact of ethical climate on moral distress revisited: Multidimensional view. *Nursing Ethics*, 22(1), 103-116.  
<https://doi.org/10.1177/0969733014542674>
- 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*, 9, 1965-1973.  
<https://doi.org/10.1111/jonm.13353>
- Centers for Disease Control and Prevention (2023). *COVID Data Tracker* [Data set].
- Consumer Financial Protection Bureau. (2016, September 08). Consumer Financial Protection Bureau Fines Wells Fargo \$100 Million for Widespread Illegal Practice of Secretly Opening Unauthorized Accounts. Consumer Financial Protection Bureau.  
<https://www.consumerfinance.gov/about-us/newsroom/consumer-financial-protection-bureau-fines-wells-fargo-100-million-widespread-illegal-practice-secretly-opening-unauthorized-accounts/>
- Deshpande, S.P., & Joseph, J. (2008). Impact of emotional intelligence, ethical climate, and behavior of peers on ethical behavior of nurses. *Journal of Business Ethics*, 85(3), 403-410. <https://doi.org/10.1007/s10551-008-9779-z>

- Dinndorf-Hogenson, G. (2015). Moral courage in practice: Implications for patient safety. *Journal of Nursing Regulation*, 6(2), 10-16. [https://doi.org/10.1016/S2155-8256\(15\)30381-1](https://doi.org/10.1016/S2155-8256(15)30381-1)
- Donkers, M.A., Gilissen, V.J.H., Candel, M.J.J., van Dijk, N.M., Kling, H., Heijnen-Panis, R., Pragt, E., van der Horst, I., Pronk, S.A., & van Mook, W.N.K.A. (2021). Moral distress and ethical climate in intensive care medicine during COVID-19: A nationwide study. *BMC Medical Ethics*, 22(73), 1-12. <https://doi.org/10.1186/s12910-021-00641-3>
- Edmondson, A. (2019). *The Fearless Organization*. John Wiley & Sons, Inc.
- Epstein, E.G., Whitehead, P.B., Prompahakul, C., Thacker, L.R., & Hamric, A.B. (2019). Enhancing understanding of moral distress: The measure of moral distress for health care professionals. *AJOB Empirical Bioethics*, 10(2), 113-124. <https://doi.org/10.1080/23294515.2019.1586008>
- Falcó-Pegueroles, A., Zuriguel-Pérez, E., Via-Clavero, G., Bosch-Alcaraz, A., & Bonetti, L. (2021). Ethical conflict during COVID-19 pandemic: The case of Spanish and Italian intensive care units. *International Nursing Review*, 68, 181-188. <https://doi.org/10.1111/inr.12645>
- Firouzkouhi, M., Alimohammadi, N., Kako, M., Abdollahimohammad, A., Bagheri, G., & Nouraie, M. (2021). Ethical challenges of nurses related COVID-19 pandemic in inpatient wards: An integrative review. *Ethics, Medicine and Public Health*. <https://doi.org/10.1016/j.jemep.2021.100669>
- Fradelos, E.C., Alexandropoulou, C., Kontopoulou, L., Alikari, V., Papagiannis, D., Tsaras, K., & Papathanasiou, I.V. (2021). The effect of hospital ethical climate on nurses' work-related quality of life: A cross-sectional study. *Nursing Forum*, 57, 244-251. <https://doi.org/10.1111/nuf.12671>
- Franklin, P., & Gkiouleka, A. (2021). A scoping review of psychosocial risks to health workers during the Covid-19 pandemic. *International Journal of Environmental Research and Public Health*, 18(5), 1-20. <https://doi.org/10.3390/ijerph18052453>
- Gebreheat, G., & Teame, H. (2021). Ethical challenges of nurses in COVID-19 pandemic: Integrative review. *Journal of Multidisciplinary Healthcare*, 14, 1029-1035. <https://doi.org/10.2147/JMDH.S308758>
- Goktas, S., Aktug, C., & Gezginici, E. (2023). Evaluation of moral sensitivity and moral courage in intensive care nurses in Turkey during the COVID-19 pandemic. *Nursing in Critical Care*, <https://doi.org/10.1111/nicc.12820>
- Gray, K., Dorney, P., Hoffman, L., & Crawford, A. (2021). Nurses' pandemic lives: A mixed-methods study of experiences during COVID-19. *Applied Nursing Research*, 60(151437), 1-10. <https://doi.org/10.1016/j.apnr.2021.151437>

- Hanks, R.G. (2007). Barriers to nursing advocacy: A concept analysis. *Nursing Forum*, 42(4), pp. 171-177. <https://doi.org/10.1111/j.1744-6198.2007.00084.x>
- Heath, K. (2021, October 22). As healthcare staff leave profession, others rise through school. The Daily News. [https://www.galvnews.com/specialsections/article\\_23214761-1d32-5df4-90b9-8fbad5035725.html](https://www.galvnews.com/specialsections/article_23214761-1d32-5df4-90b9-8fbad5035725.html)
- Herrin, M. (2001). When nurses fear. *Nursing Management (Springhouse)*, 32(4), pp. 14–15. <https://doi.org/10.1097/00006247-200104000-00009>
- Huang, M., Dong, W., Zhao, Q., & Mo, N. (2023). Factors associated with the moral courage of nurses in China: A cross-sectional study. *Nursing Open*, 00, 1-8. <https://doi.org/10.1002/nop2.1672>
- Hu, K., Liu, J., Zhu, L., & Zhou, Y. (2022). Clinical nurses' moral courage and related factors: an empowerment perspective. *BMC Nursing*, 21(321), 1-7. <https://doi.org/10.1186/s12912-022-01093-9>
- Jia, Y., Chen, O., Xiao, Z., Xiao, J., Bian, J., & Jia, H. (2021). Nurses' ethical challenges caring for people with COVID-19: A qualitative study. *Nursing Ethics*, 28(1), 33-45. <https://doi.org/10.1177/0969733020944453>
- Kelly, J. (2022, March 15). Unless we future-proof healthcare, study shows that by 2025, 75% of healthcare workers will leave the profession. *Forbes*. <https://www.forbes.com/sites/jackkelly/2022/03/15/unless-we-future-proof-healthcare-study-shows-that-by-2025-75-of-healthcare-workers-will-leave-the-profession/>
- Khodaveisi, M., Oshvandi, K., Bashirian, S., Khazaei, S., Gillespie, M., Masoumi, S.Z., & Mohammadi, F. (2021). Moral courage, moral sensitivity and safe nursing care in nurses caring of patients with COVID-19. *Nursing Open*, 8, 3538-3546. <https://doi.org/10.1002/nop2.903>
- Khoshmehr, Z., Barkhordari-Sharifabad, M., Nasiriani, K., & Fallahzadeh. (2020). Moral courage and psychological empowerment among nurses. *BMC Nursing*, 19(1), 1-7. <https://doi.org/10.1186/s12912-020-00435-9>
- Kleemola, E., Leino-Kilpi, H., & Numminen, O. (2020). Care situations demanding moral courage: Content analysis of nurses' experiences. *Nursing Ethics*, 27(3), 714-725. <https://doi.org/10.1177/0969733019897780>
- Konings, K.J.P., Gastmans, C., Numminen, O., Claerhout, R., Aerts, G., Leino-Kilpi, H., & Dierckx de Casterlé, B. (2021). Measuring nurses' moral courage: An explorative study. *Nursing Ethics*, 1-17. <https://doi.org/10.1177/09697330211003211>

- Koskenvuo, J., Numminen, O., & Suhonen, R. (2019). Ethical climate in nursing environment: A scoping review. *Nursing Ethics*, 26(2), 327-345.  
<https://doi.org/10.1177/0969733017712081>
- Lake, E.T., Narva, A.M., Holland, S., Smith, J.G., Cramer, E., Fitzpatrick Rosenbaum, K.E., French, R., Clark, R.R.S., & Rogowski, J.A. (2021). Hospital nurses' moral distress and mental health during COVID-19. *Journal of Advanced Nursing*, 78, 799-809.  
<https://doi.org/10.1111/jan.15013>
- Langlois, B. (2009). Break through your fears. *Nursing Management*, pp. 49-51.
- LaSala, C., & Bjarnason, D. (2010). Creating workplace environments that support moral courage. *Online Journal of Issues in Nursing*, 15(3), 4.  
<https://doi.org/10.3912/OJIN.Vol15No03Man04>
- Latimer, A.L., Otis, M.D., Mudd-Martin, G., & Moser, D.K. (2023). Moral distress during COVID-19: The importance of perceived organizational support for hospital nurses. *Journal of Health Psychology*, 28(3), 279-292.  
<https://doi.org/10.1177/13591053221111850>
- Lee, B., Oh, Y., Lee, E., & Nam, K.A. (2022). Validation of the Korean version of Nurses' Moral Courage Scale. *International Journal of Environmental Research & Public Health*, 19, 1-11. <https://doi.org/10.3390/ijerph191811642>
- Lenthang, M. (2022, January 31). Two New York nurses made \$1.5M in fake vaccine card scheme, prosecutors say. *NBC News*. <https://www.nbcnews.com/news/us-news/two-new-york-nurses-made-15m-fake-vaccine-card-scheme-prosecutors-say-rcna14166>
- Liu, X., Xu, Y.X., Chen, Y., Chen, C., Wu, Q., Xu, H., & Zhu, P. (2022). Ethical dilemmas faced by frontline support nurses fighting COVID-19. *Nursing Ethics*, 29(1), 7-18.  
<https://doi.org/10.1177/09697330211015284>
- Lincoln, Y.S. & Guba, E.G. (1985). *Naturalistic Inquiry*. London.
- Lutz, B. (2015, November 04). *One Man Established the Culture That Led to VW's Emissions Scandal: A Diesel Dictatorship, according to Bob Lutz*. Road & Track.  
<https://www.roadandtrack.com/car-culture/a27197/bob-lutz-vw-disel-fiasco/>
- Martin, K.D. & Cullen, J.B. (2006). Continuities and extensions of ethical climate theory: A meta-analytic review. *Journal of Business Ethics*, 69(2), 175-194.  
<https://doi.org/10.1007/s10551-006-9084-7>
- Mental Health America. (2020). *The mental health of healthcare workers in COVID-19*. Mental Health America. <https://mhanational.org/mental-health-healthcare-workers-covid-19>

- Merriam-Webster. (n.d.). Burnout. In Merriam-Webster.com dictionary. Retrieved September 2023, from <https://www.merriam-webster.com/dictionary/burnout>
- Merriam-Webster. (n.d.). Courage. In Merriam-Webster.com dictionary. Retrieved October 25, 2023, from <https://www.merriam-webster.com/dictionary/courage>
- Morley, G., Ives, J., Bradbury-Jones, C., & Irvine, F. (2019). What is ‘moral distress’? A narrative synthesis of the literature. *Nursing Ethics*, 26(3), 646-662. <https://doi.org/10.1177/0969733017724354>
- Moss, S., Mitchell, M., & Casey, V. (2017). Creating a culture of success: Using the Magnet Recognition Program as a framework to engage nurses in an Australian healthcare facility. *Journal of Nursing Administration*, 47(2), 116-122. <https://doi.org/10.1097/NNA.0000000000000450>
- Namadi, F., Shahbaz, A., & Jasemi, M. (2023). Nurses’ lived experiences of moral courage inhibitors: A qualitative descriptive study. *SAGE Open Nursing*, 9, 1-8. <https://doi.org/10.1177/23779608231157326>
- Norful, A.A., Rosenfeld, A., Schroeder, K., Travers, J.L., & Aliyu, S. (2021). Primary drivers and psychological manifestations of stress in frontline healthcare workforce during the initial COVID-19 outbreak in the United States. *General Hospital Psychiatry*, 69, 20-26. <https://doi.org/10.1016/j.genhosppsych.2021.01.001>
- Numminen, O., Konings, K., Claerhout, R., Gastmans, C., Katajisto, J., Leino-Kilpi, H., & Dierckx de Casterlé, B. (2021). *Nursing Ethics*, 28(5), 809-822. <https://doi.org/10.1177/0969733020981754>
- Numminen, O., Katajisto, J., & Leino-Kilpi, H. (2019). Development and validation of nurses’ moral courage scale. *Nursing Ethics*, 26(7-8), 2438-2455. <https://doi.org/10.1177/0969733018791325>
- Numminen, O., Repo, H., & Leino-Kilpi, H. (2017). Moral courage in nursing: A concept analysis. *Nursing Ethics*, 24(8), 878-891. <https://doi.org/10.1177/0969733017724354>
- Olson, L. (1998). Hospital nurses’ perceptions of the ethical climate of their work setting. *Journal of Nursing Scholarship*, 30(4), 345-349. <https://doi.org/10.1111/j.1547-5069.1998.tb01331.x>
- O’Mathúna, D., Smith, J., Zadvinskis, I.M., Monturo, C., Kelley, M.M., Tucker, S., Miller, P.S., Norful, A.A., Zellefrow, C., & Chipps, E. (2023). Ethics and frontline nursing during COVID-19: A qualitative analysis. *Nursing Ethics*, 0(0), 1-19. <https://doi.org/10.1177/09697330221143150>



- Pajakoski, E., Rannikko, S., Leino-Kilpi, H., & Numminen, O. (2021). Moral courage in nursing – An integrative review. *Nursing & Health Sciences*, 1-16.  
<https://doi.org/10.1111/nhs.12805>
- Pakizekho, S., & Barkhordari-Sharifabad, M. (2022). The relationship between ethical leadership, conscientiousness, and moral courage from nurses' perspective. *BMC Nursing*, 21, 1-8. <https://doi.org/10.1186/s12912-022-00941-y>
- Pearce, K. (2020). In fight against COVID-19, nurses face high-stakes decisions, moral distress. *The Hub*. <https://hub.jhu.edu/2020/04/06/covid-nursing-cynda-rushton-qa/>
- Peng, M., Saito, S., Guan, H., & Ma, X. (2022). Moral distress, moral courage, and career identity among nurses: A cross-sectional study. *Nursing Ethics*, 30(3), 358-369.  
<https://doi.org/10.1177/09697330221140512>
- Pergert, P., Bartholdson, C., Wenemark, M., Lutzen, K., & af Sandeberg, M. (2018). Translating and culturally adapting the shortened version of the Hospital Ethical Climate Survey (HECS-S) – retaining or modifying validated instruments. *BMC Medical Ethics*, 19(1), 1-9. <https://doi.org/10.1186/s12910-018-0274-5>
- Rathert, C., May, D.R., & Chung, H.S. (2016). Nurse moral distress: A survey identifying predictors and potential interventions. *International Journal of Nursing Studies*, 53, 39-49. <https://doi.org/10.1016/j.ijnurstu.2015.10.007>
- Rock, D. (2009, August 27). *Managing with the brain in mind*. Strategy + Business.  
<https://www.strategy-business.com/article/09306?gko=5df7f>
- Schroeder, K., Norful, A.A., Travers, J., & Aliyu, S. (2020). Nursing perspectives on care delivery during the early stages of the covid-19 pandemic: A qualitative study. *International Journal of Nursing Studies Advances*, 2, 1-8.  
<https://doi.org/10.1016/j.ijnsa.2020.100006>
- Schwappach, D.L.B., & Gehring, K. (2015). Frequency of and predictors for withholding patient safety concerns among oncology staff: A survey study. *European Journal of Cancer Care*, 24(3), 395-403. <https://doi.org/10.1111/ecc.12255>
- Schwappach, D.L.B., & Niederhauser, A. (2019). Speaking up about patient safety in psychiatric hospitals – a cross-sectional survey study among healthcare staff. *International Journal of Mental Health Nursing*, 28(6), 1363-1373. <https://doi.org/10.1111/inm.12664>
- Sperling, D. (2021). Ethical dilemmas, perceived risk, and motivation among nurses during the COVID-19 pandemic. *Nursing Ethics*, 28(1), 9-22.  
<https://doi.org/10.1177/0969733020956376>

- Sperling, D. (2021). Nurses' challenges, concerns and unfair requirements during the COVID-19 outbreak. *Nursing Ethics*, 28(7-8), 1096-1110. <https://doi.org/10.1177/09697330211005175>
- Tollefson, J., Kozlov, M., Maxmen, A., & Witze, A. (2022). Has Biden followed the science? What researchers say. *Nature*, 601, 491-493. <https://media.nature.com/original/magazine-assets/d41586-022-00108-4/d41586-022-00108-4.pdf>
- Trusted Health. (2021). *2021 Frontline Nurse Mental Health & Well-being Survey* [Data set].
- Victor, B., & Cullen, J.B. (1987). A Theory and Measure of Ethical Climate in Organizations. In W.C. Frederick (Ed.), *Research in Corporate Social Performance and Policy* (pp. 51-71). JAI Press.
- Wolf, M. (2022, January 07). 'They're past overwhelmed': Inside the pandemic's toll on nurses. *The Dallas Morning News*. <https://www.dallasnews.com/news/2022/01/07/theyre-past-overwhelmed-inside-the-pandemics-toll-on-nurses/>
- Wright, S. (2014). Downscaling our fear. *Nursing Standard*, 28(22), pp. 26-27.

## VITA

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### **EDUCATION:**

August 2018 – Present

University of Texas Medical Branch in Galveston

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PhD Candidate: Nursing

September 2015 – November 2016

University College London

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Master of Science: Burns, Plastic & Reconstructive Surgery

August 2010 – December 2011

Belmont University

Nashville, TN

Bachelor of Science: Nursing

August 2007 – May 2010

Azusa Pacific University

Azusa, CA

Bachelor of English: Composition

### **LICENSURE:**

Registered Nurse – State of California

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Public Health Nurse – State of California

Expiration: November 2023

### **PROFESSIONAL EXPERIENCE:**

April 2019 – May 2023

Colorado Christian University – Lakewood, CO  
Assistive Nursing Instructional Personnel (ANIP)

August 2021 – December 2021

University of Texas System – Austin, TX  
Student Associate

June 2021 – August 2021

University of Texas System – Austin, TX  
Graduate Innovation Intern

July 2019 – March 2021

Colorado Christian University – Lakewood, CO  
Assistant Professor, Undergraduate Nursing Program  
Simulation Instructor, Undergraduate Nursing Program

March 2017 – June 2019

University of Texas Medical Branch – Galveston, TX  
Research Coordinator/Nurse

September 2015 – November 2016

University College London – London, UK

March 2015 – September 2015	Master's thesis research Grossman Burn Center – West Hills, CA Staff RN
June 2013 – September 2015	Providence St. Joseph Medical Center – Burbank, CA Staff RN, preceptor
August 2012 – April 2013	WellnessMart, MD – Westlake Village, CA Staff RN

### **RESEARCH ACTIVITIES:**

#### **Areas of Research**

April 2021 – December 2023: Examining Nurses' Moral Distress, Acts of Moral Courage, and Influence of Ethical Climate in Caring for COVID-19 Patients During the Pandemic – Doctoral Dissertation

March 2016 – November 2016: MolecuLight i:X Imaging Device for Burn Wound Management: A Pilot Study – Master's Thesis

### **TEACHING RESPONSIBILITIES:**

Teaching Responsibilities at Colorado Christian University: School of Nursing

NUR-456: Evidence-Based Practice (Summer 2020, Fall 2020)

NUR-415: Adult Health Nursing II (Spring 2020, Spring 2021)

NUR-314: Pharmacology (simulation only, Fall 2019)

NUR-310: Foundations of Professional Practice (simulation only, Fall 2019)

### **COMMITTEE RESPONSIBILITIES:**

International Outreach Committee (American Burn Association, 2017-2019)

UTMB Student Government Association – alternate senator (2018-2019)

Sigma Theta Tau International – Alpha Kappa Chapter-at-Large Research Committee (2020-2021)

Colorado Christian University: Assessment Committee (2019-2021)

University College London – Student Academic Representative (2015-2016), planning committee member (2015-2016)

### **MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS:**

American Burn Association; Phoenix Society for Burn Survivors; National Society of Leadership and Success; National League of Nursing; Sigma Theta Tau International – Alpha Kappa Chapter-at-Large; American Association of Colleges in Nursing Graduate Nursing Student Academy; University College London Alumni Association

### **HONORS:**

Gale Foundation Scholarship (2023)

Ann Anderson Scholarship (2022-2023)

John P. McGovern Chair in Nursing Award (2022-2023)

Dennis William Bowman Scholarship (2021-2022)

Mariann Blum, Ph.D. Endowed Presidential Scholarship (2020-2021)

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John P. McGovern Chair in Nursing Scholarship (2019)  
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**ADDITIONAL INFORMATION:**

Peer Reviewer on “The Novel Use of Beta Blocker in Burn Management” for Baylor University Medical Center Proceedings (2021).

**PUBLISHED (UNDER MAIDEN NAME - BLUMENTHAL):**

Ojeda, S., Blumenthal, E., et al. (2018) The safety and efficacy of propranolol in reducing the hypermetabolic response in the pediatric burn population. *Journal of Burn Care & Research*, 39(6): 961-967.

Blumenthal, E. & Jeffrey, S. (2018). Autofluorescence imaging for evaluating debridement in military and trauma wounds. *Military Medicine*, 183(SUPP.1), 429-432.

Blumenthal, E. (2017). The use of the MolecuLight i:X in managing burns: A pilot study. *Journal of Burn Care & Research*, 39(1), 154-161.

**POSTER/PODIUM PRESENTATIONS:**

EWMA Conference: Co-author of the presented poster “The use of the MolecuLight Bacterial Camera in the management of bacterial load in burn patients” (2017).

AMSUS Conference: Co-author of the presented poster “Use of autofluorescence imaging in visualizing bacteria in chronic ulcers and traumatic soft tissue damage” (2016).

European Burn Association Education Course: Poster presentation on “The use of MolecuLight i:X in burn management” (2016).

International Society for Burn Injuries 18<sup>th</sup> Congress: Oral presentation on “MolecuLight i:X autofluorescence imaging for bacteria detection in burn wounds” (2016).

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