Moral Distress among Critical Care Providers at the Largest Tertiary-Care Hospital in Makkah.

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Abstract:

Introduction

Healthcare providers often experience moral distress when they recognize the appropriate course of action but encounter barriers that prevent them from acting in alignment with their ethical beliefs. Such distress may occur due to ethical dilemmas, seeing poor care being provided, or dealing with insufficient resources. Moral distress can have serious consequences, such as emotional fatigue, burnout, and dissatisfaction with work and in the end a negative effect on patient care.

Objective

the objective of this study is to assess the levels of moral distress among critical care professionals and to explore how demographic factors and professional roles influence their experiences with ethical dilemmas.

Methods

a quantitative, cross-sectional design was utilized to evaluate moral distress among 200 critical care providers using the MDS-R, a 21-item Likert-type questionnaire. The survey was distributed via email, ensuring anonymity to encourage honest responses. Data were analyzed using SPSS software to calculate descriptive statistics and mean moral distress scores.

Results

the study revealed significant variations in moral distress levels across professional roles. Registered nurses reported the highest levels of distress, particularly in scenarios involving end-of-life care and organizational pressures. Physicians and respiratory therapists also experienced moral distress, though its sources and intensity varied. Overall, the findings demonstrate a strong correlation between moral distress and demographic factors, emphasizing the need for targeted interventions.

Conclusion

Moral distress is a widespread issue among critical care providers, with distinct differences observed based on professional roles and demographic characteristics. Tackling these issues is essential to ensure the well-being of the healthcare workforce and improve patient care. Our study highlights the need for targeted interventions addressing diverse ethical challenges among healthcare professionals.

Keywords: - Critical Care Providers, Largest Tertiary-Care Hospital

Introduction:

Moral distress, a term coined by philosopher Andrew Jameton, describes the internal conflict healthcare professionals experience when they recognize the ethically appropriate action to take but are constrained from doing so due to various external factors (Jameton, 1984). This phenomenon is particularly prevalent in critical care settings, where clinicians are frequently confronted with ethically complex decisions that can lead to distressing situations, such as providing aggressive treatment to terminally ill patients or facing resource limitations that delay optimal care (Epstein & Hamric, 2009). Research over recent years suggests that moral distress have dire consequences for healthcare providers, often resulting in emotional exhaustion, burnout (Shen et al., 2020) and sometimes ultimately lead to the decision of leaving the profession altogether (Whitehead et al., 2015) Moral distress does differ in intensity and frequency among the healthcare professions, frequently associated with differences in accountability/responsibility for ethics, as well as contact/care level. Nurses and other direct-care providers tend to have greater moral distress than physicians do (e.g., in end-of-life decision-making or perceived ethical qualms with families) [Austin et

al., 2017]. The variation is probably related to power structure and hierarchy in both workplaces, as nurses typically face ethical dilemmas directly while the manifestation of moral distress for physicians might be at a systems or organizational level (Epstein et al., 2019). Furthermore, studies show that the ethical climate of an institution, as perceived by healthcare providers, significantly influences the levels of moral distress experienced across roles (Giannetta et al., 2020).

In addition to professional roles, workforce demographics play an important role in moral distress outcomes. Younger clinicians and those with less experience report higher levels of distress, possibly due to fewer coping strategies or limited support in handling ethically challenging situations (Vincent et al., 2020). Similarly, settings like intensive care units (ICUs), which involve high-stakes care, are associated with increased moral distress among all healthcare professionals, though the severity varies by demographic factors, including years in practice and patient load (Hamric et al., 2012). Demographic elements, combined with workplace culture and role-specific expectations, create a complex web of factors influencing moral distress in healthcare. This underscores the need for further comparative analysis of these dimensions to

inform effective interventions and organizational policies (Austin, 2012).

Given the potential impact on patient care and provider retention, understanding how demographic variables and professional roles interact to influence moral distress is essential for creating supportive, ethical work environments in critical care. This study aims to examine the relationship between workforce demographics and moral distress across healthcare professions, providing insight into how interventions might be tailored to specific roles and demographic profiles in critical care settings (Monrouxe et al., 2015).

While specifically focused on obstetric nurses, moral distress looms over many healthcare providers: it is well studied among the nursing profession and the impact yet far less visible for physicians or respiratory therapists. Whitehead et al. in their stud Moral distress affected all of the professional groups working in a large healthcare system (Lamprell et al., 2015), although the severity may have differed by role. Nurses, particularly those in direct patient care, reported higher levels of distress than physicians, who often encounter ethical challenges at a system level rather than directly at the bedside. The study highlighted that situations such as poor team communication, lack of continuity, and family-driven demands for futile care were common sources of distress across professions (Whitehead et al., 2015).

The comparative study by Austin et al. (2017) reinforced these findings, noting that both physicians and nurses in critical care settings experience moral distress, though the sources may differ slightly based on their roles. Nurses often face direct ethical conflicts involving end-of-life care and patient advocacy, while physicians report distress associated with organizational constraints and the prioritization of cost over care quality. Hall et al. (2016) went on to highlight statistically significant associations between for the first time in the same population which indicates that early moral distress has serious implications towards professional retention and quality of life, as those with higher levels reported earlier burnout and greater emergency intentions to leave the profession (Austin et al., 2017).

Measurement and Assessment Tools for Moral Distress:

A significant advancement in assessing moral distress in healthcare is the *Moral Distress Scale-Revised (MDS-R)*, which measures both the intensity and frequency of distress. Epstein et al. (2019) further refined the MDS-R and introduced the *Measure of Moral Distress for Healthcare*.

A systematic review by Giannetta et al. (2020) confirmed that, while the MDS-R is one of the most validated tools for measuring moral distress, other tools might be more appropriate for specific healthcare populations or ethical contexts. This highlights the importance of adopting a context-sensitive approach when selecting assessment instruments for moral distress

Objective:

The objective of this research is to examine the relationship between healthcare workforce demographics and moral distress in critical care settings. The study also aims to investigate role-specific distress factors among nurses, physicians, and respiratory therapists. Ultimately, the end goal is to inform the critical care practice literature on moral distress and in turn provide additional evidence for healthcare organizations, educators and policymakers about potential solutions to improve critical care health provider well-being

Methodology:

Design and Setting:

This study utilized a quantitative, cross-sectional survey design to evaluate the levels of moral distress among 200 healthcare professionals, including nurses, physicians, and respiratory therapists, working in critical care settings at King Abdullah Medical City (KAMC) over a four-month period. The cross-sectional approach facilitated data collection at a single point in time, enabling comparisons of moral distress across various healthcare professions and demographic groups. The study aimed to explore factors influencing moral distress, focusing on both its **frequency** (how often it occurs) and **intensity** (how distressing specific situations are) in the context of moral dilemmas faced by healthcare professionals.

Procedure:

Following institutional review board approval, data were collected through an anonymous online survey distributed via email to healthcare professionals in critical care units across selected hospitals. A cover letter accompanying the survey explained the study's purpose, emphasized voluntary participation, and guided interested participants to complete and submit their responses. Anonymity was maintained to encourage honest and candid feedback.

Measures:

Moral distress was assessed using the **Moral Distress Scale–Revised (MDS-R)**, an updated version of Dr. Ann Hamric's adaptation of Corley's original 38-item scale. The MDS-R comprises 21 items and includes both Likert-scale questions and open-ended items. It measures moral distress across various healthcare scenarios, including those outside of critical care. The scale has demonstrated reliability and validity, making it suitable for multivariate analysis.

The MDS-R was previously tested in eight intensive care units with 37 physicians and 163 nurses, achieving an overall Cronbach's alpha of 0.88 (0.89 for nurses). Key findings from earlier studies include:

1. A negative correlation between moral distress and ethical climate (r = -0.415, P < .001).

2. Lower moral distress scores for physicians compared to nurses (t = -5.972, P < .001).

3. Higher moral distress among those considering leaving their positions (F = 48.557, P < .001).

4. Greater moral distress reported by more experienced nurses (r = 0.17, P = .037) (A. B. Hamric, written communication, 2010).

The MDS-R measures moral distress based on two dimensions:

1. **Frequency** (how often situations causing moral distress are encountered), rated on a Likert scale from 0 (never) to 4 (very frequently).

2. **Intensity** (how distressing these situations are), rated on a scale from 0 (none) to 4 (great extent).

For analysis, the Likert-scale data were used to calculate two scores:

1. **Frequency × Intensity (fxi) Score**: Obtained by multiplying the frequency and intensity ratings for each item. This score ranges from 0 to 16, with lower scores indicating less distressing situations and higher scores indicating more distressing ones.

2. **Composite Moral Distress Score**: Calculated by summing the fxi scores across all items, resulting in a total score ranging from 0 to 336. Lower composite scores reflect minimal moral distress, while higher scores indicate more severe moral distress.
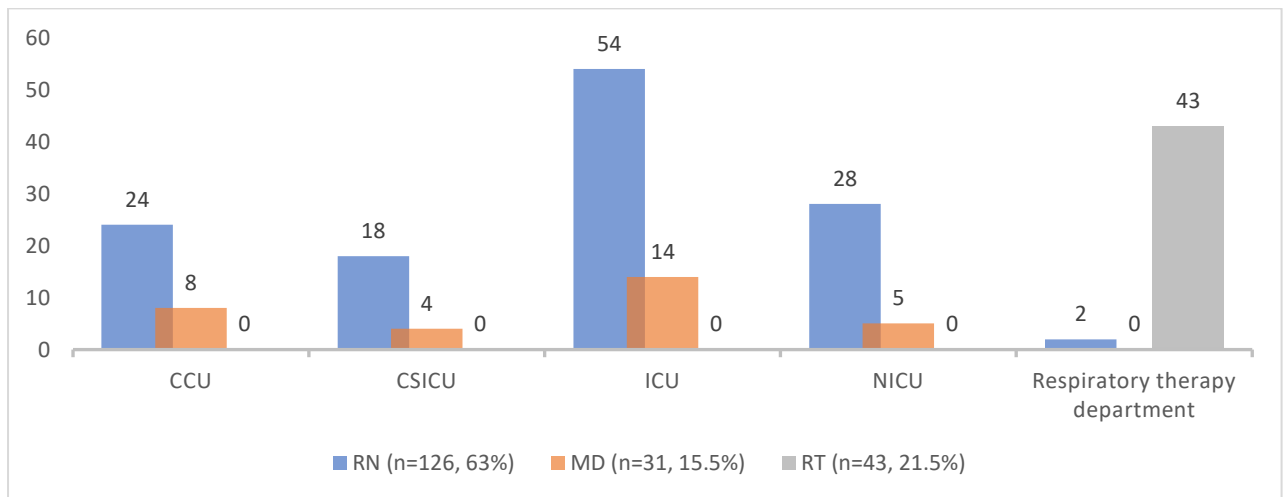
Data analysis:
The data were analyzed using SPSS software. Descriptive statistics were computed for demographic variables. Scores for each situation were summed and averaged within each group to calculate the mean scores for frequency, intensity, and moral distress levels. The situations were then ranked from highest to lowest based on these scores, with the top 10 situations highlighted and organized accordingly.
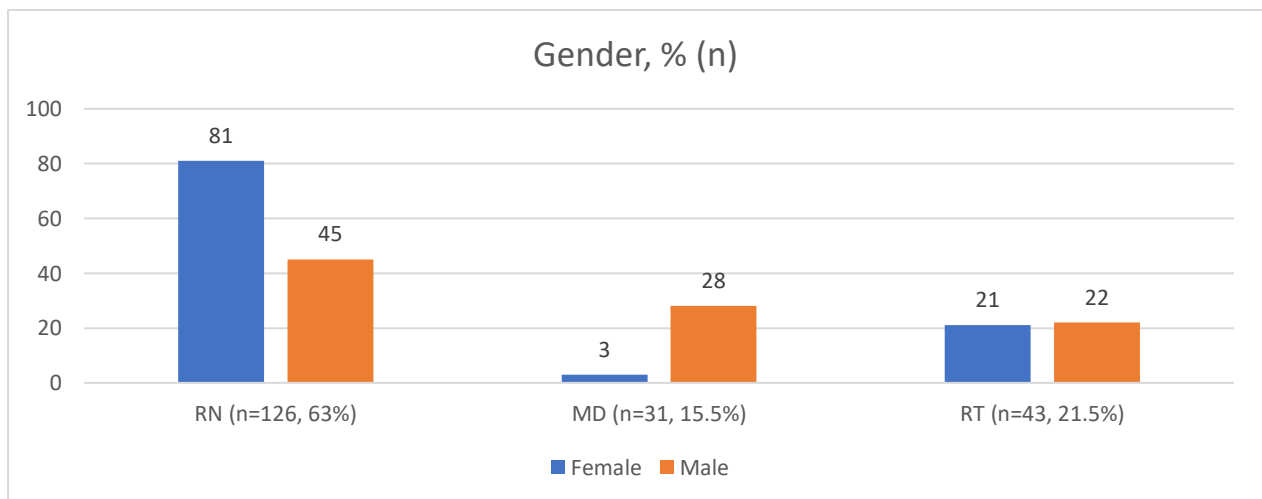
Results:

TABLE 1: Demographics of the Study Sample

Characteristic	RN (n=126, 63%)	MD (n=31, 15.5%)	RT (n=43, 21.5%)
Area, % (n)			

CCU	24 (19)	8 (25.8)	0
CSICU	18 (14.3)	4 (12.9)	0
ICU	54 (42.9)	14 (45.2)	0
NICU	28 (22.2)	5 (16.1)	0
Respiratory therapy department	2 (1.6)	0	43 (100)
Gender, % (n)			
Female	81 (64.3)	3 (9.7)	21 (48.8)
Male	45 (35.7)	28 (90.3)	22 (51.2)
Nationality, % (n)			
Saudi	37 (29.4)	7 (22.6)	13 (30.2)
Non Saudi	89 (70.6)	24 (77.4)	30 (69.8)
Years of experience in critical care, % (n)			
1 year	10 (7.9)	2 (6.5)	0
2 years	6 (4.8)	3 (9.7)	0
3 years	2 (1.6)	0	0
4 years	8 (6.3)	0	2 (4.7)
5 years	11 (8.7)	0	15 (34.9)
6 years	17 (13.5)	2 (6.5)	5 (11.60
7 years	11 (8.7)	1 (3.2)	2 (4.7)
More than 7 years.	61 (48.4)	23 (74.2)	19 (44.2)
level of education, % (n)			
Bachelor's degree	103 (81.7)	2 (6.5)	33 (76.7)
Board certified	0	1 (3.2)	0
Diploma degree	10 (7.9)	0	8 (18.6)
Doctoral degree	0	18 (58.1)	0
Master's degree	13 (10.3)	9 (29)	2 (4.7)
MRCP	0	1 (3.2)	0
Did you take an ethics course before? , % (n)			
No	62 (49.2)	18 (58.1)	17 (39.5)
Yes	64 (50.8)	13 (41.9)	26 (60.5)

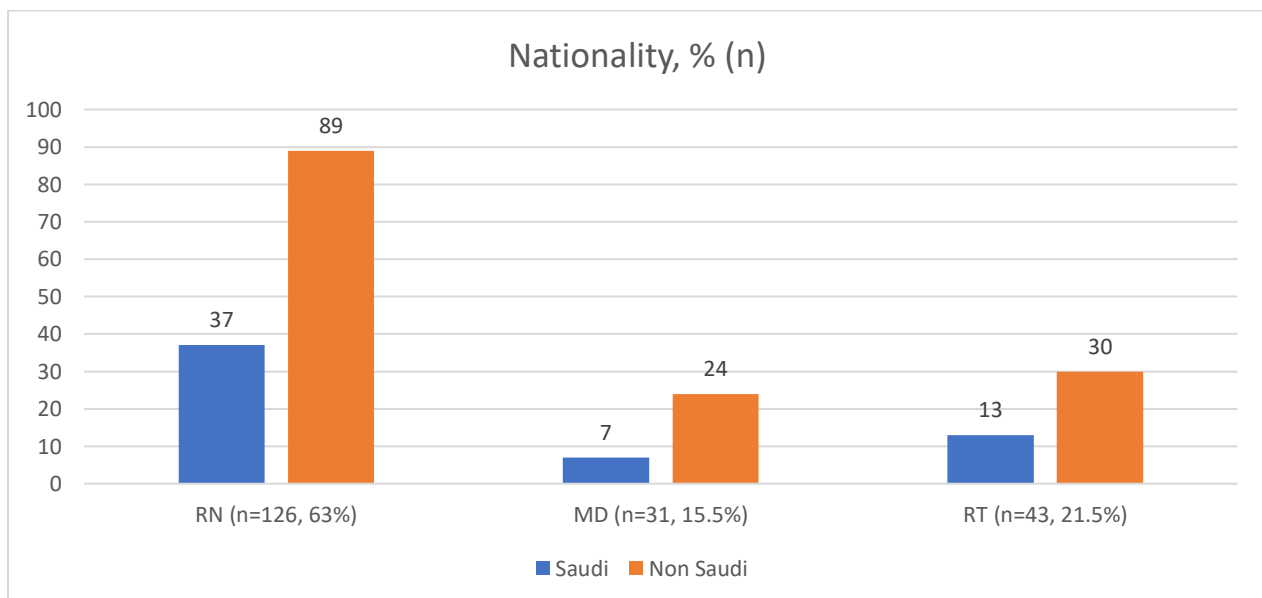*Note: Abbreviations: RN, registered nurse; MD, medical doctor; RT, respiratory therapist.*
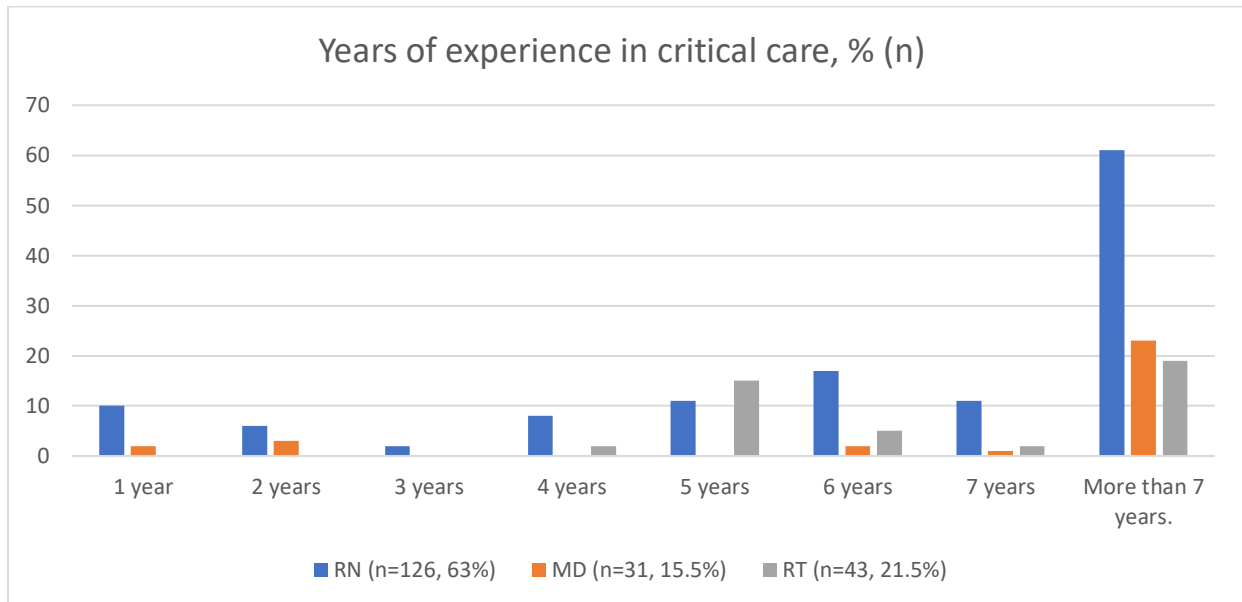
2. Area of Work

RN (n=126, 63%) MD (n=31, 15.5%) RT (n=43, 21.5%)

3. Gender Distribution:

Gender, % (n)

Female Male

4. Nationality

Nationality, % (n)

Saudi Non Saudi

5. Years of Experience in Critical Care

Years of experience in critical care, % (n)

RN (n=126, 63%)   MD (n=31, 15.5%)   RT (n=43, 21.5%)

6. Level of Education

level of education, % (n)
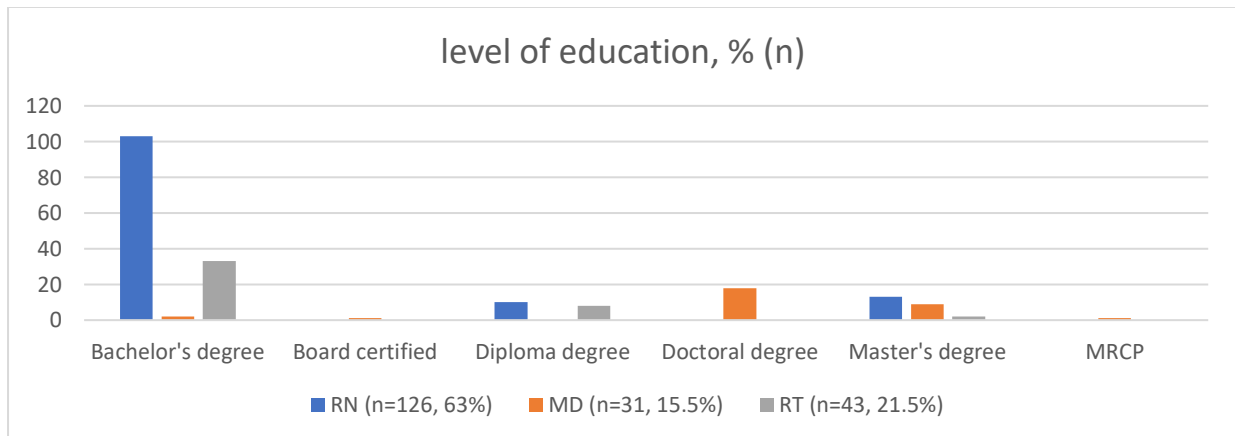
RN (n=126, 63%)   MD (n=31, 15.5%)   RT (n=43, 21.5%)

TABLE 2: The 21 MDS-R Survey Items and Mean Scores of Healthcare Professionals

Situation	Total (n=200)	RN (n=126)	MD (n=31)	RT (n=43)
1. Provide less than optimal care due to pressures from administrators or insurers to reduce costs.	.95 (1.27)	1.17 (1.37)	.48 (1.06)	.65 (.92)
2. Witness healthcare providers giving "false hope" to a patient or family.	.94 (1.20)	1.06 (1.26)	.81 (1.07)	.70 (1.10)
3. Follow the family's wishes to continue life support even though I believe it is not in the best interest of the patient.	1.34 (1.35)	1.58 (1.34)	1.23 (1.35)	.72 (1.18)
4. Initiate extensive life-saving actions when I think they only prolong death.	1.31 (1.36)	1.54 (1.43)	1.06 (1.81)	.81 (1.09)
5. Follow the family's request not to discuss death with a dying patient who asks about dying.	1.21 (1.34)	1.39 (1.30)	1.45 (1.67)	.49 (.88)

6. Carry out the physician's orders for what I consider to be unnecessary tests and treatments.	1.55 (1.41)	1.73 (1.35)	1.39 (1.58)	1.12 (1.38)
7. Continue to participate in care for a hopelessly ill person who is being sustained on a ventilator, when no one will make a decision to withdraw support.	2.28 (1.50)	2.45 (1.46)	2.32 (1.57)	1.74 (1.49)
8. Avoid taking action when I learn that a physician or nurse colleague has made a medical error and does not report it.	.87 (1.20)	.92 (1.26)	.71 (1)	.81 (1.16)
9. Assist a physician who, in my opinion, is providing incompetent care.	1.43 (1.35)	1.44 (1.29)	1.81 (1.75)	1.12 (1.15)
10. Be required to care for patients I don't feel qualified to care for.	.89 (1.15)	1.05 (1.19)	.65 (1)	.60 (1.02)
11. Witness medical students perform painful procedures on patients solely to increase their skill.	.67 (1.07)	.79 (1.16)	.26 (.68)	.60 (.97)
12. Provide care that does not relieve the patient's suffering because the physician fears that increasing the dose of pain medication will cause death.	.68 (1.05)	.83 (1.13)	.32 (.70)	.49 (.96)
13. Follow the physician's request not to discuss the patient's prognosis with the patient or family.	1.02 (1.29)	1.11 (1.22)	1.42 (1.70)	.47 (.98)
14. Increase the dose of sedatives/opiates for an unconscious patient that I believe could hasten the patient's death.	.53 (.98)	.67 (1.11)	.06 (.35)	.44 (.76)
15. Take no action about an observed ethical issue	.67 (1.10)	.81 (1.23)	.42 (.84)	.42 (.73)
16. Follow the family's wishes for the patient's care when I do not agree with them, but do so because of fears of a lawsuit.	.86 (1.21)	1.01 (1.28)	.74 (1.18)	.51 (.93)
17. Work with nurses or other healthcare providers who are not as competent as the patient care requires.	1.19 (1.23)	1.23 (1.26)	1.13 (1.17)	1.09 (1.2)
18. Witness diminished patient care quality due to poor team communication.	1.37 (1.31)	1.50 (1.34)	1.06 (1.12)	1.19 (1.33)
19. Ignore situations in which patients have not been given adequate information to insure informed consent.	.73 (1.12)	.91 (1.22)	.39 (.989)	.44 (.76)
20. Watch patient care suffer because of a lack of provider continuity.	1.36 (1.36)	1.57 (1.31)	.97 (1.42)	1.02 (1.33)
21. Work with levels of nurse or other care provider staffing that I consider unsafe.	.97 (1.18)	1.12 (1.21)	.71 (1.16)	.70 (1.05)

1. **Provide Less Than Optimal Care Due to Cost Pressures**:

   - RNs experience more distress (mean = 1.17) than MDs (mean = 0.48) and RTs (mean = 0.65). This may reflect the direct involvement of nurses in patient care and their sensitivity to cost-related limitations.

2. **Witness False Hope Given to Patients or Families:**

   - All groups experience similar levels of distress, with RNs (1.06) experiencing slightly more than MDs (0.81) and RTs (0.70), suggesting that false hope causes moral discomfort across professions.

3. **Following Family Wishes to Continue Life Support Against Best Interest:**

   - RNs report the highest distress (1.58), followed by MDs (1.23) and RTs (0.72). This indicates that RNs may face more pressure in managing end-of-life care and balancing family expectations.

4. **Initiate Life-Saving Actions That Only Prolong Death:**

   - Again, RNs (1.54) experience higher distress than MDs (1.06) and RTs (0.81). This reflects the challenging ethical dilemmas in critical care, particularly for nurses directly involved in life-saving measures.

5. **Follow Family's Request Not to Discuss Death with a Dying Patient:**

   - MDs report the highest distress here (1.45), possibly due to their role in patient communication and prognosis discussions, followed closely by RNs (1.39), with RTs reporting less distress (0.49).

6. **Perform Unnecessary Tests and Treatments as Ordered by Physicians:**

   - Distress is relatively high across all groups, particularly among RNs (1.73), followed by MDs (1.39) and RTs (1.12), indicating frustration with perceived unnecessary interventions.

7. **Participate in Care for a Hopelessly Ill Patient on a Ventilator:**

   - This situation elicits the highest distress levels across all groups, especially for RNs (2.45), MDs (2.32), and RTs (1.74). The decision to withdraw life support is a significant source of moral distress.

8. **Avoid Action on Unreported Medical Errors by Colleagues:**

   - Distress is moderate, with RNs (0.92) experiencing slightly more distress than MDs (0.71) and RTs (0.81). This highlights the ethical challenge of reporting errors within the healthcare team.

9. **Assist a Physician Providing Incompetent Care:**

   - MDs (1.81) report the highest distress, followed by RNs (1.44) and RTs (1.12). This may reflect the conflict healthcare professionals feel when working with colleagues they view as less competent. RNs (1.05) report higher distress than MDs (0.65) and RTs (0.60), possibly due to varying levels of training and specialization among nursing staff.

10 **Care for Patients They Don't Feel Qualified to Handle**
   RNs (1.05) report higher distress than MDs (0.65) and RTs (0.60), possibly due to varying levels of training and specialization among nursing staff.

11. **Witness Medical Students Perform Painful Procedures for Training:**

   - RNs (0.79) report more distress than MDs (0.26) and RTs (0.60). This reflects nurses' frontline role in patient care and their sensitivity to patient suffering.

12. **Provide Care that does not Relieve Suffering Due to Fear of Causing Death:**

   - RNs experience higher distress (0.83) than MDs (0.32) and RTs (0.49), highlighting the ethical dilemma of managing pain and potential risks.

13. **Follow Physician's Request Not to Discuss Prognosis with Patient/Family:**

   - MDs (1.42) report the highest distress, indicating the conflict doctors face in patient communication, followed by RNs (1.11) and RTs (0.47).

14. **Increase Sedatives/Opiates, Believing It May Hasten Death:**

   - RNs report more distress (0.67) than MDs (0.06) and RTs (0.44), reflecting nurses' concerns about patient outcomes and end-of-life care.

15. **Take No Action on an Observed Ethical Issue:**

   - RNs (0.81) report more distress than MDs (0.42) and RTs (0.42), suggesting that nurses may feel more responsibility to act on ethical issues.

16. Follow Family Wishes Due to Lawsuit Fears Despite Disagreement:

- RNs (1.01) report more distress than MDs (0.74) and RTs (0.51), indicating potential legal and ethical conflicts in following family directives.

17. Work with Incompetent Healthcare Providers:

- Distress is similar across all groups, with RNs (1.23), MDs (1.13), and RTs (1.09); suggesting frustration with team competency is a common issue.

18. Witness Poor Communication Leading to Diminished Patient Care:

- RNs (1.50) report the highest distress, followed by RTs (1.19) and MDs (1.06), indicating that poor communication within healthcare teams affects patient care quality.

19. Ignore Inadequate Informed Consent for Patients:

- RNs (0.91) report higher distress than MDs (0.39) and RTs (0.44), highlighting concerns about patient autonomy and informed decision-making.

20. Observe Patient Care Suffering from Lack of Continuity:

- RNs report the highest distress (1.57), with RTs (1.02) and MDs (0.97) also affected, indicating concerns over patient outcomes due to provider continuity.

21. Work in Unsafe Staffing Conditions:

- RNs (1.12) report more distress than MDs (0.71) and RTs (0.70), reflecting nursing staff concerns about adequate staffing and patient safety.

- RNs Generally Experience Higher Distress: Registered Nurses report higher distress scores on most items, particularly in cases involving direct patient care and ethical challenges in end-of-life decisions. This reflects the heavy responsibility and moral conflicts nurses face in their role.

- **MDs Report High Distress in Communication and Competency Issues**: Medical Doctors report higher distress in areas like witnessing poor communication, handling incompetent care providers, and being restricted in discussions about prognosis, which reflects their focus on communication and medical decision-making.

- RTs Report Lower Distress but Are Still Affected: Respiratory Therapists tend to report lower distress scores overall, but issues like ventilator use in hopeless cases and incompetent care providers still notably affect them.

TABLE 3: Ranking Situations of Moral Distress Identified by Healthcare Professionals

Situation	RN (n=126)		MD (n=31)		RT (n=43)	
	Mean (SD)	Rank	Mean (SD)	Rank	Mean (SD)	Rank
1. Provide less than optimal care due to pressures from administrators or insurers to reduce costs.	1.17 (1.37)	10	.48 (1.06)	16	.65 (.92)	12
2. Witness healthcare providers giving "false hope" to a patient or family.	1.06 (1.26)	13	.81 (1.07)	11	.70 (1.10)	10
3. Follow the family's wishes to continue life support even though I believe it is not in the best interest of the patient.	1.58 (1.34)	3	1.23 (1.35)	6	.72 (1.18)	9
4. Initiate extensive life-saving actions when I think they only prolong death.	1.54 (1.43)	5	1.06 (1.81)	8	.81 (1.09)	7
5. Follow the family's request not to discuss death with a dying patient who asks about dying.	1.39 (1.30)	8	1.45 (1.67)	3	.49 (.88)	16

6. Carry out the physician's orders for what I consider unnecessary tests and treatments.	1.73 (1.35)	2	1.39 (1.58)	5	1.12 (1.38)	3
7. Continue to participate in care for a hopelessly ill person who is being sustained on a ventilator, when no one will make a decision to withdraw support.	2.45 (1.46)	1	2.32 (1.57)	1	1.74 (1.49)	1
8. Avoid taking action when I learn that a physician or nurse colleague has made a medical error and does not report it.	.92 (1.26)	16	.71 (1)	13	.81 (1.16)	8
9. Assist a physician who, in my opinion, is providing incompetent care.	1.44 (1.29)	7	1.81 (1.75)	2	1.12 (1.15)	4
10. Be required to care for patients I do not feel qualified to care for.	1.05 (1.19)	14	.65 (1)	15	.60 (1.02)	13
11. Witness medical students perform painful procedures on patients solely to increase their skill.	.79 (1.16)	20	.26 (.68)	20	.60 (.97)	14
12. Provide care that does not relieve the patient's suffering because the physician fears that increasing the dose of pain medication will cause death.	.83 (1.13)	18	.32 (.70)	19	.49 (.96)	17
13. Follow the physician's request not to discuss the patient's prognosis with the patient or family.	1.11 (1.22)	12	1.42 (1.70)	4	.47 (.98)	18
14. Increase the dose of sedatives/opiates for an unconscious patient that I believe could hasten the patient's death.	.67 (1.11)	21	.06 (.35)	21	.44 (.76)	19
15. Take no action about an observed ethical issue	.81 (1.23)	19	.42 (.84)	17	.42 (.73)	21
16. Follow the family's wishes for the patient's care when I do not agree with them, but do so because of fears of a lawsuit.	1.01 (1.28)	15	.74 (1.18)	12	.51 (.93)	15
17. Work with nurses or other healthcare providers who are not as competent as the patient care requires.	1.23 (1.26)	9	1.13 (1.17)	7	1.09 (1.2)	5
18. Witness diminished patient care quality due to poor team communication.	1.50 (1.34)	6	1.06 (1.12)	9	1.19 (1.33)	2
19. Ignore situations in which patients have not been given adequate information to insure informed consent.	.91 (1.22)	17	.39 (.989)	18	.44 (.76)	20
20. Watch patient care suffer because of a lack of provider continuity.	1.57 (1.31)	4	.97 (1.42)	10	1.02 (1.33)	6

| 21. Work with levels of nurse or other care provider staffing that I consider unsafe. | 1.12 (1.21) | 11 | .71 (1.16) | 14 | .70 (1.05) | 11 |

Note: Abbreviations: RN, registered nurse; MD, medical doctor; RT, respiratory therapist. Data are presented as mean (SD)

The table 3.1 represents provides a detailed insight into the situations of moral distress identified by healthcare professionals across three key roles: Registered Nurses (RN), Medical Doctors (MD), and Respiratory Therapists (RT).

Most Distressing Situations:
The situation causing the highest distress for all three professional groups involves continuing to participate in the care of a hopelessly ill person sustained on a ventilator, with no decision to withdraw support. This issue consistently ranks first across all groups, highlighting a universal challenge in managing end-of-life care decisions that conflict with personal and professional ethics.

Differences in Perception:
There is a notable variation in the perceived distress among the different groups. For example, MDs report higher distress when asked to follow a family's request not to discuss death with a dying patient who inquires about it. This scenario ranks third for MDs but lower for RNs (eighth) and RTs (sixteenth). This disparity likely reflects the MDs' direct involvement in such conversations and decision-making processes.

Role-Specific Distress:
RNs are particularly distressed by being required to carry out what they perceive as unnecessary tests and treatments, which ranks second for them. RTs also find this situation distressing, ranking it third. Conversely, MDs are more distressed by assisting a physician they believe is providing incompetent care, which ranks second for them but lower for the other two professions.

Concerns about Professional Competence and Ethics:
All groups express significant distress when witnessing or participating in practices they believe are ethically questionable or directly harmful. Examples include witnessing medical errors that go unreported, observing inadequate communication that affects patient care, and following orders for unnecessary interventions. The differences in how these issues are ranked may reflect the varying responsibilities and scopes of practice across the professions.

Training and Qualification Concerns:
Distress related to feeling unqualified to care for patients ranks relatively low for MDs (15th) compared to RNs (14th) and slightly higher for RTs (13th). This highlights concerns regarding adequate training and perceived competence in handling complex clinical situations.

TABLE 4: Actual Moral Distress by Discipline

Disciplines	Mean (SD), Range
RN	65.44 (68.42), 0-336
MD	50.06 (36.61), 0-153
RT	36.47 (41.23), 0-150

Registered Nurses (RN) report the highest mean moral distress score (65.44), indicating they may face more frequent or severe ethical dilemmas, or perhaps they are more sensitive to these issues.

Medical Doctors (MD) and **Respiratory Therapists (RT)** have lower mean scores (50.06 and 36.47, respectively), suggesting differences in the nature or perception of moral distress across disciplines, possibly influenced by the scope of decision-making authority and direct patient interaction.

TABLE 6: Actual Moral Distress by Gender

Gender	Mean (SD), Range
Female	60.19 (64.84), 0-336
Male	53.12 (55.12), 0-336

Female professionals experience slightly higher mean distress scores (60.19) than their male

counterparts (53.12). This could be due to varying roles, responsibilities, or possibly a higher sensitivity to the ethical dimensions of patient care.

TABLE 7: Actual Moral Distress by Years of experience

Years of experience	Mean (SD), Range
1 year	47.58 (33.60), 2-122
2 years	51 (26.35), 21-88
3 years	71.50 (101.11), 0-143
4 years	97.90 (40.89), 34-161
5 years	32.38 (35.25), 0-115
6 years	46.71 (37.08), 0-141
7 years	93.93 (106.54), 0-336
More than 7 years.	57.63 (63.86), 0-336

Moral distress appears to generally increase with the years of experience, peaking at 4 years and 7 years. This could indicate that as professionals gain more exposure to complex cases, their awareness and sensitivity to ethical issues grow. Interestingly, distress drops notably at 5 years, which might suggest some form of adaptation or changes in roles that reduce exposure to distressing situations.

TABLE 8: Actual Moral Distress by did you take an ethics course before?

Taken course	Mean (SD), Range
No	53.36 (54.40), 0-301
Yes	60.10 (65.60), 0-336

Those who have **taken an ethics course** report slightly higher distress (60.10) compared to those who have not (53.36). This might suggest that education in ethics possibly heightens awareness of moral dilemmas, increasing reported distress.

Discussion:
This study makes an important addition to the literature in moral distress among healthcare professionals, especially in critical care services with ethical dilemmas [55]. With consideration of demographic factors, role-specific distress, and ethical climate included in the analysis, this study offers a detailed picture to help both practice- and policy-level improvements. Age, experience, gender and nationality as demographic factors affecting moral distress—this issue is consistent with prior research results. For example, Ulrich et al. (2010) and Whitehead et al. Previous research [27] showed that older and more experienced healthcare professionals reported lower levels of moral distress. This could be because their span of experience in managing complicated patient care situations is narrow, and they have difficulty negotiating institutional hierarchies and ethical dilemmas (reasons attached to the little tape there). Moreover, younger generations may bring higher expectations for ethical workplace behaviors, independence and advocacy from administration; when these expectations are not met, moral distress can increase. Overall, these results highlight the need for generationally differentiated systems of support when facing ethical dilemmas. Background the differences in moral distress observed with sex (female healthcare professionals reporting higher levels of distress) could indicate larger gender dynamics at play within the health care sector. Rodriguez et al. Findings are consistent with (2020) that women in healthcare often work in positions of lesser institutional power and whose expected behavior might differ from male counterparts. This interaction might lead to increased distress in women physicians, especially during moral conflict situations whereby they may feel less at liberty to pursue patient-oriented goals. Awareness of these gendered experiences points to the need for gender-sensitive support structures within healthcare institutions in order to mitigate and/or accommodate the unique ethical challenges female professionals must contend with. Moral Distress is Role-Specific: This study provides confirmation that moral distress is indeed role specific, with nurses most frequently reporting the highest levels of distress. They are at a higher risk for ethical dilemmas than other roles in the healthcare team, especially since nurses spend more time with patients, and they provide continuous care — for example during end of life situations. According to Epstein and Hamric (2009), due in part to institutional processes, nurses may discover themselves "stuck between a patient's desire for comfort and the institution's need to abide

by often times stringent outlines" that can cause moral distress. These results imply that approaches to alleviate moral distress should be role-specific, addressing the particular ethical challenges each discipline presents. Example: Dedicated support systems (such as debriefing sessions, ethics training and counseling services) addressing the specific aspects that affect nurse patient care. Role of Ethical Climate: Results related to the role of ethical climate on moral distress are in accordance with Ethical Climate Theory (Victor & Cullen, 1987), which also asserts a strong link between organizational culture and employee behaviors and well-being. Fujita et al. show that a supportive ethical climate (2016) creates an environment for open communication, transparency of decision-making and institutional support regarding ethical issues, which results in decreased moral distress. This research confirms that positive ethical climate within healthcare organizations equip staff to deal with ethical dilemmas in a healthier way and minimize distress. These results are consistent with advice on leadership programs to create supportive ethical environments as an organizational response to preventing moral distress. This move reinforces the need for ethical support frameworks and transparency of lines of communication within healthcare institutions.

Conclusion:

This study's results were not different from those of existing articles, confirming the effects of demographic factors, task type and ethical climate on moral distress in critical care. While the responses from the survey regarding sources of moral distress varied by discipline that does not lessen the impact of those with lesser frequency. Rather, each recognized source of moral distress probably presents as a highly salient concern to nurses, physicians and RTs in the context of their particular role. The differences between the reported sources of distress possibly reflects the different work environments and roles in each discipline. Finally, these results may reflect organizational culture that values patient- and family-centered care and encourages respect for autonomy. In sum, this study adds depth to the understanding of moral distress by identifying high-level policy and practice items appropriate for interventions made at healthcare organizations against the experiences of their workforce. By tackling these issues, healthcare organizations can increase the ability of their personnel to deal with ethical dilemmas, contributing in this way to individual wellness as well as organizational ones.

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