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# "It's Traumatic for All of Us": A Qualitative Analysis of Providers Caring for Seriously III Veterans With Surgical Conditions

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Objective: We aimed to characterize sources of moral distress among providers in the context of surgery.

**Background:** Moral distress is defined as psychological unease generated when professionals identify an ethically correct action to take but are constrained in their ability to take that action. While moral distress has been reported among healthcare providers, the perspectives of providers working in surgery specifically are not often explored and reported. Our study was developed from an overarching effort to investigate end-of-life care for seriously ill patients with surgical conditions.

**Methods:** Using convenience sampling, we conducted 48 semistructured interviews with providers who provide high-intensity care (eg, surgeons, anesthesiologists, intensivists, and midlevel providers) for seriously ill patients with surgical conditions across 14 Veterans Affairs hospitals. Interviews were analyzed iteratively using thematic content analysis.

**Results:** Providers described clinical encounters that generated moral distress while caring for seriously ill patients with surgical conditions: (1) difficulties in conflict resolution with and among patients and families; (2) specific types of patients or situations; (3) systemic factors hindering appropriate end-of-life care; (4) surgical culture and expectations of the surgeon's role.

**Conclusions:** Providers caring for seriously ill patients with surgical conditions report emotions and reactions consistent with moral distress. Our study highlights important triggers for providers and hospital systems to identify and address throughout a surgical provider's training and career.

Keywords: burnout, moral distress, moral injury, serious illness communication, surgery

#### INTRODUCTION

According to the British Medical Association, moral distress refers to "psychological unease generated where professionals identify an ethically correct action to take but are constrained in their ability

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Data (deidentified transcripts) may be provided by the corresponding author pending request.

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Published online 18 November 2024 DOI: 10.1097/AS9.0000000000000518 to take that action...[or] by witnessing this moral transgression by others." Particularly pronounced during the COVID-19 pandemic, reports of and attention to moral distress in healthcare have increased. Continued distress from witnessing or participating in behaviors that run counter to one's moral beliefs and values can lead to moral injury, which is characterized by psychological harm and impaired function.<sup>2</sup> Notably, moral distress may lead to other adverse consequences for healthcare providers, including burnout, attrition, and most concerning, suicidality.<sup>3,4</sup>

A recent review by our group systematically codified various contributors of heightened emotional strain and moral distress in the literature that relate to the surgical patient, such as surgeon responsibility and the high-stakes nature of the field. Most studies analyzing moral distress focus on nursing, and the few that focus on providers caring for surgical patients are limited by single-institution investigations and survey-based approaches. <sup>5-7</sup> Our study draws from experiences detailed by providers employed in diverse geographic regions and practice settings throughout the United States, and qualitative research methods can elucidate nuanced insights about providers' attitudes about clinical encounters that incite moral distress. <sup>8</sup>

Within this context, we leveraged a multicenter qualitative study about end-of-life care for seriously ill patients with surgical conditions to explore sources of moral distress among providers who care for these surgical patients.

#### **METHODS**

#### **Participants**

We used convenience sampling to recruit interviewees for this qualitative study designed to investigate end-of-life care for seriously ill veterans admitted to the surgical intensive care unit (ICU). We used the "Find VA Providers" website (https://www.accesstocare.va.gov/FindProviders) to search providers by site,

occupation, and Veterans Affairs (VA) service line. Forty-eight providers who delivered care to surgical patients across 14 VA hospitals agreed to participate, representing broad age, gender, and provider types. Providers received a one-time incentive of \$250.

#### **Interview Procedures**

Research team members (C.A.V., P.A.S.) designed an exploratory interview guide to study providers' perspectives on factors that impact end-of-life care for surgical patients, which was piloted for validity, presentation, and clarity. Participants were not specifically queried about moral distress; data were inductively derived in a separate descriptive content analysis of excerpts. Pilot data were not included in the final analysis. All participants provided verbal informed consent. An experienced qualitative researcher (C.A.V.) conducted individual interviews over Zoom or phone between April 2021 and March 2022 and was not acquainted with any of the participants. Interviews were audiorecorded, transcribed, deidentified, and lasted 30 to 60 minutes. Field notes were documented after each interview. We conducted interviews until new data began to repeat previously recorded data, indicating data saturation had been reached.9 Interviewees did not receive transcripts for review, and no follow-up interviews were conducted.

#### **Analysis and Approach**

Data were analyzed iteratively through thematic content analysis. Research team members created a codebook based on 5 transcripts with group meetings to discuss discrepancies and modifications. Each transcript was coded by 2 female researchers independently using MAXQDA 2022 (VERBI Software, Berlin, Germany) to facilitate organization, coding, and analysis. Codes were then synthesized into a descriptive matrix in Excel (Microsoft Corporation, Redmond, WA) for higher-level analysis.

While the interview guide did not include questions specifically about moral distress, we had inquired about challenges in providing care for seriously ill surgical patients, and themes were interpreted based on participant responses. For the secondary analysis, we inductively derived thematic domains that represented sources of moral distress based on an established framework for moral distress development among clinicians providing end-of-life care for seriously ill patients. <sup>10</sup>

This study was deemed exempt by the VA Ann Arbor Healthcare System Institutional Review Board (1597514) and the University of Michigan Institutional Review Board (HUM00175321). Our study was reported according to COREQ requirements for qualitative research (Supplemental Table 1, see http://links.lww.com/AOSO/A432).<sup>11</sup>

#### **RESULTS**

Across 14 VA sites, 48 semistructured interviews were conducted with providers who deliver high-intensity care for patients with surgical conditions in the surgical ICU. In total, 284 VA-affiliated providers were contacted; 53 (18.7%) agreed to participate with 48 providers completing interviews. Providers included 10 advanced practice providers and 38 physicians from diverse self-identified subspecialties ranging from general surgery and cardiothoracic surgery to neurosurgery and anesthesiology. Providers were diverse with regard to gender, with 48% of the cohort identifying as women, and race/ethnicity, with 8% identifying as Black or African American, 6% as Hispanic, and 15% as Asian. Table 1 displays participant characteristics. We identified 4 key thematic domains that drive moral distress among providers who care for surgical patients. These included difficulties in conflict resolution with

TABLE 1.

Provider Demographics

Category	n	%
Age		
<30	1	2%
30-39	15	31%
40-49	11	23%
50-59	13	27%
60-69	6	13%
70–79	2	4%
Identified gender		
Woman	23	48%
Man	25	52%
Identified race/ethnicity		
Black or African American	4	8%
Hispanic	3	6%
Asian	7	15%
White	34	71%
Position		
Nurse	2	4%
Physician assistant	8	17%
Anesthesiologist	1	2%
Surgeon	34	71%
Intensivist	1	2%
Internist	1	2%
Resident	1	2%

and among patients and families, specific challenging patients and contexts, system-level factors, surgical culture, and the role of the surgeon. Domains and additional illustrative quotes are provided in Table 2.

## Domain 1: Difficulties in Conflict Resolution With and Among Patients and Families

Providers reported experiencing negative emotions when encountering conflicts with patients and families regarding medical decision-making and goals-of-care planning. A common source of moral distress occurred when providers did not clearly understand their patients' wishes, given poor clinical status or other circumstances preventing patients from expressing their goals. One surgeon remarked, "The worst is when you can't know what the patient wants. That's the most upsetting, frustrating, situation for me as a doctor when I don't know the patient well." (Woman, 41 years old, surgeon)

Multiple providers endorsed distress when navigating discordance in treatment preferences between families and the medical team. In cases where providers believed further medical care was futile, situations where families advocated for continued aggressive course, were "quite disturbing...It leads to distress and difficulty and potentially conflicts between the medical team and family. I was angry within myself about what families were requiring, and it was almost like us against them. It is a terrible place to be in." (Man, 58 years old, critical care physician) In addition, providers referenced distress when care discordance was driven by families who were choosing to treat the patient to obtain secondary gain, or an ulterior motive: "You have a family member who is getting benefits from [the] Veteran, and they make decisions not necessarily in the best interest of the patient's care...It's rough, actually...that is tough." (Woman, 50 years old, surgeon)

Providers also encountered distress in the converse scenario, where patients or families desired to stop interventions despite team recommendations: "I can certainly think of times when that specific situation caused me sadness and regret...we could've helped a patient live a longer life that I think they would have enjoyed and found meaningful. But the patient chose to avoid surgery." (Woman, 33 years old, surgeon)

#### TABLE 2.

#### **Illustrative Transcript Excerpts**

Theme	Theme Definition	Quote Excerpt
Difficulties in conflict resolution with and among patients and families	Conflicts between respect for patient autonomy and personal provider opinion may trigger moral distress during the medical decision-making and communication process	"[A] situation that comes to mind was long ago in residency. There was a young traumatic brain injury patient in his 20s. His family said, "He would never want to live like this. We are done." And, it wasn't at all clear how much he was going to recover from that outcome he was in from that injury. He was in a very acute phase of his injury No idea where he's going to settle out. And they withdrew care and he died. That was something that definitely made me uncomfortable." (Man, 43 years old, surgeon)
Certain types of patients and clinical situations	Surgical providers describe difficulties coping with caring for specific types of patients or clinical encounters	"The most difficult are those who are not yet willing to accept the fact that they are not going to recover. And of course, the young trauma cases that I would see with injuries, [like] gun shot wounds, where [it's like] "Please don't let me die", and there is little that you can do to prevent it." (Man, 77 years old, surgeon)
Difficulties caring for seriously ill patients arising from systemic issues	Inherent systemic inefficiencies, gaps in coordination of care, or other institution-wide issues hinder care and may trigger moral distress	"There is obvious disparity where you have people that have access to good quality end-of-life care and then people that don't. You have disparity in health literacy. You have disparity in how doctors and how the medical health care—just how it interacts with patients. But then you also have a disparity between what we know is the right thing to do and what gets done. Those are like big challenges, system-level challenges." (Man, 40 years old, internal medicine specialist)
Surgical culture and a surgeon's self-perceived role	Aspects of surgical culture and role may include perseverance and solution-oriented decision-making in patient care. Some surgical providers describe goals-of-care planning and communication as outside their role as well	"As a surgeon, of course my training is that we get to do things and hopefully things get better. I think it's frustrating to have situations where there is nothing that we can concretely do for a patient." (Woman, 32 years old, surgeon)

### Domain 2: Certain Types of Patients and Clinical Situations

Certain patient characteristics influenced the moral distress experienced by providers. Goals-of-care discussions among providers, families, and seriously ill patients with cognitive impairments caused moral distress concerning surgical consent and patient autonomy. A surgeon recounted an experience caring for a patient with dementia: "[The patient] is non-ambulatory, completely dependent, and [has] dementia. But [he] refused an amputation. Initially, the wife refused the amputation, too. Now, she is agreeing to an amputation, but he still refuses. He probably is not competent to refuse, but he won't consent to it. That's a problem." (Woman, 44 years old, surgeon) Providers also reported moral distress derived from their clinical relationships with patients. For example, one surgeon reported feeling troubled by patients who were in denial about their disease course and made medical decisions about treatments accordingly: "I think the hardest thing that I have experienced in my career is the patient who is going to succumb to his disease but has not come to grips with it yet." (Man, 77 years old, surgeon)

## Domain 3: Difficulties Caring for Seriously III Patients Arising From Systemic Issues

Inefficiencies and other systemic qualities inherent to the health-care institution led to provider frustration and providers wrestling with the idea of delivering poor quality of care. Systemic factors included a healthcare system's culture, which providers described as promoting life-prolonging care that can contribute to inequities in quality end-of-life care: "I think that the culture of the institution is extremely important. ...On some surgical services I have seen in the past, the primary team [was] not able to "give up" on a patient who was quite in desperate situations. While I admire fighting for every patient, sometimes there was a perception that the well-being of the patient was not the priority anymore, and that can be disturbing." (Man, 58 years old, critical care physician)

Even while certain end-of-life care components are enacted, such as advance directives, providers reported concern with poor adherence and misinterpretation of patients' code statuses by other medical team members and administration: "If it is clearly not indicated, if somebody is throwing up all their blood from their ruptured esophageal varices, this is torture if I do more... That is a bad death. That is not having the dignity that I talked about before... We have had problems where we have performed ACLS [advanced cardiovascular life support] on people with DNR [do-not-resuscitate] orders. [Someone] who wasn't the patients nurse checked on them and [said] "Oh, he is not breathing, let's start a code." They coded the person for twenty minutes. But, the person had a DNR order. That is not what they wanted." (Man, 52 years old, critical care physician)

Finally, providers regarded quality metrics designed to measure and improve healthcare as both counterproductive and potentially helpful in assuring equitable and accessible end-oflife care. In support of quality metrics, one provider reported that: "I think unfortunately the whole reason why we became so concerned with our outcomes is because we are monitored so closely for our mortality. ... It's like a speeding ticket, you know. If you have too many [deaths], you have to stop and reassess, "Am I taking too many patients that really shouldn't be operated on?"" (Woman, 57 years old, surgeon) On the other hand, providers also recognized competing interests for the institution versus for the providers, especially in surgical education: "It is tough in a training environment. Because we are very procedurally focused, ...the metrics are focused on survival, and the training metrics are focused on procedure volume. So, we are going to tend to want to do more things and train people to do more things, less so than we are to train them in more subtle areas [like goals-of-care discussions]." (Man, 39 years old, surgeon)

#### Domain 4: Surgical Culture and a Surgeon's Self-Perceived Role

Several defining characteristics of the culture of surgery and the surgical ICU emerged from provider interviews. Interviewees spoke of a goal-oriented mindset that regards surgery as the preferred solution even when it might not be the right solution, believing "us as providers in surgery, we are so used to doing interventions that we are not necessarily thinking about how palliative [care] can play a role as well." (Woman, 30 years old, nurse practitioner). Discrepancies in expectations about what a surgery can achieve for seriously ill patients and actual surgical outcomes may also drive moral distress for providers working in the surgical ICU. A surgeon remarked that "non-surgical providers may be expecting too much from surgery sometimes. ...For patients, I also think that there's too much expectation for surgery to do something useful, helpful, or beneficial. [And] potentially, the family wants more to be done, and that's difficult when you don't see something that will be helpful." (Woman, 33 years old, surgeon)

Participants reported strong and adverse emotional reactions when confronted with death and decisions related to the care of a seriously ill patient: "As a surgeon you feel [like] a failure if your patient dies. Whether you could do anything different or not, you always feel like you failed the patient and the family." (Man, 77 years old, surgeon). The psychological and emotional toll of losing patients were described as contributing to moral distress through the loss of self-confidence in technical abilities as well as general sadness with the surgical field itself: "When you have an outcome that doesn't go the way you expect, and the patient doesn't do well, despite your best efforts, then it can be really mentally taxing and make you question your abilities as a surgeon and make you question your career choice. It can be a real emotional drain." (Woman, 41 years old, surgeon).

Another source of moral distress for providers included surgeries meant to be life-saving that ultimately led to mortalities or ones that did not change the course of a terminal illness. In some cases, providers associated profound hope and emotion with surgery, leading to severe disappointment when poor outcomes or surgical complications occur. One provider recounted, "[The patient] has not been comfortable in years...everything hurts. Now he has kidney cancer and [we] put him through a big whack and a trach and a bag and thoracotomy, and he died anyways. That's the point where I am like, "We don't have to do this stuff."" (Man, 52 years old, surgeon)

As such, the culture of surgery and the surgical ICU bred challenges for surgeons and other providers to contend and reconcile with surgical complications, especially when poor outcomes were associated with deeply distressing emotions, such as shame and sadness. According to one surgeon who performed a case that involved complications but encountered goals-of-care preferences at odds with her personal beliefs, "It's so...weird that all these things that you do to try to get the patient through these complications. So, one complication [leads] to another one. ... The daughters thanked me. But it was hard for me to be...gracious about it. Maybe I was mad at myself that I didn't pick up [the patient and family preferences] before surgery." (Woman, 57 years old, surgeon) Yet, the culture of surgery that "[doesn't] even like to talk about palliative care, because it feels like we are giving up on the patient" (Woman, 35 years old, physician assistant) potentially contributes to misunderstandings of palliative and end-of-life care, increasing provider moral distress while caring for seriously ill patients.

#### **DISCUSSION**

Our study identified multiple sources of moral distress for surgeons and other providers caring for seriously ill patients who require surgical interventions. In particular, personal experiences mattered immensely in perpetuating provider moral distress. <sup>10</sup> Surgeons often share and publish anecdotes of patient encounters that deeply impacted their practice or emotional outlook. <sup>12</sup> Similarly, participants in our study recollected powerful impressions from caring for certain patient populations,

a phenomenon reflected in other qualitative studies about surgeons and moral distress. 13,14

Furthermore, providers' perceptions of their own roles and of the surgical field were a strong influence. This is similar to previous work, which has found that unspoken aspects of surgical culture itself can contribute to provider moral distress. Published literature suggests that surgeons and other clinicians working in surgical ICUs are particularly prone to displaying maladaptive behavior and poor coping skills, leaving them vulnerable to moral distress due to repeated exposure to upsetting clinical scenarios and team conflicts. Surgeons and other healthcare professionals caring for surgical patients also commonly regarded themselves as "fixers" in our study and others, leading to heightened feelings of shame, disappointment, and guilt when complications, an inherent aspect of surgery, occur. 14

Conflicts in medical decision-making and communication between treatment teams and patients or families were profound contributors to the development of moral distress in this study. Navigating inconsistent or conflicting goals of care is reported as sources of moral distress in prior studies. We found similarly that cases, where patients were unable to participate in decision-making, were particularly emotionally fraught and challenging due to contrasting ethics of beneficence and autonomy. 14,16 Performing surgeries against personal recommendation and without strong clinical benefit for patients but which help families cope, was particularly stressful for surgeons. 6,17 Surveyed neurosurgeons report moral distress while encountering patients without clear treatment preferences and delivering nonbeneficial care. 18 Rushton et al posit that these moral and ethical dilemmas, arising from determining courses of action for seriously ill patients, and subsequent personal confusion and conflict could lead to immense and lasting negative emotional arousal.<sup>10</sup> Moral injury has recently emerged as another model encapsulating emotional and moral consequences resulting from accumulated conflicts arising over the course of a clinician's work.19 Thus, our manuscript builds on prior work identifying sources of moral distress as and provides insight into scenarios where more profound and lasting moral injury may also develop.

Our study suggests opportunities for providers and health-care systems to mitigate sources of provider moral distress. 10 First, education about palliative care and serious illness communication can promote multidisciplinary provider engagement in these practices, especially as strong collaborations between palliative care and surgical teams are built on mutual understanding of roles and shared experiences. 20 Second, due to challenges in emotional, cognitive, and ethical attunement contributing to provider moral distress, surgeons and other healthcare professionals can benefit from chances to debrief with colleagues about complications, conflicts, and difficult experiences while caring for seriously ill patients. 10,21

#### Limitations

Healthcare experiences within the entire VA system vary by facility, which may limit the generalizability of the findings of this study. We believe that we recruited diverse providers from VA hospitals throughout the country, capturing a diversity of perspectives. Our qualitative study includes a sample of 48 interviews with surgeons and multidisciplinary providers who regularly care for seriously ill ICU patients with surgical conditions, although, due to the predominance of surgeon participants, generalizability of nonsurgeon perspectives may pose a limitation as well. Common sources of provider moral distress highlighted in this study can be applicable to other practice settings, based on providers' responses regarding prior experiences. In addition, convenience sampling, while useful for collecting a variety of perspectives, can lead to bias in

sampling.<sup>22</sup> However, common sources of provider moral distress highlighted in this study may be applicable to other acute care settings regardless of role. Finally, while the premise of our study did not directly address interviewees' opinions and recommendations for mitigating surgical provider moral distress, we provide a more nuanced description of this increasingly encountered phenomenon.

#### **CONCLUSIONS**

Moral distress is an increasingly recognized challenge faced by surgeons and providers caring for seriously ill patients with surgical conditions. The emotional impact from uniquely distressing clinical encounters as well as cases involving ethical conflicts in medical decision-making with patients and families are some examples of sources of provider moral distress. Sources of moral distress are shared among providers employed at diverse hospitals throughout the United States, highlighting areas for increased attention on workplace support and education about surgical palliative care and serious illness communication.

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#### REFERENCES

- 1. British Medical Association. Moral Distress and Moral Injury: Recognising and Tackling it for UK Doctors. 2021.
- Norman SB, Maguen S. Moral Injury. U.S. Department of Veterans Affairs; 2022.
- Kherbache A, Mertens E, Denier Y. Moral distress in medicine: an ethical analysis. J Health Psychol. 2022;27:1971–1990.
- Mewborn EK, Fingerhood ML, Johanson L, et al. Examining moral injury in clinical practice: a narrative literature review. *Nurs Ethics*. 2023;30:960–974.
- Redmann AJ, Smith M, Benscoter D, et al. Moral distress in pediatric otolaryngology: a pilot study. Int J Pediatr Otorhinolaryngol. 2020:136:110138.

- 6. Zimmermann CJ, Taylor LJ, Tucholka JL, et al. The association between factors promoting nonbeneficial surgery and moral distress: a national survey of surgeons. *Ann Surg.* 2022;276:94–100.
- Lamiani G, Borghi L, Argentero P. When healthcare professionals cannot do the right thing: a systematic review of moral distress and its correlates. J Health Psychol. 2017;22:51–67.
- 8. Sutton J, Austin Z. Qualitative research: data collection, analysis, and management. Can J Hosp Pharm. 2015;68:226–231.
- Braun V, Clarke V. To saturate or not to saturate? Questioning data saturation as a useful concept for thematic analysis and sample-size rationales. Qual Res Sport Exerc Health. 2019;13:201–216.
- Rushton CH, Kaszniak AW, Halifax JS. A framework for understanding moral distress among palliative care clinicians. *J Palliat Med*. 2013;16:1074–1079.
- Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *Int J Qual Health Care*. 2007;19:349–357.
- 12. Grady C. Surgical medicine: imperfect and extraordinary. *Narrat Inq Bioeth*. 2015;5:37–43.
- Ryu MY, Martin MJ, Jin AH, et al. Characterizing moral injury and distress in US Military surgeons deployed to far-forward combat environments in Afghanistan and Iraq. JAMA Netw Open. 2023;6:e230484.
- Andrew Millis M, Ann Vitous C, Ferguson C, et al. To feel or not to feel: a scoping review and mixed-methods meta-synthesis of moral distress among surgeons. *Ann Palliat Med*. 2023;12:376–389.
- Bruce CR, Miller SM, Zimmerman JL. A qualitative study exploring moral distress in the ICU team: the importance of unit functionality and intrateam dynamics. Crit Care Med. 2015;43:823–831.
- Steiner JM, Patton KK, Prutkin JM, et al. Moral distress at the end of a life: when family and clinicians do not agree on implantable cardioverter-defibrillator deactivation. J Pain Symptom Manage. 2018;55:530-534.
- Peetz AB. Does thinking make it so?-what to make of the empirical evidence on moral distress amongst surgeons. Ann Palliat Med. 2023;12:884–886.
- Mackel C, Alterman RL, Buss MK, et al. Moral distress and moral injury among attending neurosurgeons: a national survey. *Neurosurgery*. 2022;91:59–65.
- 19. Dean W, Talbot S, Dean A. Reframing clinician distress: moral injury not burnout. *Fed Pract*. 2019;36:400–402.
- Sasnal M, Lorenz KA, McCaa MD, et al. "It's not us versus them": building cross-disciplinary relationships in the perioperative period. J Pain Symptom Manage. 2023;65:263–272.
- Kok N, Zegers M, Teerenstra S, et al. Effect of structural moral case deliberation on burnout symptoms, moral distress, and team climate in ICU professionals: a parallel cluster randomized trial. Crit Care Med. 2023;51:1294–1305.
- Robinson OC. Sampling in interview-based qualitative research: a theoretical and practical guide. Qual Res Psychol. 2014;11:25–41.