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Moral Distress Amongst American Physician Trainees Regarding Futile Treatments at the End of Life: A Qualitative Study

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BACKGROUND: Ethical challenges are common in end of life care; the uncertainty of prognosis and the ethically permissible boundaries of treatment create confusion and conflict about the balance between benefits and burdens experienced by patients.

OBJECTIVE: We asked physician trainees in internal medicine how they reacted and responded to ethical challenges arising in the context of perceived futile treatments at the end of life and how these challenges contribute to moral distress.

DESIGN: Semi-structured in-depth qualitative interviews.

PARTICIPANTS: Twenty-two internal medicine residents and fellows across three American academic medical centers.

APPROACH: This study uses systematic qualitative methods of data gathering, analysis and interpretation.

KEY RESULTS: Physician trainees experienced significant moral distress when they felt obligated to provide treatments at or near the end of life that they believed to be futile. Some trainees developed detached and dehumanizing attitudes towards patients as a coping mechanism, which may contribute to a loss of empathy. Successful coping strategies included formal and informal conversations with colleagues and superiors about the emotional and ethical challenges of providing care at the end of life.

CONCLUSIONS: Moral distress amongst physician trainees may occur when they feel obligated to provide treatments at the end of life that they believe to be futile or harmful.

BACKGROUND

Ethical challenges are common in end of life care; the uncertainty of prognosis and the ethically permissible boundaries of treatment create confusion and conflict about balance of benefits and burdens experienced by patients. Embedded in end-of-life care are ethical dilemmas that are punctuated by conflicts between differing ethical obligations such as respecting a patient's autonomy and the duty to do no harm.

Case studies in the ethical literature have described and hypothesized that physicians experience moral angst regarding overly aggressive or "futile" care.^{1,2} The definition of futility is controversial, and no one definition is universally accepted. One describes futility as an "effort to provide a benefit to a patient that is highly likely to fail and whose rare exceptions cannot be systematically produced."³ In one study, nearly 70% of house staff reported acting against their conscience in the care they provided at the end of life, with four times as many respondents concerned about over-treatment than under-treatment.⁴ Surveys have shown that clinicians sometimes perceive care in the intensive care unit (ICU) as inappropriate or futile, resulting in high costs and resource utilization.^{5,6}

Moral distress occurs when individuals believe they are unable to act in accordance with their ethical beliefs due to hierarchical or institutional constraints.⁷ Mobley et al. hypothesized that the intensity and frequency of moral distress increased with exposure time to futile care, resulting in burnout and emotional exhaustion.⁸ This can have significant negative effects on job satisfaction, psychological and physical well-being, and self-image, with consequent burnout and thoughts of quitting.^{6,9-11}

The vast majority of the literature on moral distress focuses on the nursing profession.^{12,13} Several qualitative studies on nurses have demonstrated that moral distress is associated with provision of treatments perceived to be overly aggressive and non-beneficial to patients.^{10,14,15} While there have been theoretical discussions on moral distress experienced by physicians, there have only been a small number of empirical studies demonstrating moral distress in U.S. physicians, the majority of which have focused on physicians as members of

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larger interdisciplinary teams.^{12,16,17} To our knowledge, there are no studies that describe the physician or physician trainee experience surrounding moral distress associated with end of life care in the United States.

This report is part of a larger study investigating physician and trainee views on resuscitation orders.¹⁸ During the course of these research interviews, moral distress emerged as a major theme amongst trainees. In this paper, we examine how medical physician trainees perceive and respond to ethical challenges arising in the context of treatments at the end of life that they perceive to be futile and how these challenges may contribute to moral distress.

METHODS

Design

Semi-structured in-depth interviews were conducted to investigate physician trainees' experiences and attitudes regarding medical practices and treatments at the end of life.

Hospital Sample

We purposively sampled three academic medical centers with accredited internal medicine residency and fellowship programs in medium to large cities in the United States. These hospitals were chosen based on variations among them in end of life care.¹⁹ All three hospitals had palliative care and ethics consultation services.

Physician Sample

Participants were sampled by stage of training to provide a wide range of perspectives. Physicians were excluded if they had not attended medical school and residency in the United States. Our sampling strategy was opportunistic and non-probabilistic. Recruitment occurred through e-mail solicitations to residency list serves, announcements before house staff conferences, individual solicitations of physician trainees, and referrals from respondents of colleagues who might be interested.

Interviews were conducted in person, with the exception of two interviews that were conducted via Skype. An interview guide used across all sites provided thematic continuity (see appendix, [available online](#)). However, the interview format was open-ended, encouraging participants to explore issues they considered most relevant. Interviews lasted between 45 and 120 min and were audiotaped and transcribed verbatim. Data collection concluded when we reached theoretical saturation, a point where no new themes arose from the interviews.²⁰

Analysis

This qualitative study was exploratory in nature, intended to deepen conceptual understanding of

underlying phenomena that drive physician attitudes and behavior. Themes and patterns emerged from initial interviews and analysis, and were refined and validated in subsequent interviews through questions added to the interview guide and probing of key themes during the interviews.

Our qualitative approach was grounded in a framework that acknowledges that multiple perspectives are intrinsic to the research process and the importance of the perspectives that the researchers bring to the fieldwork and analysis.^{21–23} Throughout the analyses, we drew upon our own clinical experiences in a reflexive manner, understanding how it would both inform and potentially bias our interpretation of the interview data. Data were analyzed and theories developed as more interviews were conducted and coded. Hypotheses and themes developed became the subject of questions in subsequent interviews to further confirm the trustworthiness of the data. Disconfirming cases were recognized and analyzed in light of their effect on the emerging theory.

Two independent readers (ED, AC) identified initial key themes and concepts that occurred through a subset of the interviews using an editing analysis style, and developed a codebook through an iterative process. They subsequently coded 20% of the interviews with rare disagreement, meeting to discuss emerging themes and patterns. One researcher (ED) then analyzed and coded the remaining interviews using the codebook, adding additional themes and adapting categories as needed. Data were coded by hand and managed in Excel. Member checking was conducted through regular discussions with individual physicians and in-group meetings where findings were discussed.

Informed consent was obtained from all interviewees and interview data were anonymized during transcription. The study was approved by the Johns Hopkins University Institutional Review Board.

RESULTS

Over a 9-month period, one investigator (ED) recruited and interviewed 22 internal medicine residents and medicine subspecialty fellows or physicians with less than 6 years of experience (Table 1). Because similar themes and patterns emerged in trainee responses across all sites, we based our

Table 1 Demographic Characteristics of Study Participants (n=22)

	Hospital A (n=7)	Hospital B (n=7)	Hospital C (n=8)
Years of experience, range (mean)	1–6 (3.57)	1–5 (3.17)	2–6 (4.37)
Male/female	3/4	2/4	3/5
Level of training			
Fellow, n (%)	3 (43)	3 (43)	4 (50)
Resident, n (%)	4 (57)	4 (57)	4 (50)

assessment of theoretical saturation on the aggregate interviews among all three sites. Themes that emerged relating to moral distress included language of torture and suffering, practitioner suffering, powerlessness, hierarchy, and dehumanization. Physician trainees at one of the three hospitals also discussed institutionally organized coping mechanisms such as conversations about patients who died.

TREATMENTS PERCEIVED TO BE FUTILE

One hospital had a futility policy in place (Hospital B), another had a futility clause incorporated into their DNR policy (Hospital C), and the last did not have a futility policy at all (Hospital A). Trainees were generally not aware of futility policies or DNR policies, and rather appeared more aware of the culture of their institution regarding these policies than the policies themselves.

This study focused on trainee physicians' attitudes towards treatments that they perceived to be futile. Respondents were asked to describe relevant cases. While we were primarily interested in their perceptions and reactions to clinical situations that they personally felt were futile and distressing, the majority of these cases appeared to fulfill the standard definitions of futility described earlier in the paper. One example is listed here; others can be found in the online supplement:

This person with advanced dementia had been in and out of the ICU multiple times that month at baseline, and had very poor cognitive functioning. She had no quality of life. She was septic. I forget how many other comorbidities on board. Just kind of a remote family member was making the decisions, and had spent a week in the ICU remaining full code despite everybody's efforts, and ultimately coded again and didn't survive. But I think that's a pretty common scenario, especially in the ICUs and everything (Hospital B, PGY-2).

“TORTURE” AND “SUFFERING”

Trainees sometimes felt obligated to provide end of life care that was not in the patient's best interest. They frequently used the words “torture” and “suffering” to describe this treatment:

It felt horrible, like I was torturing him. He was telling us we were torturing him. I did not think we were doing the right things (A, PGY-3).

We spend a lot of time at the end of life in the ICU torturing our patients and so, I can't in good conscience say that our current system really seems to serve the best interests of the patient because, we torture them before they die, even though we know that they are going to die (B, PGY-4).

A common source of moral angst among respondents appeared to relate to situations where surrogate decisions appeared to go against prior patient wishes. Physicians questioned whether the families made decisions in the patient's best interests. For example, one said:

It is infuriating when the family is not there and they cannot see. I feel like it's morally wrong. When people see their family members suffering and they are there suffering with them, I am more understanding of their decision...I agree with giving the patients choice, but oftentimes it's the family member. If the patient says, “Torture me, I want everything done.” Fine. The family member is doing it for other reasons. Like guilt; they can't let go (A, PGY-3).

PRACTITIONER SUFFERING

Many of the trainees expressed practitioner suffering and emotional angst over treatments they or their colleagues provided at the end of life:

At this point, the staff felt so much moral distress caring for this person. They just feel like they've been prolonging suffering as opposed to providing care (C, PGY-6).

I thought maybe we should involve ethics because the house staff team was very, very demoralized by this gentleman's care (B, PGY-4).

Trainees felt particularly distressed providing what they believed to be overly aggressive treatments such as resuscitation that was unlikely to work:

A lot of traumatic things happen when you're a resident. There was this tiny 90-year-old lady. We had to code her and it was one of the worst experiences of my life...I had a lot of moral distress when I kept coding her for an hour (B, PGY-6).

PERCEIVED POWERLESSNESS

One theme that frequently emerged from these interviews was a perceived powerlessness over physicians' ability to prevent harmful and futile treatments:

You know there's no good outcome. You just continue to code them and at some point they're going to die. You've wasted time and resources and you've just provided futile care and tortured somebody for however much more time. Then there's the whole disassociation where you want what's best, but what you can do? And what do you have ability to affect? You just do your job (B, PGY-3).

HIERARCHY

Physician trainees attributed some of their powerlessness to a clear hierarchy in academic institutions. Trainees felt unable to question the decisions of their attending even when those decisions seemed contrary to what the trainee believed was right. The trend was often towards more aggressive care:

I was taken aback. I had multiple patients where the patient and families were on board with comfort care. They had the goal of decreasing suffering and pain, but the attending was not on board with comfort care and DNR/DNI. That can be very difficult as a resident (A, PGY-2).

Another reflected on the overall hierarchy, with less moral distress the more removed one was from patient care:

It's very significant moral distress. There are definitely patients that disturb the nursing staff because they are the ones who have to carry out the doctor's orders and who are at bedside seeing the effects of our treatment—seeing patients suffer. That translates to the interns who are seeing the patients suffer, then the residents, fellows, and sometimes even attendings. So it goes up the chain, but I feel that each step is slightly further removed from the patient so they're seeing less (C, PGY-6).

DEHUMANIZATION AND RATIONALIZATION

This resident appeared to employ a process of dehumanization to detach himself as a coping mechanism:

We're abusing a body, and I get that, but as long as I remember I'm only abusing a body and not a person, it's okay. Frequently when it's an inappropriate code, that's what's happening (C, PGY-3).

One fellow (A, PGY-4) remarked that she had become “numb to it” and that to not reflect upon these ethical dilemmas was the only way to make it through training. Another physician remarked:

We do a lot of terrible things to critically ill patients and at the end of life. It's routine care, and I feel pretty numb to having done those things...it seems like there is no benefit and only risk. Yet I am accepting the patient to have these procedures done to them. I'm in that situation all the time. I'm pretty powerless to do anything about it (B, PGY-4).

This physician described the self-interest aspect of medical learning as a justification for futile resuscitation for the sake of medical education:

We are torturing this poor gentleman; that is really all we are doing. I do vaguely feel uncomfortable about the general gestalt of what we do in the ICU to people at the end of life. I feel morally sick to my stomach about it of course. Some of what we do is awful, but some of those things have also given me the skills to resuscitate [others]. I don't mean to justify the torture that we put our elderly critically ill and dying through, but it did provide me with many learning opportunities to help people who then could be saved (B, PGY-4).

Another resident worried that his cynicism would affect his behavior and attitudes towards patient care:

I have grown increasingly cynical about what medicine has the capacity to do. That has shaped how I converse with patients. I think cynically through residency I started to wish this person would be DNR/DNI because they are totally unfixable. The danger is that you get a bit sloppy and you're looking for DNR as a way to off-burden your work and labor and not be meticulous (B-PGY-4).

SUCCESSFUL COPING STRATEGIES AGAINST MORAL DISTRESS

The most common coping strategies described involved formal and informal open forum discussions. One of the three hospitals had a culture that actively promoted such conversation:

When I was a med student, a patient I was taking care of died. I didn't find out for two days because I had left. I felt hurt by that. I have noticed that whenever a patient dies here, whoever is taking care of them is notified, whether it's by a quick text message or whatever. The first time an intern has a patient who dies, I talk about it with them before, how to approach the family and talk about with them afterwards about how they felt it went to the family. I feel like there is a lot of space for emotions here (C, PGY-3).

The culture in this hospital seemed to be influenced in part by a palliative care-friendly environment, especially a program called “death rounds.” This weekly session facilitated open discussion and normalization of emotional issues, providing time and space for reflection within a busy resident schedule:

We have death rounds once a week and talk about our emotions around making these decisions. It gives us time to slow down and everybody can say their story about a patient that touched them, or a concern that they had, or that made them feel a little uncomfortable. It usually ends with people crying. The program, the staff, and the residents tend to talk about emotions a lot. I think death rounds helps facilitate that (C, PGY-3).

CONCLUSIONS

Our study sheds light on a significant cause of moral distress amongst physician trainees when they feel obligated to provide treatments at the end of life that they believe to be futile or harmful. Their words—"torture," "gruesome," "abuse," "mutilate," and "cruel"—evoke images more befitting penal regimes than hospitals. The moral toll exacted upon these physicians is evident in descriptions such as feeling "violated" and "traumatized."

These findings are consistent with a study by Solomon et al. suggesting that trainees "acted against their conscience in providing care to the terminally ill."⁴ The vast majority of respondents in the present study appeared more concerned about providing overly burdensome treatment than under-treatment. Their attitudes may reflect inexperienced doctors' feelings of being trapped by expectations and policies that prioritize patient autonomy,²⁴ as they have yet to develop the experience or confidence to cope with these ethical conflicts.

Among physicians, trainees are particularly vulnerable to moral distress because they are subordinate but on the front line,² which reinforces a perceived powerlessness to act as independent moral agents against treatments that they believe may do more harm than good. This study provides evidence that similar to nurses, trainees may experience moral distress from perceived futile care,⁸ thus highlighting the need for greater nuance and attention to differences between trainees and attending physicians. One study noted that decreased autonomy was associated with increased frequency and intensity of moral distress amongst nurses.²⁵ Because the hierarchy of control over decision-making descends from attending to resident to nurse, the consequent degree of moral distress experienced by trainees may be more similar to nurses than attending physicians.²⁵

In light of this perceived helplessness, physician trainees can become emotionally detached and cynical, and may dehumanize their patients in order to protect themselves. Prior reports have highlighted the negative effects of cynicism and burnout on empathy, patient care, and the culture of medicine.^{26,27} Cynicism can alienate young physicians from their profession, as they begin to wonder whether their efforts are meaningless or harmful.

Trainee distress may be a root cause of a decline in empathy,^{26,28–34} and can be related to experiences such as perceived ethical and professional dilemmas and exposure to death and

human suffering.^{26,31} Contradictions between the ethics taught in medical school and practices on the wards may contribute to the ethical erosion that can occur during medical training,³⁵ which results from an inability to address the moral distress and ethically unjustified treatments they are asked to provide.³⁶ Ethical erosion and empathy decline may reflect mechanisms of self-preservation through detachment and dehumanization.³⁷

The dispensation to inflict pain is a necessary professional duty, but it also engenders moral vulnerabilities.³⁸ Stepping over the fine line between inflicting necessary and unnecessary pain, for example during futile treatments, may contribute to the decline in empathy during medical training, as demonstrated by previous U. S. studies.^{31,32,39,40} These experiences have significant impacts on physicians' professional identity and moral personhood during their most formative years.^{37,41,42}

The limitations of this study include social desirability bias as well as a concern among respondents that their answers might affect their evaluations or be relayed to their superiors. However, participants were assured that interviews would be confidential and that the interviewer had no affiliation with their residency program. Another limitation is the exclusion of community hospital-based residency programs.

Interventions that remind physicians of the humanity of their patients and reconnect them to their own humanity and professional purpose can help mitigate moral distress and counteract loss of empathy. Programs such as Schwartz Center Rounds and death rounds (at Hospital C) serve as important coping strategies for dealing with these difficult issues.^{43,44} Providing a safe space where emotions and compassion are encouraged helps to counteract the culture of stoicism in medicine. In the harried life of a resident, encouraging opportunities to stand back and reflect, even as simple as a text message or a short time-out, gives permission to acknowledge the inherently challenging emotional and humanistic aspects of patient care. These conversations also promote the importance of physician self-care, a prerequisite to one's ability to care for others,^{11,45} which may in turn help foster the empathy needed to remain a compassionate physician. A crucial component of fostering open dialogue and awareness of issues surrounding death and dying is establishing palliative care-friendly environments through palliative care and ethics services and consultation.

Strategies for addressing moral distress explored in the literature thus far include re-calibration of emotional responses, resilience and mindfulness training, and promotion of inquiry and reflection.^{46–49} Medical education should continue to recognize the importance of addressing these issues through focus groups, didactic sessions, and awareness of the training environment and culture. Root cause analyses and other systematic methods to understand structural and organizational factors can also help in recognizing and addressing sources of moral distress.⁵⁰ An example of a policy-oriented intervention includes a statement issued by the American

Thoracic Society that addresses situations to which a clinician might morally object and seeks to establish institutional norms that allow for practitioners to personally excuse themselves from morally problematic situations.⁵¹

These strategies, likely underutilized at many institutions, could be used to mitigate moral distress and loss of empathy during medical residency and fellowship training. This study describes experiences of moral distress amongst physician trainees in response to treatments administered at the end of life that they perceive to be futile. It provides insight into the scope and character of moral distress amongst physicians, and physician trainees in particular. These findings underscore the need to enhance support and training for physician trainees in the context of end of life care in order to address morally distressing situations.

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Study concept and design: Dzeng, Levine, Smith, Roland, Barclay.

Acquisition, analysis, or interpretation of data: Dzeng, Colaianni.

Drafting of the manuscript: Dzeng.

Critical revision of the manuscript for important intellectual content: Dzeng, Levine, Smith, Colaianni, Roland, Kelly, Barclay.

Procurement of funding: Dzeng.

Study supervision: Dzeng.

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