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Education

UNDERSTANDING ETHICAL DILEMMAS IN THE EMERGENCY DEPARTMENT: VIEWS FROM MEDICAL STUDENTS' ESSAYS

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☐ **Abstract—Background: For medical students, the emergency department (ED) often presents ethical problems not encountered in other settings. In many medical schools there is little ethics training during the clinical years. The benefits of reflective essay writing in ethics and professionalism education are well established. Objectives: The purpose of this study was to determine and categorize the types of ethical dilemmas and scenarios encountered by medical students in the ED through reflective essays. Methods: During a 4th-year emergency medicine rotation, all medical students wrote brief essays on an ethical situation encountered in the ED, and participated in an hour debriefing session about these essays. Qualitative analysis was performed to determine common themes from the essays. The frequency of themes was calculated. Results: The research team coded 173 essays. The most common ethical themes were autonomy (41%), social justice (32.4%), nonmaleficence (31.8%), beneficence (26.6%), fidelity (12%), and respect (8.7%). Many of the essays contained multiple ethical principles that were often in conflict with each other. In one essay, a student grappled with the decision to intubate a patient despite a preexisting do-not-resuscitate order. This patient encounter was coded with autonomy, beneficence, and nonmaleficence. Common scenarios included ethical concerns when caring for critical patients, treatment of pain, homeless or alcoholic patients, access to care, resource utilization, and appropriateness of care. Conclusion: Medical students encounter patients with numerous ethically based issues. Frequently, they note conflicts between ethical principles. Such essays constitute an important resource for faculty, resident, and student ethics training.** © **2015 Elsevier Inc.**

☐ **Keywords—ethics; medical student; residency; education; qualitative**

INTRODUCTION

Ethical behavior is fundamental to professionalism and is often embedded in medical decision-making. Formal ethics training has been a subject of considerable interest (1,2). Medical students may be introduced to medical ethics through formal curricula during their preclinical years, but there may be little or no structured ethical training during the clinical years and residency (3–5). In order for physicians to emerge from training equipped to make sound ethical decisions, it is important that curricula include practical, real-world ethics training. These principles and virtues are rarely taught explicitly during the clinical years, leading to their

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being primarily taught through the hidden curriculum (the values, norms, and beliefs taught through socialization as opposed to openly taught in the curriculum) (6). However, these issues can often be complex and it may be difficult for medical students to apply to the clinical setting. Further, with the busy emergency department (ED) environment, discussions of the ethical dimensions of care are frequently a lower priority than clinical obligations.

Principles-based ethics and virtue ethics are two common approaches to medical ethics (7,8). The four medical ethical principles are autonomy, beneficence, nonmaleficence, and social justice (Table 1). Virtue ethics include analysis of using the traditional ethical virtues of honesty, integrity, fidelity, trust, compassion, empathy, fairness, courage, and prudence. Both the principles and the virtues are commonly seen in the ED.

There is both an interest in and a demonstrated need for improved medical ethics training during medical school and residency (3,9,10). Ethics education in the ED is especially important due to the complex nature of patient interactions (9). As more medical schools mandate emergency medicine (EM) clerkships, ethics training in the acute setting will become needed. Despite its importance, there is little literature on teaching ethics to medical students during the EM clerkship. The most robust example recommends 30 h of extensive training and role playing (11). This amount of time is generally unavailable in a 1-month clerkship.

The ED presents unique ethical problems and other constraints not encountered in other settings (12,13). The purpose of this study is to determine and categorize the types of ethical dilemmas and common scenarios encountered by medical students in the ED to better understand ethical conflicts encountered. This will serve both as a useful exercise for emergency physicians to understand the ethical dilemmas seen in the ED, and as an informal needs assessment for further formal education in medical ethics.

MATERIALS AND METHODS

We used a cross-sectional study design with qualitative analysis. The study design was informed by previous work in professionalism (14,15). The setting was an academic ED with associated community and county EDs. Participants were all 4th-year medical students in a mandatory EM clerkship during the 2012–2013 academic year. The study was determined to be exempt by the institutional review board.

Students were prompted to "Write one paragraph about an ethical issue encountered during your EM rotation. If you did not encounter one this rotation you may write about an ethical encounter from another clinical rotation." Students received credit for completion regardless of the content of their reflections. There was no separate guidance toward specific ethical principles or specific issues. All students submitted a brief essay. These essays formed the basis of an end-of-rotation student-led debriefing and discussion facilitated by a member of the School of Medicine's ethics faculty. With the exception of gender, the reflections were de-identified prior to analysis.

The student essay data were analyzed qualitatively using grounded theory (16). This was informed by the literature on ethics and medical education and was ongoing and iterative. In contrast to most quantitative research, grounded theory is inductive rather than deductive; the theory is formed from the data. As the data were analyzed, emergent themes were recorded and refined after each batch of coding until common themes had emerged (14).

Coding was performed by a seven-person team that included five emergency physicians, one clerkship director, three ethicists, two lay people, and an expert in qualitative methods. The study team read the reflections, and discussed common themes that were generated from reading the primary data. The entire team coded the initial 2 months of essays. Common themes were identified and

Table 1. Categorization of Ethical Themes

Theme	Total Cases n	% of Cases*	Theme Definition
Autonomy	71	41.0%	Patients should have the right to self determination
Social justice	56	32.4%	The moral obligation to fairly balance competing interests (e.g., fairly distributing scarce resources)
Nonmaleficence	55	31.8%	First, do no harm
Beneficence	46	26.6%	Act in the patient's best interest
Fidelity	21	12.1%	Put the patient's interests first, above the physician's own
Respect	15	8.7%	Respect for patients as people (e.g., cultural practices)
Compassion	14	8.1%	Showing compassion for the patients, and other people around
Confidentiality	5	2.9%	Keeping patient's information private
Honesty	6	3.5%	Being honest in all situations

* Each student narrative could contain multiple codes.

catalogued using grounded theory. The reviewers generated the initial list of themes. Subsequently, two of the authors coded the remaining essays. Disagreements regarding coding were resolved by dialogue and consensus.

After essays were coded, the most common codes were analyzed for their relationship to common ethical principles, and those themes pertaining to medical ethics were extracted for deeper evaluation. In addition, common ethical scenarios are reported. In reporting the results, we demonstrated the meaning of the themes with quotes from the students' essays (14). After each quote, in parentheses, are a unique student identifier, student gender, and themes coded.

RESULTS

We identified 10 themes from the 173 reflections. The frequency of each theme is noted in Table 1. Kappa statistic was performed on the coding from 23 essays to ensure consistency of coding and showed a high degree of agreement (K = 0.83). The themes fell into two domains. The first domain was ethical conflicts, which included the four common biomedical ethics principles: autonomy, social justice, nonmaleficence, and beneficence. The second domain included some of the aspirational virtues (fidelity, respect, compassion, confidentiality, honesty). These reflections were most commonly either examples of how the ethical principle or virtue was not adhered to, or examples of aspirational behavior that the student admired and thought should be role modeled. Some of the student essays reflected on scenarios in which two or more of these themes were discussed or came into conflict. The most common themes were autonomy and social justice. We will address the major themes below. Further, the clinical scenarios where ethical issues were demonstrated are described.

Whereas ethics is often taught as the individual ethical principles, for the most part, the practical application of the ethics in the ED involved conflicts amongst the principles. *Autonomy* was often at the center of these conflicts. Many students noted the struggle of maintaining a patient's autonomy in the setting of critical illness. For example, many students wrote about patients who were unable to discuss whether or not they would want to be intubated. In these cases, often, decisions were being made by family members or medical providers who were trying to advocate for the patient's best interest, or intubating to prevent harm while the patient's wishes are elucidated. The essays frequently identified that the situation put *beneficence* and *nonmaleficence* in conflict with autonomy.

Regarding a patient whose family knew he did not want intubation, a student wrote, "His family at the time said they wanted the doctors to do everything to keep him alive. Several days later the patient was extubated and stated how angry he was that he had been intubated since he did not want to live longer" (12.9, male, autonomy, beneficence, nonmaleficence).

Themes of *respect* often emerged from medical students' reflections. One common example was respect for other cultural practices. Regarding a Vietnamese patient with lung cancer, whose diagnosis had been withheld from her by her family, one student wrote, "Is it permissible for cultural beliefs to counteract a patient's autonomy and right to know?" (2.13, male, autonomy, respect, honesty).

The theme *nonmaleficenc*e was exemplified by a scenario in which a patient was involved in a car crash in which two of her children died. The student wrote "the ethical question became when and how to inform her that her children had died" (2.3, male, nonmaleficence, respect).

Social justice was a common theme, often touching on aspects of resource allocation. A student wrote about access to care, medical costs, and beneficence of doing the right thing for the patient. He treated a patient with asthma who was not able to afford albuterol inhalers, saying "can you ethically discharge a patient with asthma who had an exacerbation, in part due to running out of his inhaler without the resources to obtain a new one […] Can society expect him to pay hundreds of dollars for an ED visit that could have been prevented with better access to primary care? […] How do we allocate minimal resources?" (6.1, male, social justice).

A student wrote about a case of a gentleman not being offered surgery for aortic dissection, as his operative risk meant his survival was close to zero. The student described the tension between wanting to offer an intervention (*beneficence*), but knowing an intervention would almost certainly do harm (*nonmaleficence*). "For the next several minutes, the ER attending explained to the patient and his family that though the only treatment available was surgery–he was not going to be offered an operation … The manner in which the ER physician communicated this concept with the patient demonstrated a profound understanding of the limitations of medical intervention" (5.21, male, beneficence, nonmaleficence, compassion).

The themes related to virtues were most notable in essays where students often were disturbed by cases in which physicians demonstrated unprofessional behavior. These cases often demonstrated a lack of *fidelity* (our unwavering commitment to put our patient's interests first) or a lack of *respect* (17,18). For example, when a patient who was suspected to have malingering presented with decreased level of consciousness, a medical student quotes a staff member as saying "We should straight cath him, I bet that would wake him up," with the

student subsequently expressing concern about "performing an unnecessary medical procedure … one that is physically invasive for the primary purpose of exposing a patient's feigned illness" (2.7, male, compassion, fidelity, nonmaleficence).

Another example was medical students documenting the behavior of physicians who showed a lack of *compassion* for their patients. For example, a student wrote about a resident's comment "Why is this patient here, they're such an idiot?" and "Why should I help them if they can't even take care of themselves?" (2.12, female, compassion).

Medical students also found honesty very important. One documented a lack of honesty regarding a patient with cholecystitis receiving multiple painful ultrasound examinations by residents for educational purposes, writing that when a patient asked why three examinations were needed, a resident said, "We need multiple exams to be sure we see it right." This reflection also was a good example of physicians lacking compassion: the same student wrote, "The patient did not offer consent for multiple painful exams, the patient was lied to about why multiple exams were being performed, and the patient suffered for the education of the residents when pain meds could have easily been administered prior to the exam" (2.9, male, honesty, compassion, fidelity, autonomy).

Students often expressed concern about the conditions of a busy ED or how the constraints of the emergency setting impact basic patient expectations and confidentiality. One student commented on a patient with groin pain in a hallway bed, "People nearby were able to view the physical exam … Since starting medical school, I was taught the importance of patient confidentiality" (4.14, male, confidentiality).

In contrast, students also wrote about positive behavior. After witnessing a resuscitation of a 7-year-old boy that ended in the child's death, a medical student reported, "I was impressed by how compassionate the physician was, and the emotional support he offered the family as they began to grieve …" (1.5, female, compassion, respect, beneficence, nonmaleficence).

Finally, some essays included no ethical principles or virtues, or used them incorrectly. For example, one student wrote about conveying normal test results to a patient, saying "What struck me about this encounter was the progression of our conversation, which was essentially taking the patient on an emotional roller coaster" (1.4, male, no ethical themes), expressing concern that this encounter should have involved more communication and that absence of this breached an unstated ethical principle. Likely the student was noting suboptimal empathy and communication, which is more of a marker of professionalism. Some of these narratives revealed students' lack of knowledge of medical ethics.

During our analysis there were several scenarios that brought up ethical issues repeatedly. The first was management of critically ill patients. Common ethical themes included discussions of autonomy (often involving questions of patient's capacity to provide consent) or medical futility. Often there were questions about difficult patient populations, such as people suffering from chronic pain, alcoholics, and drug users. There were many essays about patients without appropriate access to care, especially primary care. Students commonly wrote about resource utilization, especially when they perceived excess resource utilization was tied to any fear of litigation. Debriefing exercises also addressed similar issues.

DISCUSSION

The student essays provided examples of the variety of ethical questions faced in the ED and the extent to which students are concerned by these questions. They provided insight about ethical issues, behavior, values, and perceptions of our specialty.

They clearly revealed the need for further education in medical ethics in the clinical years, as noted by some students writing essays with no ethical themes at all. Judging by the reflections, the students look closely to attending and resident physicians' behaviors. They noted the difficulty of balancing ethical principles in the constrained environment of the ED. At the same time, they commonly wrote about where physicians didn't live up to the aspirational virtues.

Classroom ethics training in the preclinical years may present a foundation for ethical decision-making; however, this cannot fully capture the complexities of real-world ethical decision-making (19). In the clinical world, ethical principles and conflicts between principles need to be identified, decisions made, and actions taken in real time. An analogy can be made to preclinical and clinical teaching in the practice of medicine. The preclinical years initially involve learning some basic principles that underlie normal physiology and disease processes. In the clinical years this base knowledge is built on to create competency in differential diagnosis and medical treatment. Similarly, although basic ethical principles and virtues may be taught in the preclinical years, they cannot be fully applied without layering them into medical decision-making and the constraints of time, resources, and clinical complexity faced by practicing physicians.

The ED is an ideal location for this kind of training to understand the complexities of ethics and clinical decision-making. In current practice, however, this nuanced model for ethical decision-making is rarely explicitly communicated to students or residents (11). To the trainee it can be confusing how these ethical decisions are made, or worse, the trainee perceives that ethics

are not being integrated into decision-making. As we noted in a number of essays, the students struggled to understand ethical decisions of more senior practitioners. Based on our clinical experience and debriefing sessions, we suspect they rarely communicated these inner debates with faculty and residents.

The act of writing these essays allowed students to reflect about ethical issues. Reflective writing has previously been shown to help students learn about professionalism and ethics (20). It is likely that many students found this process helpful in gaining a better understanding of the stressful or uncomfortable situations about which they wrote. Further, the ethics faculty met with the students to debrief these experiences.

There were benefits for faculty as well. Subsequently, these essays were used as a faculty development tool. Essays representing good and bad examples of physician actions, or teachable ethical points, were selected. In some cases it highlighted and allowed us to combat the effects of the hidden curriculum (6). These essays were presented at a faculty meeting and discussed. This served to improve attending physicians' ability to mentor medical students on ethical situations; specifically, reminding faculty to discuss with students the ethical issues when caring for homeless, drug-seeking, and critically ill patients.

In many cases, the students wrote about faculty and resident behavior. Role models have been shown to be importance sources of learning for students on professional behavior and values (21). Student essays described situations in which students reacted, either positively or negatively, to resident or faculty behavior. They were likely not aware that students were evaluating them. It has been noted, in relation to professionalism, that role models are often unaware that students perceive them as such (22). Another ED study described a window on professionalism through similar medical student narratives; this study also noted that medical students often model or reject attending behavior (14). The same is likely true of ethical role models. Physicians sometimes express reluctance to teach ethics because they do not see themselves as being knowledgeable enough about ethical concepts (23). Regardless of whether or not a physician wants to be a teacher of ethics, students are learning about ethics through their behaviors and the ethical decisions they make in caring for patients. This exercise revealed the importance for emergency physicians in maintaining awareness of their position as ethics role models. We believe that discussing the ethics behind decision-making with trainees regularly would improve the trainees experience and lessen the effect of the hidden curriculum. Additional benefit may be gained by integrating other ethics-based learning experiences into the clinical period, such as these reflective essays or debriefing sessions guided by an ethics expert.

Limitations

This study was an initial foray at using reflection to deepen student knowledge of ethics, and so there are multiple limitations to our data. This was a single-center study, with results from one medical school over 1 year. Adding results from other centers and over longer periods of time would add to the validity of these results. To some extent this is tempered by including multiple EDs within our data.

Some limitations stem from our qualitative methods. Qualitative studies are descriptive and are not intended to test inferences about causation or associations (16). Coding is inherently subjective, although there was significant agreement between the coders.

The design of this study requested students to choose an ethical dilemma to write about. It is likely that the self-report nature of the data results in underrepresentation of the frequency of events. For example, the students may have been unwilling to write about particularly concerning events. The goal of this study was to further our understanding about ethical problems and may not represent the actual occurrence rates. Additionally, the prompt specifically asks about an ethical dilemma, and this may bias toward examples of ethical decision-making handled poorly, or other unprofessional behavior.

CONCLUSIONS

Medical students' essays demonstrated a wide variety of interesting ethical dilemmas. They often showed conflict between ethical principles or lapses of aspirational virtues. Ethical issues may be complex and it can be difficult for trainees to apply these in the clinical area without active guidance and more training. These topics may serve as the basis for a clinically based curriculum in ethics. Future work could investigate using brief interventions such as encouraging faculty to discuss the ethics behind decision-making with trainees, reflective essay writing, and debriefing sessions to improve ethical training for medical students. To further delineate the true frequency of ethical dilemmas encountered in the ED, students could also be surveyed regarding ethical issues.

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ARTICLE SUMMARY

1. Why is this topic important?

Ethics is constantly woven into emergency medicine decision-making, yet little training for medical students addresses this in the clinical years.

2. What does this study attempt to show?

This study used reflective essays and debriefing sessions to show the kinds of ethical dilemmas experienced by medical students.

3. What are the key findings?

Medical students commonly encounter ethical dilemmas in the emergency department. More explicit training on ethics in the clinical years may minimize the effect of the hidden curriculum.

4. How is patient care impacted?

Conceivably, patient care could be impacted by improved ethical decision-making in future physicians, however, such impact would be difficult to determine.