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Is the current state of medical ethics education having an impact on medical students?

Lauren Saltzburg

Current requirements of medical ethics education

There currently does not exist a substantial emphasis on the teaching of medical ethics in U.S. medical schools. Typically the majority of medical education focuses on the sciences and physiology that will prepare students to succeed in the clinical setting—after all, physicians must know the science behind the human body inside and out. Where, if at all, does this leave room for the teaching of medical ethics? Osteopathic and allopathic schools alike have very similar core competencies that must be addressed and integrated into their curriculums in order to obtain their re-accreditation every ten years. According to the National Board of Osteopathic Medical Education (NBOME), there are seven domains that address the fundamental osteopathic medical competencies. These include: (1) Osteopathic Principles & Practice and Osteopathic Manipulative Treatment, (2) Patient Care, (3) Application of Knowledge for Medical Practice, (4) Practice-Based Learning and Improvement, (5) Interpersonal and Communication Skills, (6) Professionalism, and (7) Systems-Based Practice. Ethics is listed as a required element solely under "Professionalism" while it is apparent that ethics can be applied to a number of the other domains as well. Interestingly, while ethics education is included in this list of core competencies, its teachings are at the discretion of each medical school. In other words, each medical school has the option to incorporate medical ethics as they see fit, as long as it fulfills the competency requirement from their governing board.

In a report put out by the Association of American Medical Colleges (AAMC) in 1998, their board states a general framework for the goals and objectives of medical student education as they transition into physicians:

> Physicians must be altruistic. Physicians must be compassionate and empathetic in caring for patients, and must be trustworthy and truthful in all of their professional dealings. They must bring to the study and practice of medicine those character traits, attitudes, and values that underpin ethical and beneficent medical care. They must understand the history of medicine, the nature of medicine's social compact, the ethical precepts of the medical profession, and their obligations under law. At all times they must act with integrity, honesty, respect for patients' privacy, and respect for the dignity of patients as persons. In all of their interactions with patients they must seek to understand the meaning of the patients' stories in the context of the patients' beliefs, and family and cultural values. They must avoid being judgmental when the patients' beliefs and

> values conflict with their own. They must continue to care for dying patients even when disease-specific therapy is no longer available or desired (17).

This statement serves as a precedent for medical schools that can be used to assist in formulating ethics education. It pinpoints specific characteristics the AAMC feels would enhance a student's moral development and the well-being of their patients. Additionally, the AAMC states:

> For its part the medical school must ensure that before graduation a student will have demonstrated, to the satisfaction of the faculty, the following: Knowledge of the theories and principles that govern ethical decision making, and of the major ethical dilemmas in medicine, particularly those that arise at the beginning and end of life and those that arise from the rapid expansion of knowledge of genetics. Compassionate treatment of patients, and respect for their privacy and dignity, honesty and integrity in all interactions with patients' families, colleagues, and others with whom physicians must interact in their professional lives (17).

The AAMC delineates here specific areas where medical schools can shift their focus of teaching as well. This highlights areas of ethical teaching not specific to actual cases or ethical dilemmas; rather, it encourages the development of humanistic behaviors as well. This includes relational skills acquired by the student that cannot be taught in the classroom alone. Perhaps it is important these standards include not just knowledge, but expectations students continue to develop character, motive, and virtue. Acquiring the latter requires one to challenge himself and his beliefs and ultimately integrate them into clinical practice. According to the American Society for Bioethics and Humanities, medical schools must meet the standards for curricula developed by the Liaison Committee on Medical Education (LCME), which include specific curricular objectives and evaluation criteria keyed to these standards. The LCME states:

> …a medical education program must include instruction in medical ethics and human values and require its medical students to exhibit scrupulous ethical principles in caring for patients and in relating to patients' families and to others involved in patient care. The medical education program should ensure that medical students receive instruction in appropriate medical ethics, human values, and communication skills before engaging in patient care activities. As students take on increasingly more active roles in patient care during their progression through the curriculum, adherence to ethical principles should be observed, assessed, and reinforced through formal instructional efforts. In medical student-patient interactions, there should be a means for identifying possible breaches of

> ethics in patient care, either through faculty or resident observation of the encounter, patient reporting, or some other appropriate method. (18)

These LCME curricular standards do not always translate easily into standards for implementing and evaluating effective education in medical ethics and humanities. This can range from an online course or one three-hour lecture to small groups debating ethical case studies. In one study, the reported number of hours devoted to medical ethics over 4 years ranged from 5 to 200 (15). This wide variation can account for different perspectives on medical ethics depending on how much content to which students are exposed. Additionally, most schools provide a structured, rather than integrated, medical ethics curriculum. Therefore, with the majority of a medical student's four years being spent on science and clinical application, it is critical that medical ethics be taught in a manner that is most conducive to student engagement and exposure. While ethics education has grown over the past 30 years because of these accreditation requirements, there still remain shortcomings in teaching. This is in addition to the number of new technologies or health policy implications that medicine is facing today. Dr. Lawrence Silverberg published an article in the Journal of the American Osteopathic Association that surveyed medical ethics in U.S. medical schools. One of his findings stated that many physicians have found that the traditional approach to learning medical ethics fails to account for important aspects of their moral experience in practice (15).

Current state of ethics in education

Medical ethics education must comprise both didactic teaching with its application. Author Narveaz Rest states, "…education about ethical issues should, at a minimum, enhance the student's ability to (1) recognize ethical issues when they arise, (2) reason through ethical dilemmas and determine a justified response, (3) have an awareness of professional responsibility to know that one must act, and (4) act in the face of ethical conflict" (11). A study published in the Association of American Medical Conferences in 2005 concluded that "deep shortcomings exist in the literature on medical ethics education" (1). It cannot be assumed that all medical schools are requiring their students to be able to recognize, reason, acknowledge, and act through ethical situations. More often than not, students will typically have little to no experience actually engaging in an ethical situation during school. Therefore, if a student develops the ability to recognize and reason through an ethical case, can we assume he also has the awareness of having a professional responsibility and further—the courage to act? The shortcoming seems to exist with the absence of applying what is learned to what is experienced. Additionally, this study stated that two points of view exist

regarding the purpose of teaching medical ethics: (1) that it is a means of creating virtuous physicians; and (2) that it is a means of providing physicians with a skill set for analyzing and resolving ethical dilemmas (1). This dichotomy can make it challenging for medical schools to delineate where to focus their curriculum goals in ethics for their students. This study, however, is not implying that an ethics course can instill virtue in anyone who takes an ethics course. Rather, the focus is to link a student's character to their clinical application, hoping to emphasize the skills needed to be a good clinician.

Authors Edmund Pellegrino and David Thomasma wrote about virtues in medical practice in a New England Journal of Medicine article. Following Aristotle, they believe virtues can be taught (19). The list of virtues includes intellectual honesty, benevolence, humility, and therapeutic parsimony. Examined in more detail, virtues include trust, compassion, prudence, justice, fortitude, temperance, integrity, and self-effacement. These authors believe that the key virtue in a physician's character is prudence, which is "both a moral and intellectual virtue that disposes one habitually to choose the right thing to do in a concrete moral situation" (19). Ethics based on virtue alone is not sufficient as an educational tool for medical students. Rather, integrating an ethic of virtue with one based on principles and rules can establish a moral sense in a student. Traditionally, students are exposed to the basics—the four fundamental principles of ethics: autonomy, beneficence, nonmaleficence, and justice. There may be some theories incorporated or some discussion of ethical "hot topics:" physician-assisted suicide, end-of-life issues, informed consent, or confidentiality, as examples. These are the ABC's of ethics and certainly essential to understand for a student to expand upon his ethical knowledge—much like anatomy or biochemistry is essential for the sciences. After a student begins clinical rotations, however, they start to experience firsthand ethical situations that they previously only read about. At this point, students may have completed their mandatory ethics education and have no further formal discussion with professors about these experiences. This lack of reflection and discussion on these experiences can downplay their importance during a critical time of a student's development. Despite the difference among schools about quantity or immersion of ethics into its curriculum, what appears to be consistent is the prevalence of classroom teaching. Just as the sciences are translated from paper to the clinical setting, ethics ought to be as well. While role-playing, standardized patients, or computer simulations are utilized, ethics does not appear to be explicitly integrated into the clinical setting.

Encouraging moral development in medical students is of paramount importance as they begin their training. However, is that what we are seeing? In an article published in the Journal of General Internal Medicine, author Dr. William Branch states, "available data suggest that many medical students, who

should be in this transition, show little change in their moral development" (2). Research has shown that medical students begin school as young idealists (3). During the first two years of school, there is much didactic learning of the sciences, with a smattering of ethics in the majority of schools. The expected transition into higher levels of moral reasoning when looking at ethical cases does not appear to be present. In terms of Lawrence Kohlberg's Theory of Moral Development, medical students should be beginning school at the conventional stage, where one is focused on living up to social expectations, conforming, and respecting authority. At this stage of development, students are concerned with following rules and abiding by the law. Abstract thinking and individualism does not appear to be an integral part in this stage of Kohlberg's theory. After clinical rotations have begun and medical students gain experience in the hospitals and dealing with patients, they should begin to make the transition into the postconventional stage, where people begin to account for the differing values, opinions, and beliefs of other people. At this level, students would begin to understand that individualism—the idea of favoring freedom of action for individuals over collective control—at some point may trump standardized rules of society. This is due to the abstract nature of medical ethics—standardized rules can be nearly impossible to establish because there are so many subjective factors that are in play in each situation. A set of standardized rules fails to acknowledge the many variables that are important to patients, clinicians, and other parties involved. This progression can be difficult for students, however, if they are not supported and encouraged to challenge themselves during difficult ethical situations. Kohlberg's Theory does not consider specifically virtue or the development of one's character, leaving a rift between where students should be progressing towards and where they presently are. This theoretical framework demonstrates how moral progression should occur naturally, but it fails to make the connection between the abstract and reality of situations. It is not enough for a medical student to simply possess the characteristics described in Kohlberg's postconventional stage—respecting individualism and leveraging principled beliefs. Students must learn to make the connection from theory to practice. Additionally, this theoretical framework puts forth that moral development should also never regress. Perhaps medical students are becoming disillusioned during their studies (24). A medical student's priorities quickly become focused on scores, tests, and performance, while the study of ethics is essentially a nonentity. As a student enters clinical rotations in his third year, a once dreamt-about experience usually does not play out as expected. A medical student on rotations must be prepared to answer questions on the spot, recite pharmacology on the fly, and muster through treatment algorithms. The student is, in other words, at the bottom of the medical chain hierarchy. In many students' minds, this is their time to shine—not their time to challenge those above them in regards to making treatment decisions or handling ethical cases. Dr. Branch mentions in his article that the main conflict of medical students is between adhering to their inner moral

values and functioning within a clinical team which is mostly based on obeying the hierarchy. Therefore, is the solution, then, to take the path of least resistance in order to climb this hierarchal ladder? In a paper written about the hidden curriculum in medical schools, Hafferty and Franks put forth that medical students suffer from professional insecurity and fear of failure and that they generalize this perceived incompetence as ethical incompetence as well (4). They believed that any attempt to develop a comprehensive ethics curriculum must acknowledge the "broader cultural milieu" (4).

Barriers to the incorporation of ethics education

In addition to the formal classroom setting where ethics can be taught, there is also ample opportunity for students to learn while on clinical rotations. Are we seeing a missed opportunity? A barrier to clinical educators teaching medical students about ethics is the perception that these instructors must have some formal training in ethics to teach this topic effectively (12). Because of this and the lack of time many physicians have to sit down with students and discuss these things, it is imperative medical schools create educational opportunities for students to reflect upon their experiences. In the clinical setting, physicians and residents conduct student evaluations and often students' behavior appears to reflect these expectations of their physician role models. Yet, students express beliefs that what they are taught in the classroom settings is what is "ideal" or ethically preferable (13). Observations suggest that the hidden curriculum blunts the impact of the formal curriculum, resulting in students trained to practice according to what they see rather than what they are taught—with minimal individual analysis. Role modeling is often unintentional, but nonetheless makes strong impressions. Medical education literature has identified the importance of role modeling, but has not yet offered strategies for assuring or maximizing positive impact (14).

It is certainly apparent the effect physician behavior can have on students' moral development. The impact of the "hidden curriculum" could, alternatively, be mitigated by the practice of virtue ethics from physicians themselves. As a subset of normative ethics, virtue ethics identifies with the emphasis of one's moral character—compared to that of duty-based deontology or consequence-based consequentialism. A virtue such as honesty or generosity is not just a tendency to do what is honest or generous, but rather an integral part of one's character. Such an approach for physicians helps clarify the motives for engaging in a specific therapeutic practice that can aid in the development of trust, confidence, and rapport with patients. In the practice of virtue ethics, morality stems from the identity of the physician, rather than being a reflection of his actions. In this way, students derive reasons for behaving in ethical situations that hold a purpose that are inherent in one's character along with compassion for the patient. Observing this inherent character trait in physician role models from the

perspective of the student can have an extremely positive subliminal effect on their moral growth.

The lack of progression in moral development seen in medical students is of paramount importance. It has been reported that up to 25% of patients present some sort of ethical problem or dilemma to physicians. If physicians have no training in ethical analysis and judgment, is it safe to assume they can navigate through it alone? Additionally, a correlation has been noted between evidence of higher moral reasoning and clinical performance (6); thus, encouraging ethics education can benefit a physician's skill level as well. A study was completed that assessed ethical reasoning scores and their association with residents' disclosure of making an error with a patient. The study's findings suggest that ethical training may help to improve disclosure of medical errors (20). Researchers involved with this study utilized the Defining Issues Test (DIT) as a tool to measure individual variation in ethical reasoning, which has been used for over 30 years in medicine. Higher DIT scores have been associated with a variety of noteworthy outcomes including improved ratings of doctor-patient interactions by third-party observers (21). The study further concludes that their results support an association between more sophisticated, principled ethical reasoning and important aspects of open, honest communication.

If faced with an ethical dilemma, medical students may feel they are forced to compromise their principles, leading to a crucial problem: students often are forced to choose between complying with how things are done in their surrounding environment versus their own personal beliefs. Aspects of medical culture, such as an ideal of error-free performance, can affect a student's courage to have a different opinion than the physician (21). While there may be no clear resolution to an ethical dilemma, this can put medical students in an uncomfortable position during a transitional time in their career. No absolute truth implies to the student that he will be unable to come to the expected, correct conclusion as he was taught because one does not exist. There is room for disagreement in his conclusion because the situation does not call for a calculated, irrefutable solution. The constraints a student feels while working with physicians above them can impact their confidence to share their personal opinions on ethical situations. Therefore a student typically wants to feel like "part of the team" and will acquiesce to the physician's opinion rather than state his own. This can do one of two things for the student: (1) subconsciously cause them to adopt that physician's way of dealing with ethics cases or (2) force them to recognize the contrast between how they would have handled it. Either way, does this cause any critical thinking that can enhance his growth or is it simply the student stating, "I would/would not handle this in that way"? It is at this point when students can be challenged to analyze situations from many different perspectives and navigate ethical cases.

Opportunities for integrating ethics into curriculum

The lack of progression in moral development during medical school makes it evident at this point that the current didactic lecturing of ethical theories to medical students is not enhancing their analytical thinking. Therefore, there are changes that could be initiated that will encourage students to spend time examining medical ethics and its importance in the healthcare field. Data shows that medical students' scores on the DIT generally improve in response to classes on medical ethics, as well as to small group discussions (22, 23). The first exposure of ethics to students should continue to be within their first two years of school. Understanding its prominence and its increasing importance in healthcare is essential. Additionally, students should have a fundamental understanding of the four fundamental ethical principles—autonomy, beneficence, nonmaleficence, and justice. The western philosophy tends to have a predominance of autonomy in our society, and it is therefore critical students understand its importance; after all, the majority of their patients will have been raised under the western philosophy influence so autonomy will play a huge role in many situations. Every medical student takes the historic Hippocratic Oath when choosing to begin their healthcare journey and promising to "do no harm." It is therefore essential every student understands the principle of nonmaleficence and how it applies to various ethical cases. Oftentimes beneficence and nonmaleficence are balanced with each other in situations when the physician weighs out risk versus benefit. Understandably, beneficence is a crucial fundamental principle for students to grasp and for them to be able to contrast and compare it with the other principles. A goal of any physician is to provide treatment to patients that have a clear benefit for them. Lastly, justice spans so much of healthcare and of our overall society that being able to recognize when justice is playing a role is crucial.

At this time, having students read and analyze ethics cases could be beneficial. This aids in making the connection between ethics principles and real-world case studies. For example, how might a student interpret a vaccination shortage in terms of justice? This will begin the process for medical students to connect the basics of ethics with actual ethical dilemmas while in the classroom setting. Additionally, it will give the students an opportunity to gauge where their beliefs are and subsequently ascertain if they change over time with experience in the clinical setting. Studying cases can enhance a student's ability to recognize when an ethical situation arises. By studying them in the classroom setting and forcing them to reflect internally where their moral convictions lie, this sets up for them the stepping stone to be able to identify their change in values as they gain experience. A study conducted involving third-year students and their experience in case studies with and without reflection after reading case studies showed overall total benefit with reflection (11). The study found that students' abilities to

identify and assess ethical problems improved following exposure to their respective ethics topics. Additionally, including a facilitated discussion session added benefit to the students' satisfaction with the educational experience. Role-playing and discussion of cases could be extremely effective at this point in time for students. Debating different points of a case study or having students pick a solution and explain through it forces them to think about an ethical dilemma from different perspectives. This exposure is a great introduction into medical ethics as they begin to transition into their clinical rotations. In one study, meeting in small groups for case-based discussions for only 20 hours by second-year medical students enhanced their growth in moral reasoning throughout medical school (10). Despite the many reasons why small-group teaching may not be implemented at schools, including being time-consuming, difficult to organize, and labor-intensive, it can be highly effective and rewarding to both students and faculty (10). This study reflects how small-group case discussions create cognitive dissonance, which stimulates "upward movement" within the moral stages. When students, therefore, engage in group discussion and see higher-stage thinking they are attracted toward it and begin to question their less-developed beliefs. Cognitive dissonance is thought to be a key factor here and thus is generated in discussion when students of varying levels of moral reasoning confront each other. Students and faculty alike stimulate each other when different positions are held (10). Given these findings, I would propose 15 hours of case study analysis with discussion and reflection by the end of a student's second year in school. This could be organized into 3-hour sessions in a small group fashion. If a medical school is comprised of trimesters, this could be a one three-hour session per term starting with the second semester of first year, totaling five sessions. This would enable ample time to cover a wide array of ethical topics by the professor along with interactive group discussion prior to beginning clinical rotations.

Mock patient encounters with ethical dilemmas during preclinical years can be an effective tool for students to transition from classroom to clinical years. While some schools utilize standardized patient encounters to address ethical topics, many do not utilize these and have not trained the patients for an ethical case scenario. This would be a great segue for students to face their first ethical encounter in a comfortable and nonjudgmental environment, where they also can receive feedback. These topics could include informed consent, end-of-life decisions, professionalism, confidentiality, truth telling, religious concerns, etc. These patient encounters can be used for teaching in conjunction with an ethics case study discussion altogether for a small group of students, as mentioned as a suggestion earlier. This would elicit responses from the students, who can react to others' feelings and emotions during the encounter. Additionally, many schools are beginning to implement simulation-type scenarios for students involving medical procedures. These include ACLS protocol, labor and delivery, orthopedic

surgery, OR procedures, etc. The clinician in these situations could incorporate any tenet of ethics that would require the students' attention at that moment or if missed, be a teaching point afterwards for those who did not acknowledge it. For example, one student could be instructed beforehand to be distracted with their cell phone when they are in charge of monitoring vital signs during a group simulation—will anyone speak up out of concern? Either way, adding this as a part of these mock situations exposes the students to the possibility of its occurrence in the actual clinical setting. This would improve students' ability to recognize ethical dilemmas more readily than if they were experiencing them for the first time in the hospital.

Perhaps one of the most critical times for growth is after students have received some bedside experience in the hospitals. They have been exposed to different clinical scenarios, worked with physicians, and been exposed to the wide array of cultures of many patients. It is likely during this time that a student will be involved in some capacity in an ethical dilemma—whether that be end-of-life decisions, informed consent, cultural conflicts, etc. It is essential that students take time to reflect on these situations after the fact. Reflective learning allows students to conceptualize and generalize their behavioral changes into their mental structure of knowledge, skills, and values (8).

An article written by Norman A. Sprinthall entitled "Counseling and social role taking: promoting moral and ego development" about reflective learning states that it has been shown that learning by practice without the added component of reflection does not promote psychological growth (9). This can be achieved through small group discussions among students with faculty at school in a confidential and comfortable setting. This allows students to feel open about their feelings or opinions towards various ethical dilemmas. Having a healthy debate and going through experienced ethical cases leaves room for the students to integrate what they learned in the classroom with what they are seeing in the hospital. This small group setting actually forces them to think about the situations they are faced with or have played a part. Similar to my suggestion for the first two years, I propose every three months, students reconvene on campus for a three-hour session addressing ethical issues faced in the clinical setting. It is commonly required that students return to campus for lectures particular to their rotation for that month, so perhaps one afternoon could be incorporated to include a small group ethics discussion. Faculty are there to provide insight and perspective as an experienced clinician and guide the discussion along within the group. Short-term studies have demonstrated that educational interventions such as small group reflection positively influence students' understanding of moral problems and their behavior towards patients (10). The timing of this reflection could occur every few months during the students' third and fourth years. This would provide the opportunity for them to continually assess situations they are

involved with in clinicals because students can anticipate they will subsequently have the opportunity to discuss it with their classmates. Additionally, students will be able to share their ethical dilemmas they see that vary from rotation to rotation. For example, students can begin to understand that certain ethical cases will arise in an ICU setting versus psychiatry versus obstetrics. Holding these small group reflections can greatly increase students' awareness of medical ethics.

There certainly is an opportunity for students to reflect on moral cases while on rotations. With that being said, there are many aspects of ethics that are not as unique as a case, say, to make an end-of-life decision in the hospital setting. In reality, decisions in clinical practice can be complex and very individualized for textbook, preconceived theoretical approaches. There are many tenets of ethics that should also be addressed that are more common among physicians and not necessarily "hot topics." Students may be unprepared to recognize more common ethical issues in the ambulatory setting. Medical ethics can play a role in everyday practice and these should be discussed as well, including: justice, autonomy, confidentiality, malfeasance, paternalism, gender, culture, voluntariness, beneficence, truth telling, and racism (15). The potential for moral growth through the medical school environment and experience is substantial. As Shimon M. Glick pointed out:

> Teachers of ethics have obligations not just to teach the subject matter but to help create an academic environment in which well-motivated students have reinforcement of their inherent good qualities. Emphasis should be placed on the ethical aspects of daily medical practice and not just on the dramatic dilemmas raised by modern technology. Attention should be paid to ethical problems faced by the students themselves, preferably at the time when the problems are most on the students' minds. Personal humility on the part of teachers can help set a good example for students to follow (16).

This statement supports the suggestion earlier that curriculums at schools could offer small group reflective studies about any of these topics every few months, when their experiences are current and fresh in their minds.

Every medical school has a different timeline for courses, rotations, requirements, etc. Therefore I do not believe setting universal standards for ethics education would be a feasible option because each school's curriculum is so variable. With that being said, I do think a feasible option could include 20 hours of ethics education within the first two years of school followed by 20 hours in the final two years. The earlier study by Self, Olivarez, and Baldwin that alluded to the efficacy of small-group case-study discussion showed that the effect on

moral reasoning skills appears to increase in proportion to the amount of exposure to small-group case-study discussion, once the threshold of 20 hours has been reached. The first two years would include lectures, small-group case-study discussion, and ethics incorporation into a standardized patient. The final two years would include a small group reflection of ethics education in the clinical setting every three months, which would allow for four sessions a year. This would provide a minimum of 12 hours of group reflection each year, leaving room to surpass the 20-hour threshold over the course of two years. For students who are unable to travel back to school for this (due to an away rotation), an online case study or reflective paper could be substituted. This, at the very least, keeps medical ethics as an integral part throughout a student's journey through medical school. Even if they are not studying or analyzing it as much as they are pharmacology, for example, they get better and more comfortable at recognizing and dealing with ethical situations. Each school can utilize the time requirement as they see best; however, small group discussions should be incorporated throughout all four years in some capacity, as evidenced with support in this paper that it is a productive means to understanding medical ethics' significance.

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