MEDICAL ETHICS EDUCATION AND THE HIDDEN CURRICULUM

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ABSTRACT

In the last forty-odd years, medical ethics has become an increasingly important part of undergraduate medical education. This has been reflected in changes in medical school curricula as well as increased emphasis in standardized testing and accreditation requirements. However, both the scope and aims of ethics education are not well defined and surveys of medical ethics curricula reveal there is significant heterogeneity in the way it is taught to students. Examination of ethics education shows that there is a hidden curriculum that operates alongside the explicit curriculum and influences how students perceive and value the subject. This is in addition to the more general hidden curriculum, which has been identified as a cause of moral regression in medical students. This paper attempts to illuminate the hidden curriculum of ethics education and propose ways in which its negative impacts may be mitigated.

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CHAPTER ONE: INTRODUCTION

In the last forty years, there has been in increasing emphasis on the importance of ethics in undergraduate medical education. This may be because of advances in medical care and technology, as well as increased societal attention on diversity and injustice and the role which medicine plays it.[1] Bioethics is also multidisciplinary and relatively young field with a wide scope that extends beyond the field of medicine alone. While all medical schools in the United States are now required to teach ethics, there is still significant disagreement and variation in the way that the subject is taught. At the same time, there is another process that impacts the moral development of medical students. In recent years, more attention is being placed on what is termed the informal or "hidden" curriculum of medical education. This term refers to the process of socialization in medical education that teaches trainees to adopt certain attitudes and behaviors which are often in direct contradiction to what is explicitly taught.[2] The literature on the hidden curriculum in medical education generally focuses on students' clinical experiences and how they may cause an "ethical erosion."[3] In addition, I believe that medical ethics education also has a hidden curriculum, in that the way that ethics is taught has a significant impact on how students perceive the topic and its relevance to their future practice. This paper will review the scope and

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[1] Rachael E. Eckles et al., "Medical Ethics Education: Where Are We? Where Should We Be Going? A review," *Academic Medicine* 80, no. 12 (December 2005): 1143-1152. DOI:10.1079/00001888-200512000-00020.

[2] Carlton Lawrence et al., "The Hidden Curricula of Medical Ethics Education: A Scoping Review," *Academic Medicine* 93, no.4 (April 2018): 648-656. DOI: 10.1097/ACM.0000000000020049.

[3] C. Feudtner, D.A. Christakis, and N.A. Christakis, "Do clinical clerks suffer ethical erosion? Students' perceptions of their ethical environment and personal development," *Academic Medicine* 69, no.8 (August 1994): 670-679. DOI: 10.1097/00001888-199408000-00017.

methods of medical ethics education, as well as the potential hidden curriculum of that education, and the impact of the hidden curriculum as a whole on medical students' perception of ethics.

CHAPTER TWO: THE AIMS AND CONTENT OF THE MEDICAL ETHICS CURRICULUM

Part One: Aims of Medical Ethics Education

While there is significant variation in the way that ethics is taught in United States medical schools, there are a few national organizations that may provide guidance to schools about what their curricula should be. The primary organization that regulates medical education in the United States is the American Association of Medical Colleges (AAMC). In a report from 1998, the AAMC advised that students should have "knowledge of the theories and principles that govern ethical decision making, and of the major ethical dilemmas in medicine," as well as demonstrate "compassionate treatment of patients, and respect for privacy and dignity" and "honesty and integrity in all interactions with patients' families [and] colleagues."[4] This report also states that physicians "must bring to the study and practice of medicine those character traits, attitudes, and values that underpin ethical and beneficent medical care." We can see from this relatively brief statement that there are several different aims that may direct medical ethics education. Physicians ought to know certain things and behave in a certain way, but they are also supposed to *be* a certain way and have inherent qualities or virtues.

The above document was a position statement from the AAMC, but how does it translate into their accreditation standards? The body that sets standards for medical education in the United States and is responsible for accreditation is the Liaison Committee on Medical Education (LCME), which is a subpart of the AAMC. The LCME curricular content standard for

[4] Association of American Medical Colleges, *Report 1: Learning Objectives for Medical Student Education: Guidelines for Medical Schools,* 1998, https://www.aamc.org/system/files/c/2/492708-learningobjectivesformedicalstudenteducation.pdf.

"Medical Ethics" states that schools must provide students with instruction in "medical ethics and human values…and require medical students to behave ethically in caring for patients and in relating to patients' families and others involved in patient care."[5] We can see that goal of medical ethics education here is to result knowledge and in ethical behavior on the part of trainees. Unlike in the statement from the AAMC, there is no mention of creating inherently virtuous physicians. Even in documents from the same organization, there is little consistency about what ethics education should really be. The LCME standards are accreditation requirements; as such, it must be feasible for the LCME to assess whether schools are or are not providing adequate education in this area. This illustrates how there is a bidirectional influence between what is deemed to be important curricular content and the need for that content is assessed.

Much of the literature on medical ethics education has conceived of its aims in a similar way to the AAMC, describing cognitive, behavioral, and attitudinal goals. However, there is not consensus about which of those goals should take precedence. In a 1995 article, Myser et al. describe the development of an ethics seminar for medical students at the University of Newcastle.[6] The problem that they attempted to solve was how to bridge the gap between the theoretical, principle-based education their students were receiving and the ability of their students to apply this knowledge in a clinical setting. They hoped that their ethics curriculum would "serve as an action-guide for ethical decision-making in clinical practice." The authors'

[5] Liaison Committee on Medical Education, *Functions and Structure of a Medical School*, March 2022. https://lcme.org/publications/.

[6] Catherine Myser, Ian H. Kerridge, and Kenneth R. Mitchell, "Teaching clinical ethics as a professional skills: bridging the gap between knowledge about ethics and its use in clinical practice," *Journal of Medical Ethics* 21 (April 1995): 97-103. DOI:10.1136/jme.21.2.97.

aims, therefore seem to be knowledge and ethical behavior based on the application of that knowledge. They are not attempting to create virtuous physicians who have specific values; in fact, one of the issues they state they are trying to correct is that "medical students struggle to apply such knowledge of ethics to clinical cases and sometimes confuse…personal or professional values…with reasoned argument and justifiable clinical ethical decision-making." Similarly, in 2005 Eckles et al. write that while "creating virtuous physicians is an admirable goal…however, it is our belief that a more practical and measurable goal is to endow students with a set of skills for ethical reasoning."[7] These quotes raise some interesting issues. What does it mean to be a virtuous physician if it means something besides applying ethical reasoning? What professional values are there that do not rely on reasoned arguments and justifiable clinical ethic principles? Bigger questions, relating to the meaning of virtue, whether it can be divorced from action, and whether it can be taught, are at play here. These questions have been debated at least as far back as Plato and Aristotle and are somewhat beyond the scope of this paper.

This approach focuses on behavioral outcomes rather than on changing students' attitudes. These quotes reflect the perception that changing someone's character is challenging, messy (who knows what "[un]reasoned…and [un]justifiable" beliefs they might hold), and impractical. Avoiding this and focusing education instead on giving students a toolbox of principles and the ability to apply them, is more easily done. It helps standardize behavior and gives students a guideline for behavior even when they may feel internally conflicted (for example, giving students a guideline to approach parents who want to refuse a vaccine in a nonjudgmental way when students may personally have strong feelings about this issue). It is

[7] Eckles et al., "Medical Ethics: Where Are We Going?" 1145.

also easier to assess behavioral outcomes than attitudinal ones. The potential downsides of this are that in more unfamiliar or subtle scenarios, students may struggle to apply what they have learned if they are not being guided by more deeply-held beliefs.

Others feel that the creation of physicians guided by professional values should be the goal of ethics education. In an article from 1999 Shelton states, "the profession of medicine should require all physicians to embrace and manifest certain characteristics indicative of the 'good doctor.'"[8] The benefit of this is that ethics becomes inalienable to the physician.[9] However, he also acknowledges the ways in which the idea of teaching students to develop certain virtues may feel strange to many contemporary Americans: "Virtue means many different things to different people…We have also witnessed the rise of a powerful individualism in the Western world…in which each individual is seen as his or her own source of moral authority…Can we speak of "virtue" without sounding self-righteous?" To return to the AAMC statement, while they promote medical students having certain attitudes and qualities, they also state that students "must bring" these qualities to the practice of medicine. The wording of this makes it unclear if these are preexisting qualities that students should have, or if they are developed during medical education. While we seem to want doctors to embody certain characteristics, we are unclear on how exactly to make this happen.

Some others have proposed a more integrated approach. Branch asserts that medical schools "must seek to promote the moral development of [their] students," in order to help them

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[8] Wayne Shelton, "Can virtue be taught?" Academic Medicine 74, no. 6 (June 1999):671-674. DOI: 10/fkx5k7

[9] Frederic Hafferty and Ronald Franks, "The Hidden Curriculum, Ethics Teaching, and the Struture of Medical Education," *Academic Medicine* 69, no. 11 (November 1994):861-871, DOI: 10.1097/00001888-199411000-00001.

reach, according to Kohlberg's model of moral development, a "postconventional level [of moral development]…where the choices that govern behavior are determined by moral principles."[10] This is similar to the idea proposed by Campbell that states that medical ethics education has three aims which build upon each other: knowledge, habituation (attitudes and characteristics), and action.[11] This approach views action as a natural consequence of personal attitudes and seeks to integrate knowledge, attitudes, and behavior. If successfully done, physicians will be able to function in any ethically challenging scenario that may arise.

Part Two: What Do Medical Ethics Curricula Look Like?

As medical ethics education appears to have diverse aims, its methods are also varied. It is also a multidisciplinary field and medical schools may have faculty with different professional backgrounds involved in teaching. Therefore, medical schools vary significantly in the way that they instruct students. The guidance statements from the AAMC and LCME provide little practical instruction on how schools should actually teach ethics or how to prioritize the varying aims. Depending on which goal schools emphasize, ethics education may end up looking very different.

Several studies have been done to try to understand the landscape of undergraduate medical ethics education in the United States. A survey done in 2004 by Lehmann et al. of U.S. and Canadian medical schools showed that 78% of the schools surveyed had mandatory ethics

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[10] William Branch Jr., "Supporting the Moral Development of Medical Students," *Journal of General Internal Medicine* 15, no.7 (July 2000): 503-508. DOI: 10.1046/j.1525-1497.2000.06298.x.

[11] Alberto Giubilini, Sharyn Milnes, and Julian Savulescu, "The Medical Ethics Curriculum in Medical Schools: Present and Future," *The Journal of Clinical Ethics* 27, no.2(Summer 2016):129-45, https://pubmed.ncbi.nlm.nih.gov/27333063/.

education at the time.[12] There was a wide variety in the methodology of this education, but the authors found that most time was spent on small-group and case discussion. Subjects that were included by more than 80% of schools in the preclinical years included consent, end-of-life issues, confidentiality, and truth-telling. A similar study done in 2002 by Dubois and Burkemper also found that there was significant heterogeneity in the way that ethics was taught.[13] They reviewed syllabi from participating schools in order to determine the scope and contents of formal ethics curricula and tried to identify "objectives, teaching methods, content areas, and methods of assessing students' performances." They found ten objectives across these syllabi that were deemed most important. The first four (familiarity with ethical topics, development of ethical problem-solving skills, knowledge of ethic theories, and knowledge of the law and medicine) are all knowledge-based. The next two objectives have to do with virtue (promoting medical virtues/interiorization of professional values and personal value clarification.) The most common teaching method, as with the study done by Lehmann, was group discussion, followed by readings, writing exercises, and lecture.

A more recent international systematic review of medical ethics curricula from 1990-2020 revealed that, twenty years on, there is a still a significant amount of variation.[14] While

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[12] Lisa Soleymani Lehmann et al., "A survey of medical ethics education at United States or Canadian medical schools." *Journal of the Association of American Medical Colleges* 79, no. 7 (July 2004):682-9, https://journals.lww.com/academicmedicine/Fulltext/2004/07000/A_Survey_of_Medical_Ethics_Education_at_U_S__and.15.aspx.

[13] James M. DuBois and Jill Burkemper, "Ethics education in US medical schools: a study of syllabi," *Academic Medicine* 77, no. 5 (May 2002):432-437, DOI: 10.1097/00001888-200205000-00019.

[14] Mun Kit Wong et al., "A systematic scoping review of medical ethics education programs from 1990 to 2020," *Medical Teacher* 44, no. 2 (September 2021), DOI: 10.1080/0142159X.2021.1970729.

many schools reported an "integrated" curriculum, there was little clarity on what was meant by this description. Some reported teaching ethics alongside "hard" science topics, while others combined ethics with topics in humanism and professionalism. The topics that were covered by most curricula were ethical theories and principles, professionalism (including medical errors, whistleblowing, and appropriate doctor-patient relationships), and patient autonomy. Schools continued to use a wide variety of teaching methods, with small-group discussion and case-based learning being the most common. Role-playing and clinical rounds/field visits were only mentioned by about 20% of respondents.

These surveys give a view of the landscape of medical education. They also help reveal aspects of the hidden curriculum of medical ethics. Where and when ethics is taught conveys something about its importance to students. We can see from these studies that the topic of ethics does not receive much time in the curriculum. In the study by Lehmann et al., the average amount of time it received in the curriculum was 29 hours.[15] Many schools also reported having formal ethics education during the clinical years, but 21-45% of core clerkship directors reported including no formal ethics education in the clinical years. When ethics is relegated to a few hours of discussion tacked onto the preclinical curriculum, this tells students that the subject is not actually that relevant to clinical practice.

Similarly, who teaches medical ethics is just as important to students' perception as the content. The survey by Lehmann et al. found that 26.3% of courses were taught by trained ethicists and many also used interprofessional instructors from law, nursing, social work, and

[15] Lehmann et al., "A Survey of Medical Ethics Education," 684.

spiritual care.[16] While interprofessional education is very valuable, especially in the multidisciplinary field of medical ethics, many have also noted that medical students tend to discount material that is not taught by physicians.[17] This is not simply because medical students feel themselves superior to educators from other professions. Medical students are in a uniquely challenging position as trainees and many of the ethical issues they face are intrinsically tied to this role. They are interested in learning from those who have had the same educational experiences in order to learn how to best resolve these conflicts.[18] Additionally, when ethics courses are taught by mostly non-physicians, it again can give the impression that ethics is not actually important to practicing doctors.

[16] Wong et al., "A systematic scoping review of medical ethics education programs," 172.

[17] Shimon M. Glick, "The teaching of medical ethics to medical students," *Journal of Medical Ethics* 20 (December 1994):239-243, DOI: 10.1136/jme.20.4.239.

[18] Shana D. Stites et al., "Moving beyond the theoretical: Medical students' desire for practical, role-specific ethics training," *AJOB Empirical Bioethics* 9, no. 3 (July 2018): 154-163, DOI: 10.1080/23294515.2018.1472149.

CHAPTER THREE:

ASSESSMENT OF MEDICAL ETHICS EDUCATION

Assessment of students' ethical development is complex. The institutions of academic medicine want students to obtain knowledge, behave ethically, and develop into ethical physicians. How to assess knowledge is a task with which schools and licensing organization are familiar, but assessing behavior is more challenging, and assessing character more so. Like the content and aims of medical ethics education, methods of assessment also appear to vary between schools and some schools may not do it at all. In the survey study by Lehman et al. of medical schools, they found that "only 48 (53%) of deans reported their school formally evaluated students' moral reasoning abilities…and only one third formally evaluated students' behaviors in ethically difficult situations."[19] Medical ethics is not a subject that lends itself as easily to testing as the basic and clinical sciences. While there are aspects that may be easily tested, such as the law or basic facts about bioethical principles, students' ability to perform ethical reasoning in the context of a clinical case is harder to assess. However, because of the competitive nature of medical education and the overwhelming importance of test results, both schools and students tend to devalue "soft" skills that are not easily tested. Calman and Downie recommended in 1987 that "to achieve credibility in the eyes of the student population it is suggested that some form of assessment or examination is required."[20] Others have echoed this

[19] Lehmann et al., "A Survey of Medical Ethics Education," 685.

[20] K.C. Calman and R.S. Downie, "Practical problems in the teaching of medical ethics to medical students," *Journal of Medical Ethics* 13, no. 3 (September 1987): 153-156, DOI: 10.1136/jme.13.3.153.

sentiment.[21] Therefore, medical educators may find themselves in a catch-22 situation where they and their students feel that their methods of assessment are inappropriate, but also feel the need to perform assessments in order to measure students' progress and to get students to take the subject seriously.

Part One: Standardized Testing

Since that survey was done in 2004, the testing of medical ethics has become much more central to medical education. Although individual schools may do a lot or a little to evaluate students on ethics, some amount of assessment has been standardized nationally as ethics are tested by the NBME. In fact, The NBME has increased the number of questions related to ethics, most recently in 2020.[22] As the USMLE looms so large in the minds of medical students, increasing the amount of ethics on the test does convey to students that the subject is important and valued. However, ethics that may not be well-suited multiple-choice exams such as the USMLEs. These exams attempt to assess students' knowledge, ex: knowing when a pediatric patient's parents must give permission for treatment, as well as having students apply that knowledge in hypothetical cases, e.g., assessing ethical reasoning or their ability to behave ethically. Does this really assess how students will actually end up behaving? Standardized testing relies on there being only one correct answer. Even when testing clinical medicine, the USMLE is often criticized for creating artificial situations in questions that have little to do with actual practice. For example, asking which of the following is the most appropriate first step in

[21] Glick, "Teaching medical ethics," 243.

[22] "Step 1 and Step 2 CK Content Distribution Changes," Educational Commission for Foreign Medical Graduates, accessed March 10, 2022, https://www.ecfmg.org/news/2020/07/22/step-1-and-step-2-ck-content-distribution-changes/.

treatment of a patient when, in reality, a physician would be completing multiple steps at once. This problem becomes even more significant when the USMLE tests ethics. Another common question type is to choose the "best option." The question can then go on to provide a set of possible answers that are all less than bad, and the "correct" answer is technically correct because it is the least bad; but is this really the right way to present ethics? The artificiality of the question divorces ethical reasoning from any kind of real-world application.

Standardized questions also impart information to students. Many questions use buzzwords that depend on stereotypes or perpetuate biases. They may use recent immigrant as a shorthand for unvaccinated or African-American to mean sickle-cell disease. Not only does this promote intellectual laziness, but it also conflicts with the stated ideals of national medical education (ex: combatting bias). Ethics questions have their own patterns; for example, it is a truism and joke among medical students that the right answer is never to consult the hospital ethics committee (anecdotally, in four years of school and thousands of questions, I have only ever seen this be the correct answer once.)

Part Two: Other Methods of Assessment

Others have suggested methods of assessing medical students' ethical development outside of standardized testing. Wong and Cheung argued that students should be assessed based upon a "Know-Can-Do" model.[23] This model was based on a previous article by Mitchell et al., who proposed that students need to have ethics knowledge, behavior, and the skills and

[23] Josephine Wong and Erik Cheung, "Ethics assessment in medical students," *Medical Teacher* 25, no. 1 (2003):5-8, DOI: 10.1080/0142159021000061341.

reasoning ability to bridge the gap between the two.[24] In order to assess the knowledge, they cited multiple authors who had students analyze a hypothetical case vignette and "demonstrate their ethical sensitivity, their knowledge of the ethical analytical framework, their skills of analysis, reasoning, and reflection."[25] Notably, they also stated that "assessment of pure theory or facts is probably hardly ever used since it is inappropriate for medial ethics to be considered in a context-less vacuum." Yet, this sounds remarkably like the type of assessment that is done through the USMLE. When assessing students' ability to apply knowledge (the "can" phase), they recommended assessment by a simulated encounter with a standardized to evaluate "the actual behavior of students in a typical clinical situation requiring both medical ethics knowledge and skills." Regarding the "do" phase, they acknowledge the difficulty of assessing students' actual behavior in practice. This is partially because the very act of evaluation may cause students to alter their behavior. Potential methods the authors suggest include direct observation by teachers, incognito visits by standardized patients, or creation of a longitudinal portfolio with multiple different sources and viewpoints on the moral development of a student.

None of these methods, however, are in widespread use. In the systematic review by Wong et al., it appeared that schools use a wide variety of assessment methods.[26] The most common method (41%) was observation in a roleplay scenario such as an OSCE. However, more granular information on what kinds of ethical scenarios were included, and how students'

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[24] Kenneth R. Mitchell, Catherine Myser, and Ian H. Kerridge, "Assessing the clinical ethical competence of undergraduate medical students," *Journal of Medical Ethics* 19, no. 4 (1993): 230-236, DOI: 10.1136/jme.19.4.230.

[25] Wong and Cheung, "Ethics assessment in medical students," 6.

[26] Wong et al., "A systematic scoping review of medical ethics education programs," 176.

performance was assessed, is not available. Many schools also used case analyses, written assignments, and multiple-choice questions. As with standardized testing, the problem with many of these methods is that, whenever the assessment is divorced from a real clinical scenario and the real clinical context, there is the risk of students behaving "by the book" on the test, and a completely different way in the clinic.

Another method that has been suggested for assessing pre-medical and medical students' ethical development are situational judgment tests. In fact, one of the first exposures that students have to medical ethics is in the medical school admission process through the use of these tests. Many medical schools and even some residency programs have instituted situational judgment tests such as CASPer (Computer-based Assessment for Personal Characteristics) as a prerequisite for admission. The CASPer test states that it is "an.open-response, situational judgment test that evaluates aspects of your social intelligence and professionalism, such as ethics, empathy, problem-solving, and collaboration."[27] At first, it might sound like a good idea to select students on the basis of moral reasoning skills. However, if CASPer actually assesses these skills is unclear. The makers of CASPer report that its results correlate well with results of the parts of the Medical Council of Canada Qualifying Examination (equivalent to the USMLE Step 1 and Step 2 CS) that evaluate interpersonal skills.[28] There are multiple problems with this. The first is that, like Step 2 CS, the MCCQE part II has been discontinued the pandemic. Moreover, many view Step 2 CS as an unnecessary exam that was only fairly recently made a

[27] "What is Casper?" Altus Assessments, accessed 4/2/2022, https://takealtus.com/casper/.

[28] Kelly L. Dore et al., "CASPer, an online pre-interview screen for personal/professional characteristics: prediction of national licensure scores," *Advances in Health Sciences Education: Theory and Practice* 22, no.2 (May 2017): 327-336. DOI: 10.1007/s10459-016-9739-9.

requirement in order to make money for the NBME as it had a 97% pass-rate. There also is not a clear correlation between standardized testing results and ethical behavior or character.

Recently, the AAMC created its own test called the PREview Professional Readiness Exam which has started to be required or strongly encouraged by medical schools, one dimension of which is ethics.[29] They report that it correlates with medical school interview performance (another subjective measure which does not have any real-world correlates) and "major markers including grades in courses like Doctoring and Society and others that cover such crucial topics as patient-provider communication" – although in most American medical schools, these courses are pass/fail.

Students are obligated to take these tests and, in most cases, pay for it themselves. After taking it, they are not given their results and there is little transparency about how they is graded. The CASPER test and its ilk are being added to a myriad of other expensive and difficult tasks that students are compelled to complete during the medical school and residency application processes. These are processes in which students must spend thousands of dollars since there is no other way for them to progress to the next level of training, and the AAMC makes millions of dollars off them each year ($116,670,173 from residency applications alone in 2021).[30] Unsurprisingly, many students feel this is exploitative and unethical and one does not have to venture far into online medical student communities to see this view expressed vehemently.

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[29] Stacy Weiner, "The new PREview exam for medical student applicants goes beyond academics," Association of American Medical Colleges, accessed April 15 2022, https://www.aamc.org/news-insights/new-preview-exam-medical-school-applicants-goes-beyond-academics.

[30] "Association of American Medical Colleges: Audit for period ending June 2021," ProPublica Nonprofit Explorer, accessed April 4 2022, https://projects.propublica.org/nonprofits/display_audit/4839020211.

The use of these tests as entrance exams has other implications as well. It may give students the impression that their moral character is already fixed prior to medical school, or that if they have been accepted to medical school, they have already met the ethical standards of the profession and do not need to do any more active work in this area. Additionally, it seems very strange that medical students who are labelled as "more ethical" should go to better medical schools and subsequently better residencies. Does that mean that patients at hospitals associated with lower-ranked schools deserve less ethical physicians? This is a highly unethical proposition. While the AAMC espouses, its use of these tests undermines these values in the eyes of students from the very beginning of the medical education process.

So, how well does the actual implementation of medical ethics education and assessment reflect its stated goals? Curricula based in lecture and small-group discussions can give students opportunities to obtain knowledge and try to learn some ethical reasoning. But when this is not tied to the clinical setting, it does not give studies the opportunity to continue to build clinical-ethical reasoning skills nor integrate it into their forming professional identity. Additionally, while the AAMC and many others argue that medical ethics is one of the central pillars of what it means to be a physician, this importance is not reflected in curricula when ethics is relegated to only a few hours of didactic time. When assessments are only done through standardized tests, this makes ethics seem theoretical and irrelevant. Standardized tests can do a good job of assessing knowledge, but not behavior or personal characteristics. Because of the pervasive attitude among medical students that if something is not tested it is not relevant, and the pressure schools face to teach to the test, this can skew medical ethics education. In all, there are significant disconnects between what we say we want to accomplish with medical ethics education, and what we are actually doing into order to meet those goals.

CHAPTER THREE: THE HIDDEN CURRICULUM

Despite the increasing role of ethics in the medical school, it is unclear if this actually impacts students' ethical development. Multiple studies attempting to track this development over time have found that students, rather than appearing to improve, experience "ethical erosion" during medical school.[31] A study by Hebert et al. in Canada asked students to identify ethical issues in clinical cases across four years of medical school.[32] They found that students' ability to identify issues increased in the first two years, but by the fourth year had declined to below their initial level. Others have done similar studies with similar results showing a decline in moral judgment.[3334] Although the authors note that this study merely assessed the cognitive aspect of students' development, it is still concerning. Other studies have measured a decline in empathy in medical students over the course of their education.[35] There is also concern that there

[31] Feudtner, Christakis, and Christakis, "Do clinical clerks suffer ethical erosion?" 670.

[32] Philip C. Hébert, Eric M. Meslin, and Earl V. Dunn, "Measuring the ethical sensitivity of medical students: a study at the University of Toronto," *Journal of Medical Ethics* 18, no.3 (September 1992): 142-147, DOI: 10.1136/jme.18.3.142.

[33] D.J. Self, M. Olivarez, and D.C. Baldwin Jr., "Clarifying the relationship of medical education and moral development," *Academic Medicine* 73, no. 5 (May 1998): 517-520, DOI: 10.1097/00001888-199805000-00018

[34] Darko Hren, Matko Marusic, and Ana Marusic, "Regression of Moral Reasoning during Medical Education: Combined Design Study to Evaluate the Effect of Clinical Study Years," *PLoS One* 6, no. 3 (March 2011): e17406, DOI: 10.1371/journal.pone.0017406.

[35] Casey White et al., "A Qualitative Exploration of How the Conflict Between the Formal and Informal Curriclum Influences Student Values and Behaviors," *Academic Medicine* 84, no. 5 (May 2009): 597-603, DOI: 10.1097/ACM.0b013e31819fba36

is inadequate buy-in from students into medical ethics education.[36],[37] Many have attributed this ethical decline to the effect of the hidden curriculum on trainees.

Part One: The Problem of the Hidden Curriculum

Medical school, in addition to simply teaching pathophysiology and clinical reasoning, can be thought of as a process of enculturation.[38] Students learn to adopt the attitudes and behaviors that they see modelled by peers and superiors. While medical education espouses values like compassion, sensitivity, and communication skills, most, if not all, medical students can easily recall multiple incidents where their superiors, potential role models, and medical institutions failed to embody these values or in fact did the opposite.[39] As they feel the need to fit in with the hospital work-social environment, they may begin to adopt these attitudes and behaviors. When students find these behaviors problematic, they are often unable to express their distress because they are being graded by these same superiors and fear retribution, or they find that even when they do speak up, nothing is done.

Medical students occupy a dual role during their training as both student and medical provider. They must obtain clinical experience in order to become competent physicians, but in this process, they must practice on real patients. Although this conflict is unavoidable in medical

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[36] Yangzi Lu et al., "Alignment of Ethics Curricula in Medical Education: A Student Perspective," *Teaching and Learning in Medicine* 32, no. 3 (January 2020): 345-351, DOI: 10.1080/10401334.2020.1717959

[37] Carolyn Gaebler and Lisa Soleymani Lehmann, "Fostering Student Engagement in Medical Humanities Courses," *AMA Journal of Ethics Virtual Mentor* 16, no. 8 (August 2014): 595-598, DOI: 10.1001/virtualmentor.2014.16.8.ecase1-1408

[38] Hafferty and Franks, "The Hidden Curriculum," 861.

[39] Stites et al., "Moving beyond the theoretical," 156.

education, it may still cause moral distress to trainees. They are also at the bottom of the clinical hierarchy and because of fears about their grades, they often find themselves disempowered bystanders to unethical behavior.[40] For example, news broke in recent years about how many students are instructed to perform pelvic exams on anesthetized patients, who were unaware that these exams would be happening.[41] This clearly demonstrates the disconnect between how students are instructed to behave through medical ethics education and how they are actually expected to behave in a clinical setting.

Part Two: Combatting the Hidden Curriculum

The consequence of this double standard is "feelings of moral relativism and cynicism regarding the sanctity of the standards that are supposed to govern their professional lives."[42] Many have cited medical ethics education as a potential way to combat the detrimental effects of the hidden curriculum. However, we have seen that just supplying more medical ethics education is not sufficient. In fact, the detrimental effects of the hidden curriculum are magnified when the process of ethics education is in conflict with its own principles.

Although the situation sounds dire, there are still ways in which we can combat the hidden curriculum and do a better job with medical ethics education. Despite concerns about students' lack of engagement with ethics, it seems that many medical students feel that ethics is relevant to them and actually want more instruction in the topic. A survey of medical students in

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[40] Ibid, 156-158.

[41] Sanjana Salwi et al., "Aligning patient and physician views on pelvic examinations under anaesthesia: the medical student perspective," *Journal of Medical Ethics* 47, no. 6 (May 2020): 430-433, DOI: 10.1136/medethics-2020-106473.

[42] Hafferty and Franks, "The Hidden Curriculum," 866.

the United Kingdom found that only 2.5% of respondents felt that medical ethics was not relevant to them and 87% felt that it was important or very important.[43] In a qualitative study at the University of Pennsylvania, medical students expressed the desire for more education, especially during the clinical years when they began to deal with ethically challenging situations themselves.[44] So, it seems that students have the potential to be highly engaged with ethics if they had educational opportunities that met their needs.

How can this be accomplished? An article by Hafferty and Franks makes several recommendations as to how to mitigate the effects of the hidden curriculum.[45] Their main proposal is that the presence of the hidden curriculum needs to be made explicit and more attention needs to be paid to how trainees perceive their education. As we have seen, although ethics is becoming a larger part of medical education, the ways in which it has been implemented gives students mixed messages about its importance. Part of this involves the institutions of medical education recognizing that they themselves are moral agents rather than neutral entities.[46] This is not an easy task, especially when one thinks about the larger cultural-social-economic axes in which medicine operates. But when trainees perceive that the institutions of medical education make no effort to be ethical themselves and do not appear to be reflecting on the impact of their actions, it erodes students' willingness to participate in their own positive

[43] Carolyn Johnston and Peter Haughton, "Medical students' perceptions of their ethics teaching," *Journal of Medical Ethics* 33, no.7 (July 2007): 418-422, DOI: 10.1136/jme.2006.018010.

[44] Stites et al., "Moving beyond the theoretical," 159.

[45] Hafferty and Franks, "The Hidden Curriculum," 868.

[46] Ibid.

moral development. While some students may be at an advanced enough level of development to see the benefit of self-reflexive ethical practice in and of itself, this is a very difficult attitude to maintain in the stressful medical school environment in the fact of constant double-standards.

They also recommend that faculty "should demonstrate the integration of ethical principles into the everyday work of both science and medicine." This is critical if we are to avoid sending the message to students that ethics does not have clinical applicability. This is similar to a model of education proposed by clinician-ethicists at Cornell.[47] They note that many patients pose ethical questions, but few cases ever make it to the level of formal ethics consultation. They imagine that, within an appropriately supportive culture, "The implications of ethical decisions should be discussed and dissected on ward rounds with the same rigor, enthusiasm, and attention to detail with which differential diagnoses are generated and treatments are rendered."[48] This is also similar to the model proposed by Glick where "ideally medical ethics would be taught in a world where every medical teacher were personally committed to such a philosophy and practiced it at the bedside. Thus the student would be exposed…to role models who practiced and taught ethics in the context of their discussions on surgery, pediatrics, or obstetrics."[49] Creating such an educational environment would not be without its challenges. The most significant of these is that not all attending physicians and

[47] Matthew McCarthy et al., "Frequency of Ethical Issues on a Hospitalist Teaching Service at an Urban, Tertiary Care Center," *Journal of Hospital Medicine* 15, no. 5 (May 2019): 290-293, DOI: 10.12788/jhm.3179.

[48] Matthew McCarthy and Joseph Fins, "Teaching Clinical Ethics at the Bedside: William Osler and the Essential Role of the Hospitalist," *AMA Journal of Ethics* 19, no. 6 (June 2017): 528-532, DOI: 10.1001/journalofethics.2017.19.6.peer2-1706.

[49] Glick, "Teaching medical ethics," 240.

teachers feel qualified, interested, or feel like they have time to address ethical issues with students. However, I would argue that since they practice ethics every day anyway in their role as clinicians, they have an obligation to think critically about that practice. It is also necessary because failing to address these topics with students is not a neutral position, but in fact also imparts just as much information to students about the value of ethics because the hidden curriculum exerts its effects in large part by role modelling.

CHAPTER FOUR: CONCLUSION

Teaching medical ethics is a difficult task. More than other subjects like basic science, the method of delivery and assessment has a significant impact on the way students begin to integrate that knowledge into behavior and professional identity. Educators need to be aware of the hidden curriculum of ethics education in order to dispel its negative effects. They must try to ensure that education adequately reflects its aims; for example, not having standardized tests be the dominant assessment method if the aim is the development of personal characteristics and attitudes. They must be aware that education is not always a value-neutral process and be aware of the ways in which the process can be unethical (for example, testing ethics in ways like CASPer that exploit students and have the potential to deepen inequities in patient care). They must be aware that as educators, they are modelling behavior to students and that not addressing ethics in a clinical setting tells students as much about its value as a lecture on it. If medical education can start to move in these directions, I believe we can actually start to teach ethics in an effective way which is beneficial to students, educators, and institutions alike.

BIBLIOGRAPHY

Association of American Medical Colleges. "Learning Objectives for Medical Student Education: Guidelines for Medical Schools." 1998. https://www.aamc.org/system/files/c/2/492708-learningobjectivesformedicalstudenteducation.pdf.

Altus Assessments. "What is Casper?" Accessed April 2, 2022. https://takealtus.com/casper/.

Branch Jr., William. "Supporting the Moral Development of Medical Students," *Journal of General Internal Medicine* 15, no.7 (July 2000): 503-508. DOI: 10.1046/j.1525-1497.2000.06298.x.

Calman, K.C., and R.S. Downie. "Practical problems in the teaching of medical ethics to medical students," *Journal of Medical Ethics* 13, no. 3 (September 1987): 153-156, DOI: 10.1136/jme.13.3.153.

Dore, Kelly L., Harold I. Riter, Sharyn Kreuger, and Geoffrey R. Norman. "CASPer, an online pre-interview screen for personal/professional characteristics: prediction of national licensure scores," *Advances in Health Sciences Education: Theory and Practice* 22, no.2 (May 2017): 327-336. DOI: 10.1007/s10459-016-9739-9.

DuBois, James M. and Jill Burkemper."Ethics education in US medical schools: a study of syllabi," *Academic Medicine* 77, no. 5 (May 2002):432-437, DOI: 10.1097/00001888-200205000-00019.

Eckles, Rachael E., Eric M. Meslin, Margaret Gaffney, and Paul R. Helft. "Medical Ethics Education: Where Are We? Where Should We Be Going? A review," *Academic Medicine* 80, no. 12 (December 2005): 1143-1152. DOI:10.1079/00001888-200512000-00020.

Educational Commission for Foreign Medical Graduates. "Step 1 and Step 2 CK Content Distribution Changes." Accessed March 10, 2022. https://www.ecfmg.org/news/2020/07/22/step-1-and-step-2-ck-content-distribution-changes/.

Feudtner, C., D.A. Christakis, and N.A. Christakis. "Do clinical clerks suffer ethical erosion? Students' perceptions of their ethical environment and personal development," *Academic Medicine* 69, no.8 (August 1994): 670-679. DOI: 10.1097/00001888-199408000-00017.

Gaebler, Carolyn and Lisa Soleymani Lehmann, "Fostering Student Engagement in Medical Humanities Courses," *AMA Journal of Ethics Virtual Mentor* 16, no. 8 (August 2014): 595-598, DOI: 10.1001/virtualmentor.2014.16.8.ecase1-1408.

Giubilini, Alberto, Sharyn Milnes, and Julian Savulescu. “The Medical Ethics Curriculum in Medical Schools: Present and Future,” *The Journal of Clinical Ethics* 27, no.2(Summer 2016):129-45, https://pubmed.ncbi.nlm.nih.gov/27333063/.

Glick, Shimon M. “The teaching of medical ethics to medical students,” *Journal of Medical Ethics* 20 (December 1994):239-243, DOI: 10.1136/jme.20.4.239.

Hafferty, Frederic and Ronald Franks. “The Hidden Curriculum, Ethics Teaching, and the Struture of Medical Education,” *Academic Medicine* 69, no. 11 (November 1994):861-871, DOI: 10.1097/00001888-199411000-00001.

Hébert, Philip C., Eric M. Meslin, and Earl V. Dunn. “Measuring the ethical sensitivity of medical students: a study at the University of Toronto,” *Journal of Medical Ethics* 18, no.3 (September 1992): 142-147, DOI: 10.1136/jme.18.3.142.

Hren, Darko, Matko Marusic, and Ana Marusic, “Regression of Moral Reasoning during Medical Education: Combined Design Study to Evaluate the Effect of Clinical Study Years,” *PLoS One* 6, no. 3 (March 2011): e17406, DOI: 10.1371/journal.pone.0017406.

Johnston, Carolyn and Peter Haughton. “Medical students’ perceptions of their ethics teaching,” *Journal of Medical Ethics* 33, no.7 (July 2007): 418-422. DOI: 10.1136/jme.2006.018010.

Lawrence, Carlton, Tscholofelo Mhlaba, Kearsley Stewart, Relebohile Moletsane, Bernhard Gaede, and Mosa Moshabela. “The Hidden Curricula of Medical Ethics Education: A Scoping Review,” *Academic Medicine* 93, no.4 (April 2018): 648-656. DOI: 10.1097/ACM.0000000000020049.

Lehmann, Lisa Soleymani, Willard S. Kasoff, Phoebe Koch, and Daniel D. Federman. “A survey of medical ethics education at United States or Canadian medical schools.” *Academic Medicine* 79, no. 7(2004): 682-9, https://journals.lww.com/academicmedicine/Fulltext/2004/07000/A_Survey_of_Medical_Ethics_Education_at_U_S__and.15.aspx.

Liaison Committee on Medical Education, *Functions and Structure of a Medical School*, March 2022. https://lcme.org/publications/.

Lu, Yangzi, Alexandra Erath, Sanjana Salwi, Alexander Sherry, and Margaret B. Mitchell. “Alignment of Ethics Curricula in Medical Education: A Student Perspective,” *Teaching and Learning in Medicine* 32, no. 3 (January 2020): 345-351, DOI: 10.1080/10401334.2020.1717959.

McCarthy, Matthew, Diego Real de Asua, Ezra Gabbay, Paul J. Christos, and Joseph F. Fins. “Frequency of Ethical Issues on a Hospitalist Teaching Service at an Urban, Tertiary Care Center,” *Journal of Hospital Medicine* 15, no. 5 (May 2019): 290-293, DOI: 10.12788/jhm.3179.

Matthew McCarthy and Joseph Fins. “Teaching Clinical Ethics at the Bedside: William Osler and the Essential Role of the Hospitalist,” *AMA Journal of Ethics* 19, no. 6 (June 2017): 528-532, DOI: 10.1001/journalofethics.2017.19.6.peer2-1706.

Mitchell, Kenneth R., Catherine Myser, and Ian H. Kerridge. “Assessing the clinical ethical competence of undergraduate medical students,” *Journal of Medical Ethics* 19, no. 4 (1993): 230-236, DOI: 10.1136/jme.19.4.230.

Myser, Catherine, Ian H. Kerridge, and Kenneth R. Mitchell. “Teaching clinical ethics as a professional skills: bridging the gap between knowledge about ethics and its use in clinical practice,” *Journal of Medical Ethics* 21 (April 1995): 97-103. DOI:10.1136/jme.21.2.97.

ProPublica Nonprofit Explorer. “Association of American Medical Colleges: Audit for period ending June 2021.” Accessed April 4, 2022. https://projects.propublica.org/nonprofits/display_audit/4839020211.

Salwi, Sanjana, Alexandra Erath, Pious D. Patel, Karampreet Kaur, and Margaret B. Mitchell. “Aligning patient and physician views on pelvic examinations under anaesthesia: the medical student perspective,” *Journal of Medical Ethics* 47, no. 6 (May 2020): 430-433, DOI: 10.1136/medethics-2020-106473.

Self, D.J., M. Olivarez, and D.C. Baldwin Jr. “Clarifying the relationship of medical education and moral development,” *Academic Medicine* 73, no. 5 (May 1998): 517-520, DOI: 10.1097/00001888-199805000-00018.

Shelton, Wayne. “Can virtue be taught?” Academic Medicine 74, no. 6 (June 1999):671-674. DOI: 10/fkx5k7

Stites, Shana D., Justin Clapp, Stefanie Gallagher, and Autumn Fiester. “Moving beyond the theoretical: Medical students’ desire for practical, role-specific ethics training,” *AJOB Empirical Bioethics* 9, no. 3 (July 2018): 154-163, DOI: 10.1080/23294515.2018.1472149

Weiner, Stacy. “The new PREview exam for medical student applicants goes beyond academics,” Association of American Medical Colleges, accessed 4/15/2022, https://www.aamc.org/news-insights/new-preview-exam-medical-school-applicants-goes-beyond-academics.

White, Casey B. PhD; Arno K. Kumagai, Paula T. Ross, and Joseph C. Fantone. “A Qualitative Exploration of How the Conflict Between the Formal and Informal Curriclum Influences Student Values and Behaviors,” *Academic Medicine* 84, no. 5 (May 2009): 597-603, DOI: 10.1097/ACM.0b013e31819fba36

Wong, Josephine and Erik Cheung, "Ethics assessment in medical students," *Medical Teacher* 25, no. 1 (2003):5-8, DOI: 10.1080/0142159021000061341.

Wong, Mun Kit, Daniel Zhi Hao Hong, Jiaxuan Wu, Jacquelin Jia Qi Ting, Jia Ling Goh, Zhi Yang Ong, Rachelle Qi En Toh, et al., "A systematic scoping review of medical ethics education programs from 1990 to 2020," *Medical Teacher* 44, no. 2 (September 2021), DOI: 10.1080/0142159X.2021.1970729.