UME-21 and Teaching Ethics:
A Step in the Right Direction

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Background and Objectives: *Ethics education for medical students has included a number of relatively vague descriptions of appropriate curricular objectives, but medical schools struggle with the general teaching of ethics, as well as with presenting the ethical dilemmas posed by managed care. This paper proposes some standards and uses them to analyze the general and managed care ethics content of the Undergraduate Medical Education for the 21st Century (UME-21) curricula.* Methods: *We analyzed progress and final reports from each school to define their learning objectives, content, teaching methods, and evaluation strategies in ethics. Each was evaluated using principles of adult learning and Rest's Four Component Model of Moral Development. Good examples of curricular elements from participating schools are described.* Results: *Ethics curricula varied widely among the schools. Goals and objectives were often stated in generalities. Teaching methods were diverse and innovative, and several new combinations of learning activities were created to highlight ethics topics. Content represented managed care and non-managed care topics in varying proportions. Student surveys of attitudes toward managed care and opinions of the ethics programs were the most commonly used as evaluation tools. Some schools were able to develop more direct means of evaluating student learning. The Four Component Model was not fully addressed in the programs developed by the participating schools.* Conclusions: *We make recommendations about the objectives, teaching methods, content, and evaluation methods of an ideal medical school curriculum in ethics.*

There are no lovelier, or livelier, wars than those fought over medical school curricula. The idea that ethics should be introduced into the fray is one that all sides could, in principle, support. This has not, however, always made it easy to introduce ethics into medical school curricula.

The question of whether and to what extent to include ethical issues in general, and managed care ethics in particular, into an already crowded curriculum should be seen in light of nearly 2 decades of debate about the role of ethics in medical education. It was first necessary to make the case that ethics belonged with the basic and clinical sciences and to define what "ethics" should consist of. Despite some literature on how best to teach ethics in medical schools,[1] this is still not clear.

In 1985, Culver and colleagues called for a "minimal basic curriculum" in ethics.[2] A decade later, the Pew Health Professions Commission recommended 17 competencies required for the "successful health professional" of the future, including being able to "frame their work in ethically sensitive ways and provide education and counseling for patients, families, and communities in situations where ethical issues arise."[3] The report suggested that medical educators were doing a poor job of training future physicians, whose skills "have increasingly less relevance to the needs of patients, the way health care is organized and delivered, or the principles of improving the health status and well-being of the public."

The challenge of teaching basic biomedical ethics has been expanded in the past decade to include new areas created by health care reform, including managed care. The Undergraduate Medical Education for the 21st Century (UME-21) initiative included new approaches to education in both areas. This paper's purpose was to use adult educational principles to review and critique the ethics content of UME-21 schools' curricula and

then to reexamine them using the Four Components Model of Moral Development to identify areas of strength and weakness and to propose an ideal curriculum.

Methods

We reviewed the UME-21 partner and associate partner schools' content area summary reports from the spring of 2000 and final reports from the fall of 2001. They analyzed the goals and objectives, teaching methods, content, and evaluation in ethics that were reported. Follow-up telephone interviews and correspondence were used when additional information was needed. Ethics content that predated or was not directly related to UME-21 was not included. We reviewed the UME-21 ethics curricula with the intent to describe the approaches that were developed and also to provide an evaluation of those efforts to identify best practices and map out areas in which additional work is needed.

Evaluation Criteria

For this report, we explicitly chose to examine the ethics curricula of the UME-21 schools using two benchmarks: basic principles of adult education and the Four Component Model of Moral Behavior.[4]

Adult Education. Four educational principles were considered when reviewing the curricula. They were (1) clear and observable learning goals and objectives, (2) active learning activities stressing application of principles to real situations, (3) problem-oriented and relevant content with immediate practical application, and (4) performance-based evaluation with provisions for individualized student feedback and program evaluation and improvement.[5-7]

Rest's Four Components Model of Moral Behavior. We chose to use this model to examine the ethics content of the UME-21 curricula because it is clear, has been applied to professional education,[8,9] and addresses the types of behavior that the curricula were designed to promote. For the purposes of this paper, "ethics" is defined as "the study of moral standards and how they affect conduct." As such, "ethical conduct" and "moral behavior" are interchangeable terms. Rest's model proposes a series of processes that one must master to consistently behave in a moral fashion. The theory starts with the question "What must we suppose happens psychologically for moral (ethical) behavior to take place?" Curricular elements can be seen as addressing this model at any one of the four levels, here expressed as reasons for which an individual might fail to act ethically:

• Moral sensitivity. First, an individual might be blind to a moral issue. If students have an underdeveloped or distorted view of a professional's role, lack empathy, or lack skill in interpreting social situations, they may fail to act morally.

• Moral judgment. Once students have become aware of an ethical issue, they may be unable to identify possible lines of action, imagine how other people would be affected by each, and choose a justifiable response.

• Moral motivation. Even if an ethical response is identified, an individual may fail to give adequate priority to moral values in competition with other values such as convenience, self-preservation, or competing allegiances.

• Moral action. If students have identified and chosen the moral action, they may lack the requisite problem solving and interpersonal skills or the perseverance and character to carry it out.

It is against this background of educational principles and components of ethical behavior that we analyzed and assessed the ethics curricula developed by the various schools.

Results

All eight partner schools and seven of ten associate partner schools included ethics in their UME-21 curricula (Tables 1 and 2).

Goals and Learning Objectives

There were a variety of stated goals and objectives for ethics content among the schools. Only Jefferson Medical College (JMC) cited a reference as the basis for choosing objectives, a 1996 paper by Perkel on ethics and managed care.[10] Schools varied from choosing all managed care related goals and objectives (University of California, San Francisco [UCSF], University of Minnesota, and University of Miami) to having no objectives related to managed care (Case Western Reserve University [CWRU]). The objectives were generally appropriate to the level of the learners, with general understanding of principles of ethics highlighted in the preclinical years and more clinically relevant topics stressed during clinical experiences.

The University of Pittsburgh developed an excellent example of clear learning objectives in ethics for its community/ambulatory medicine clerkship. They were divided into knowledge, skills, and attitude and could be easily used to develop a strong curriculum and evaluation system. One knowledge objective started by saying that "each student will be able to describe and define" several ethical issues. A skill-related objective stated that "each student will be able to participate in a discussion about advanced directives with a patient," and an attitude objective that could be evaluated was to "demonstrate consideration for patients' differing perceptions of health and illness as they relate to patient care."

CWRU also articulated clear learning objectives for its ethics content. In a session called "Ethical Issues

Table 1

Ethics Curricula Developed as Part of UME-21 Curricula at the Eight Partner Schools

Partner Schools	Ethics Taught as Part of:	Year	Format/Content	Evaluation: Student/Program
Dartmouth	On Doctoring	1,2	Lecture, small groups, case-based role-play/preclinical ethical and professionalism issues	Student ratings of sessions
	Health, Society, and the Physician	4	Lecture, small groups, symposia on informed consent, competence, liability, risk management	General course student survey
University of California-San Francisco	Foundations of Patient Care	1,2	Lecture, small group/confidentiality, boundaries	
	PLACE 24-week longitudinal preceptorship	3	Small groups: formulary restrictions, "detailing," the referral process, access to care	Pre and post surveys of student attitudes toward managed care
	Freestanding course	3	10 days, lecture, small group/principles of ethical decision making and practice	
University of Miami	Internal Medicine Clerkship	3	Web-based ethics lesson	Questions as part of computer lesson; student attitudes toward managed care
	Primary Care Clerkship	3	Small-group case discussions	
University of Nebraska	Junior seminar series	3,4	3-hour workshop on genetic testing: lecture small groups, panel discussion	Pre- and post-workshop knowledge test/ student survey
University of Pennsylvania	Clinical Evaluative Science and Health Care Systems courses	1,2	Lectures, small groups, panel discussions; value judgments, health outcome utilities, resource allocation, access to health care, dual responsibility and conflicts of interest organizational ethics in systems of care	Content not evaluated separately; exam questions, student attitude surveys, preceptor evaluations, student presentations, written papers
	Doctoring II course (during core clinical clerkships)	2,3	Monthly, longitudinal small-group discussions with reading assignments, role-playing, standardized patients, and student projects; professionalism, multiculturalism, value conflicts and ethical dilemmas, conflict resolution, palliative care, coping with the clinics	
University of Pittsburgh	Community/ Ambulatory Medicine Clerkship	3	Three sessions: informed consent, patient advocacy, end-of-life care	Exam questions, critical incident technique, preceptor evaluation/student ratings
Wayne State University	In Managing Care Curriculum	2	Large/small groups; ethical theories, doctor-patient relationship, informed consent, end-of-life issues	Essay exam/student ratings
	Clinical Learning Exercises in continuity clinic	3	Three cases: confidentiality, end-of- life planning, physician conflict of interest	Three Clinical Learning Exercises; ethics also in internal medicine clerkship OSCE/student ratings
University of Wisconsin	Core Seminars/ Conferences	3	Large/small groups; breaking bad news, medical mistakes, death and dying	Student attitude survey
	Pediatric Clerkship	3	Small-group cases with ethicist, ethics work-up	
	Preceptorship	4	Ethics write-up or attendance at Ethics Committee	

Unique to Medical Students," actively worded learning objectives included that students will "identify ethical dilemmas they have encountered during their third-year rotations," "articulate the moral choices and moral consequences implicit in these dilemmas," and "develop practical strategies for dealing with the ethical dilemmas they face." Although difficult to evaluate in a test situation, these objectives were well suited to guiding small-group facilitators in giving individualized feedback to students.

Teaching Methods

The teaching methods used by UME-21 schools to present ethics content relied heavily on small-group discussions, sometimes supported by larger group lectures or symposia. Curricular elements that occurred in the first 2 years tended to use large-group sessions, and those that took place in years 3 and 4 tended to rely on smaller group experiences. Many schools created innovative combinations of methods to present their ethics content.

One example of a stand-alone ethics module, from the University of Nebraska, was a 3-hour genetics workshop for third- and fourth-year students that combined a lecture on the science of genetic testing, small-group sessions on how to discuss genetic testing with patients, and a panel discussion highlighting how real women with a family history of breast cancer decided whether or not to be tested. The combination of scientific knowledge with discussions about application of that knowledge, capped off by real patient stories, illuminated the integral importance of ethics in the real-life practice of medicine.

Another innovative teaching module was developed at the University of Miami. As part of the internal medicine clerkship, third-year students completed a Web-based ethics module that made use of a variety of techniques, including an on-line discussion and quiz, to engage the students in patient cases. Similarly, the University of Kentucky developed computer-based patient simulations that incorporated the ethics of health care delivery and managed care. A debriefing session for the cases was included as a part of a 2-hour managed care seminar.

Another self-contained ethics piece at Jefferson Medical College brought small groups of students together to discuss the dual function of physicians as advocates for patients and gatekeepers for their care using real student experiences as the basis of the discussion and role-playing. This approach allowed students to directly relate to the topic by using stories from their own lives, and role-playing pushed them to grapple with the choices that physicians make when dealing with real patients.

Both the University of Wisconsin and the University of Kentucky used structured approaches to the discussion of real cases. The University of Wisconsin developed an "ethics work-up," and the University of Kentucky used the "Four Box Method" of case analysis. The latter method entailed posing a structured set of questions about four aspects of each case, including the medical indications for a given action, the patient's preferences (autonomy), the quality of life issues (beneficence, well-being), and contextual issues such as justice and utility.[11]

Content

The actual content of the UME-21 curricula in ethics was varied but had several themes. In general, the schools that already had strong ethics curricula in place were the ones that chose to concentrate their UME-21 resources on managed care topics, while those with less well-developed ethics programs used the support to improve them. Managed care topics that were included fell into several broad categories. These included management of limited resources (University of Miami, University of Nebraska, University of Pennsylvania, Wayne State University), physician conflicts of interest (University of Miami, Jefferson Medical College, UCSF, University of Nebraska, University of Pennsylvania), affect of ability to pay on access to health care (University of Miami, UCSF, University of Pennsylvania), and formulary issues (UCSF).

General ethics topics that were covered included confidentiality (CWRU, Dartmouth, University of Wisconsin, University of Massachusetts, Wayne State University), professionalism (Dartmouth, Wayne State University, University of Pennsylvania), ethical issues unique to medical students (CWRU, University of Pennsylvania), transient relationships in the third year (CWRU), student diminishment/harassment (CWRU, University of Pennsylvania), informed consent (University of Wisconsin, University of Massachusetts, University of Pittsburgh, Wayne State University, Dartmouth), medical mistakes/liability/risk management (CWRU, Dartmouth, University of Wisconsin, University of New Mexico), abortion (Dartmouth), breaking bad news (University of Wisconsin, University of Kentucky, University of Pennsylvania), advance directives (University of Pittsburgh, Wayne State University, University of Pennsylvania), medical futility and end-of-life decision making (Wayne State University, University of Pennsylvania, CWRU), and genetic screening (University of Nebraska).

Evaluation

Evaluation of the ethics content was not well developed at most UME-21 schools. In some instances, ethics was a small part of a larger course, and the ethics portion was not independently evaluated. In many, proxies of ethics knowledge were used, such as answers to particular questions on the Association of American

Medical Colleges Graduate Questionnaire (Wayne State University) or surveys of students' attitudes toward managed care (University of Miami, UCSF). Most used student surveys to assess the quality of the courses and their individual components.

Some schools did make strides toward developing robust evaluation schemes in ethics. For example, Wayne State University developed Clinical Learning Exercises (CLEs), three of which addressed ethics. One exercise focused on advanced care planning, requiring students to discuss a "Designation of Patient Advocate" form with one patient and turn in a summary of that experience, making it both a learning and evaluative activity.

Similarly, the University of Pittsburgh used an evaluation tool, based on the critical incident technique,[12] in which students were asked questions about their preceptor's approach to ethical issues. Analysis revealed that nearly half of the students studied had been exposed to memorable, critical, and sensitive ethical issues handled well in clinical settings. A significantly smaller proportion observed role models exhibiting undesirable behaviors.

At CWRU, an innovative station for an end-of-third-year objective structured clinical exam (OSCE) was developed to examine student understanding of patient confidentiality. The student was instructed to use a phone to call an adolescent standardized patient to give sensitive laboratory results and was confronted with the task of explaining to the patient's mother, who answered the phone, that results could only be given to her daughter. Other schools using OSCE exams for evaluation include the University of Kentucky, University of Pittsburgh, and Wayne State University.

Principles of Adult Learning

Principles of adult learning provided a useful framework for reviewing the UME-21 ethics curricula.

Table 2

Ethics Curricula Developed as Part of UME-21 Curricula at Seven of the Ten Associate Partner Schools

Associate Partner Schools	Ethics Taught as Part of:	Year	Format/Content	Evaluation: Student/Program
Case Western Reserve University	CLICS: longitudinal small-group course	3	Discussions of real-life scenarios: transient relationships, ethical issues unique to medical students, confidentiality, student diminishment, medical mistakes	OSCE stations in pilot phase/student surveys
Jefferson Medical College	Primary care acting internship	4	2-hour case discussion, role playing of real scenarios	Exam questions, GQ questionnaire, pre-/post- attitude survey/student satisfaction survey
University of Kentucky	Women's Maternal and Child Health Clerkship	3	Computer-based simulations on ethics of managed care	Pre- and post-third year student attitude toward managed care surveys; essay task during Clinical Performance Exam/student feedback
	Women's Maternal and Child Health Clerkship	3	2-hour seminar on ethical decision making	
	Third-year Orientation, Introduction to Managed care	3	Lecture on principles of ethics	
University of Massachusetts	Family Medicine Clerkship	3	Case presentations with ethicist	Direct observation and feedback during small-group sessions/student ratings
	Internal Medicine and Pediatrics Clerkships	3	Small-group discussions on confidentiality, advanced directives, informed consent, competency, confidentiality	
University of Minnesota	Physician and Society	1		
	Primary Care Clerkship	3,4	Discussions in Managed Care Colloquium	Not evaluated
University of New Mexico	Seminar Series	3	Seminar on medical errors	Student opinion surveys

Clear and Observable Goals and Objectives

The objectives that guided many of the UME-21 ethics curricula fell short in terms of their clarity and their ability to guide the feedback and evaluation process. Only a few were worded in a concrete and active manner.

Active Learning Activities

There was a rich and diverse set of learning activities used by the UME-21 schools to actively engage their students in the area of ethics. Courses included lectures, small- and large-group discussions, panel discussions, Web-based cases, readings, an on-line discussion, written assignments (eg, ethics workups), and role-playing. Further, combinations of various activities created some unique learning opportunities for students.

Problem-based Relevant Content

The UME-21 schools addressed topics in general ethics as well as in managed care ethics. Many chose content that was directly applicable to the students' experiences. One useful strategy was to build a curriculum that focuses on student issues as a means of teaching general principles that can be applied to other issues at a later date.

Performance-based Evaluation With Provision for Individualized Feedback to Students

UME-21 ethics curricula provided few examples of direct evaluation of student knowledge, skills, and/or attitudes regarding the topics covered, making conclusions about their efficacy elusive. There were many examples of tools that recorded student experiences, giving course directors an indirect view of their learning. The schools that used OSCE stations to test student performance came closest to direct evaluation.

The Four Components Model

The Four Components Model of Moral Development added insight into our review of the UME-21 ethics curricula by looking at them from a student development point of view.

Moral Sensitivity. There were several activities included in the UME-21 curricula that had the potential to enhance students' ability to recognize that a situation has a moral dimension. Several schools asked students to identify cases from their own clinical experience that involved ethical issues. These activities could help students see ethical issues where perhaps they had previously overlooked them.

Moral Judgment. Several schools also addressed this component. The written ethical work-ups used by the University of Wisconsin required students to identify alternative courses of action in response to a written vignette, choose one, and then provide a justification.

In terms of understanding how an action might affect others, the panel discussions of women from families with a history of breast cancer used by the University of Nebraska in their genetic screening curriculum was an example of a creative approach. The on-line discussion of ethics cases at Jefferson Medical College also allowed this type of interchange in a novel manner.

Moral Motivation. This component, and how to promote it, is less well understood than the others and is determined in large part by one's understanding of what it means to be a professional.[8] The UME-21 schools that came closest to addressing issues of professionalism are those that presented the conflicting roles that physicians play in managed care as "gatekeepers" and patient advocates. UCSF had content on pharmaceutical company gifts that also approached larger questions of professionalism. Other UME-21 curricula address pieces of professionalism, such as student harassment, but none describe a comprehensive approach to the topic.

Moral Action. As with moral motivation, moral action is closely related to professionalism. UME-21 ethics curricula, in general, did not assess actions in real settings, but some did use written or role-played approximations of situations that students did, or might, encounter.

Discussion

Having reviewed the literature and the UME-21 curricula, we conclude that an exemplary approach to teaching ethics to medical students would (1) be informed by a model of moral development and/or behavior in professionals and based on adult learning principles, (2) take advantage of research on successful approaches, (3) establish measurable objectives in teaching ethics to medical students that can guide evaluation, (4) provide diverse and innovative teaching methods with student-generated and relevant content, (5) emphasize skill building/feedback, 6) allow students and faculty to address real ethical issues they have encountered or observed, and (7) include direct evaluation of students and of the curriculum.

UME-21 provided an extraordinary opportunity to think and act creatively regarding the place of managed care in medical curricula. In aggregate the resulting curricula reinforced—to students, educators, and society—that medical education ought never to be exclusively about the acquisition of clinical skills and scientific knowledge. Rather, every generation of educators has a duty to ensure that physicians are prepared not only to treat but also to think clearly and critically about a variety of other challenging and interesting issues. Despite the battles among the keepers of medical education, improved curricula in ethics may ensure that future physicians and their patients will both win.

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The Ethics of Teaching. Take a moment and think about your favorite teacher. Maybe he or she was your third grade teacher or your high school chemistry teacher but all of us have had at least one teacher that had a profound effect on our lives and that we consider our "favorite." As a beginning teacher, it is important for you to identify the role that ethics plays in the profession. It is also critical that you begin to reflect on your own beliefs and consider whether the ethical responsibilities of teaching align with your personal belief structure and values. In step one, individuals initially base their ethical decisions on how those decisions care for their own needs. In Gilligan's next step of development, individuals are guided by how their decisions care for the needs of others. UME-21 and teaching ethics: a step in the right direction. L. Lewin, Curtis A. Olson, K. Goodman, P. Kokotailo. Psychology, Medicine. Family medicine. 2004. BACKGROUND AND OBJECTIVES Ethics education for medical students has included a number of relatively vague descriptions of appropriate curricular objectives, but medical schools struggle with the… Expand. 18. 1. PDF. View on PubMed. Save. Ethics education for medical students has included a number of relatively vague descriptions of appropriate curricular objectives, but medical schools struggle with the general teaching of ethics, as well as with presenting the ethical dilemmas posed by managed care. This paper proposes some standards and uses them to analyze the general and managed care ethics content of the Undergraduate Medical Education for the 21st Century (UME-21) curricula. We analyzed progress and final reports from each school to define their learning objectives, content, teaching methods, and evaluation strategies in ethics. Each was evaluated using principles of adult learning and Rest's Four Component Model of Moral Development.