Medical Students' Cases as an Empirical Basis for Teaching Clinical Ethics

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ABSTRACT

Purpose. To identify ethical issues that interns encounter in their clinical education and thus build a more empirical basis for the required contents of the clinical ethics curriculum.

Method. The authors analyzed a total of 522 required case reports on ethical dilemmas experienced by interns from September 1995 to May 1999 at the medical school of Vrije Universiteit in Amsterdam. They identified four regularly described and numerous less frequently described topics.

Results. The interns addressed a wide range of ethical themes. In 45% of the cases, they mentioned disclosure or non-disclosure of information and informed consent; in 37%, medical decisions at the end of life; in 16%, medical failures; and in 9%, problems transferring patients from one caregiver to another. The interns also identified 27 themes linked to their unique position as interns and 19 themes related to specific types of patients.

Conclusion. Based on self-reported experiences, the authors conclude that clinical ethics teachers should reflect on a multitude of dilemmas. Special expertise is required with respect to end-of-life decisions, truth telling, medical failures, and transferring patients from one caregiver to another. The clinical ethics curriculum should encourage students to voice their opinions and deal with values, responsibilities, and the uncertainty and failings of medical interventions.

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In the past 20 years, virtually all the medical schools in The Netherlands have launched medical ethics courses. More and more, ethics education is longitudinal, starting in the first year and continuing through the sixth. (Dutch medical education consists of four years of medical school and two years of residency.) In the first two years, the courses focus on general philosophical and ethical concepts, normative ethics (i.e., the principles of bioethics), the historical background of medical ethics, and physician–patient relationships. In the third and fourth years, the curriculum covers themes in the fields of genetics, reproductive technologies, end-of-life decisions, the care of the dying, induced abortion, research ethics, organ transplantation, informed consent, confidentiality, and the refusal of treatment on religious grounds. These themes reflect the ethical dilemmas faced by Dutch practitioners. At some Dutch medical schools, prior to or during their internships, students are trained in analyzing cases involving ethical issues.[1]

At Vrije Universiteit in Amsterdam, one of the final steps in this longitudinal approach uses the experiences of medical students themselves as a basis for teaching ethics.[2] This module, given at the end of the first year of residency, is similar to "students' ethics," which underscores "ethical issues of immediate relevance for students (as opposed to relevance for practicing physicians)."[3] By articulating real ethical dilemmas, the students clarify and deepen their understanding of the issues they had studied at the preclinical stage. The importance of listening to medical students' experiences and using them to explore ethical problems in medicine was emphasized in the 1980s.[4] The implementation of this type of ethics was suggested in the early 1990s by Bickel,[5] Christakis and Feudtner,[6] and Feudtner and Christakis.[7]

Empirical studies, using a variety of methods, have researched the contents of ethical issues experienced by students during their clinical training. Most of the studies have used questionnaires

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based on reviews of students' essays, but they have tended to have low response rates. Survey studies by Feudtner et al.,[8] Bissonette et al.,[9] and Price et al.[10] all had response rates of 50% or less. One exception was a study by Parker et al.,[11] which had a response rate of approximately 75%. A qualitative research method, which excluded students who were not interested in ethics, was used by Charon and Fox,[12] who received 100 essays in response to an essay contest. An ethnographic research method was used by Hundert et al.,[13] who tape-recorded informal conversations of students and residents to get an impression of the ethical dilemmas in an informal ethics curriculum. They did not mention their response rate in that study. One infrequently used method is the quantitative analysis of the case reports students have to write for their required ethics classes. Waz and Henkind[14] did this, reviewing 214 student essays on ethical dilemmas in pediatrics clerkships.

In our study, we analyzed 522 case reports that medical students presented between 1995 and 1999 as part of the required clinical ethics class at the medical school of Vrije Universiteit. Vrije Universiteit is an urban university, and students do their residencies in various hospitals in Amsterdam and the vicinity. Most of the patients are white, nonchurchgoing, and rather well educated. Almost all the patients have health insurance. The case reports are the students' responses to a request to describe a situation or event they viewed as involving ethical dilemma. The response rates ranged from 80% to 90% per year. Because of the high response rate and the dearth of rules about what an ethical dilemma is, the study provides insight into the variety of ethical dilemmas medical students face in their first year of residency.

Method

After one year of residency, medical students at Vrije Universiteit take a two-week course to prepare them for the next year of clinical rotations. The course has been given since September 1995. Two Friday mornings are set aside for clinical ethics. In preparation, the interns each submit a case report on an ethical dilemma they have experienced in the previous year. They are asked to indicate what they found problematic and ethics-related about the event, what they want to discuss, and whether they have discussed the case with anyone else. From September 1995 to May 1999, 47 groups of ten to 14 students participated in the course. Each group brought in an average of 11 cases. Since we implemented the module, we have been empirically studying the contents of the ethical issues brought up by the students. With few exceptions, the students have consented to the anonymous publication of their case reports.

Based on the subjects discussed in the ethics class, we developed a list of 105 variables. Using this list, we converted the 522 case reports into groups of items. For each case, we looked at the type of internship involved, the position of the intern, the intern's categorization of the patient, the people with whom the intern discussed the dilemma, the intern's opinion of any reactions from supervisors, and the content of the dilemma (for example, end-of-life decisions, medical errors). Based on the results, we clustered the cases in a way slightly different from the original list of variables. We acknowledge that ours is only one way of clustering and other researchers might interpret or cluster these cases differently.

To validate the results of the analysis, we double-analyzed and compared approximately 70 cases and found no relevant difference between the analyses of the various authors, except in cases involving medical failures. Due to doubts about the conversion to items of medical failures, 50% of all the case reports on medical failures were analyzed again by one of the other authors. We agreed on which cases involved medical failures, but not on the natures of the failures or the effects (for example, did the patient die because of the failure or would he have died anyway?). Consequently, we report no percentage for the items related to medical failures (Table 1, Section C).

The purpose of the analysis was to identify the ethical issues that interns face and that consequently need to be addressed in ethics courses.

Results

We analyzed 522 self-reported ethical dilemmas: 36% in internal medicine, 23% in surgery, 10% in the emergency room, 10% in neurology, and 2% in general practice (19% did not mention the location of the internship). This coincides with the fact that after a year, all the interns had completed internal medicine and surgery, but only some of them had completed neurology and general practice.

We identified four recurring topics from the case reports: (1) disclosure or non-disclosure of information to patients and informed consent in 45%, (2) medical decisions at the end of life in 37%, (3) medical failures in 16%, (4) problems transferring patients from one caregiver to another in 9%. The remaining cases presented a variety of topics such as health care scarcity, needle accidents, genetic screening, attempted suicide, organ donation, and vasectomy of mentally retarded young men (each mentioned in less than 2% of the case reports).

With respect to the first topic—disclosure or non-disclosure of information and informed consent (Table 1, Section A)—the most frequently identified themes were criticisms of physicians who provided partial or incomplete information to patients (15%) and interns' attitudes toward patients who have not been informed fully or at all (11%, in the table under "Themes related to the interns' unique position," Section F). These themes were followed

Table 1

Items Used to Code 522 Ethics Cases Reported by Students at the Medical School of Vrije Universiteit in Amsterdam, 1995 to 1999

Theme	% of Cases
A. Disclosure and non-disclosure of information and informed consent	(45%)
Criticism of physicians who	
provided incomplete information to patients	15
communicated bad news to patients	7
did not respect patients	7
did not devote attention to patients as persons	6
did not ask for consent	5
overwhelmed patients	5
did not inform patients and relatives about medical errors	4
treated patients rudely	4
provided incomplete information to relatives	3
talked to relatives without the patients' consent	2
did not respect the patients' privacy	2
did bedside teaching with numerous students present	0.2
Problems related to informed consent and	
incompetent patients	6
patients who did not speak Dutch	2
demented patients	1
psychiatric patients	0.4
children	0.2
B. Medical decisions at the end of life	(37%)
Ethical dilemmas related to	
limits of treatment	11
authority of relatives in end-of-life decisions	8
withdrawing treatment	7
communication or the lack of it with relatives	5
sedation with morphine	5
end-of-life codes	4
a physician's refusal to perform euthanasia	4
a physician's communication or lack of it with patients on medical end-of-life decisions	4
a physician's communication with patients on death and dying	4
performance of euthanasia on request	3
unrequested mercy killing	2
the value of living wills in medical practice	2
withholding medication	1
assisted suicide (psychiatric patients)	0.6
asking relatives' consent for autopsy	0.4
C. Medical events that interns felt should not have occurred*	(16%)
Erroneous diagnoses; delayed diagnoses; wrong treatment; operating failures; treatment without proper reason; excessive or poorly performed diagnostics	
Seriousness of the event: no consequences; longer hospital stay but complete recovery; permanent injury; death	
Culpable/non-culpable failure	
How physicians dealt with failures: denial; glossing over; forcing others not to talk about it; frankly discussing it; reporting it to the authorities	
D. Problems transferring patients	(9%)
E. Other topics (e.g., scarcity of health care, genetic screening, attempted suicide, and organ donation)	†

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Table 1 (Continued)

Theme	% of Cases
F. Themes related to the interns' unique position	
The interns' uncertainty	
as regards personal values and norms	25
about responsibilities	8
about medical knowledge	3
about duties	2
about their task	2
Attitudes toward	
patients who have not been informed fully or at all	11
daring or not daring to ask critical questions	9
dealing with the uncertainty and failings of medical interventions	7
being forced to perform obligatory medical interventions	4
bearing too large a responsibility	3
being forced to perform interventions without any explanation	2
refusing odd jobs	1
dealing with the criticism of others	1
dealing with problems related to gender	0.4
dealing with problems related to ethnicity	0.4
dealing with lack of solidarity on the part of fellow interns	0.2
working with alcohol-abusing physicians	0.2
dealing with problems related to appearance	0
working with overtired physicians	0
working with overworked physicians	0
working with physicians with problems other than the above	2
Dealing with emotions such as	
powerlessness	6
shock	6
anger	6
frustration about the possibilities of medicine	3
grief	2
pride	0.4
Existential questions	5
G. Themes related to specific categories of patients	
Noncompliant	7
In whom the interns had an emotional interest	5
With different opinions based on culture	4
Who claimed interventions	3
Psychiatric	3
With different opinions based on religion	2
With different opinions based on health beliefs	2
With different opinions based on sexual orientation	1
Aggressive	1
Neglectful	1
Denying	1
Of high social standing (treating colleagues, celebrities, etc.)	0.6
Repugnant	0.6
Trivializing	0.4
Long-winded	0.4
Close-mouthed	0.2
With different opinions on politics	0
Who made sexual advances	0
Miscellaneous‡	(<1)

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Table 1 (Continued)

Theme	% of Cases
H. People with whom the interns discussed the ethical dilemmas	
Residents	28
Other interns	12
Supervisors	12
Someone at home	8
Nurses	5
Others	10
Teaching supervisors at the hospital	0.2
No one (explicitly indicated)	9
(Unknown)	35

*No percentages are reported for the items because the authors could not reach consensus on the interpretation of the events.

†All were mentioned in less than 2% of the cases.

‡Retarded, very young, demented, suicidal, HIV-positive, and so on. All were mentioned in less than 1% of the cases.

by items such as criticisms of physicians who communicated bad news to patients and who did not respect patients or devote attention to them as persons, and an item related to incompetent people. Other themes such as informed consent and psychiatric patients or bedside teaching with numerous students present were mentioned in less than 2% of the cases.

The second topic—medical end-of-life decisions (Section B)—involved overlapping themes such as ethical dilemmas related to limits of treatment, sedation with morphine, end-of-life codes, and performance of euthanasia on request. Of these items, the ethical dilemmas related to the limits of treatment, the authority of relatives in end-of-life decisions, and withdrawing treatment were identified most frequently (11%, 8%, and 7%, respectively).

The third topic—medical failures (Section C)—involved all the medical events the interns felt should not have occurred, such as erroneous or delayed diagnoses, operating failures, treatment without proper reason, and excessive or poorly performed diagnostics.

The fourth topic—problems transferring patients (Section D)—particularly involved faulty communication and disagreements between members of the medical staff. The rest of the cases involved communication problems between medical specialists and residents, specialists and physicians on duty, and physicians and nurses, and problems transferring patients from one hospital to another.

We identified 27 overlapping themes linked to the interns' unique position (Section F). The theme that the interns identified most often was their uncertainty regarding personal values and norms (25%), followed by their attitudes towards patients who have not been informed fully or at all (11%), and their daring or not daring to ask critical questions (9%). Other uncertainties, attitudes, and emotions were identified in 2% to 8% of the cases. Existential questions such as "Is this still a dignified human life?" and "Do I really want to become a physician?" were identified in 5% of the cases. The remaining themes—refusing odd jobs, dealing with the criticism of others, feeling pride, problems concerning solidarity with fellow interns, and problems related to gender, ethnicity, or appearance—were mentioned in less than 2% of the cases.

We identified 19 themes related to specific categories of patients (Section G). Noncompliant patients gave rise to the most ethical dilemmas, followed by patients in whom the interns had an emotional interest. Compared with the themes related to their own position, specific categories such as aggressive patients were mentioned rather infrequently. The remaining themes, such as treating colleagues or celebrities, were mentioned in less than 1% of the cases.

The analysis (Section H) shows that the interns had discussed their ethical dilemmas mainly with residents and other interns. They less frequently had discussed problems with supervisors, someone at home, nurses, or others. In 9% of the cases, students explicitly indicated they had not discussed the cases with anyone. In a third of the cases, it was not clear whether the interns had discussed the cases with anyone.

Discussion

Although our interns most commonly reported ethical dilemmas related to disclosure and informed consent, end-of-life decisions, medical failures, and patient transfers, they also reported a multitude of other dilemmas. Clearly, clinical ethics teachers need to be prepared to discuss and analyze many topics.

But not all of the dilemmas reported by the students are covered in preclinical courses. Medical failures and transferring patients from one caregiver to another, for instance, are not explicitly

included in the curricula of general ethics courses. In addition, the themes related to the interns' unique position are not covered in the preclinical courses, but the ethical seminars for interns make up for this. We conclude that as students get closer to starting to practice medicine themselves, the contents of the ethics courses should shift from a theoretical curriculum based upon the dilemmas of experienced practitioners to a practical curriculum that reflects the ethical dilemmas the students themselves have experienced.

In addressing these topics, attention should be devoted to the interns' uncertainty about their own values and norms. One of the paradigmatic cases concerns an intern's uncertainty about how to behave toward a patient who has not yet been informed of a bad diagnosis. As one of the students wrote, "The problematic thing in this situation is that as an intern you know 'better,' but you are obviously not allowed to interfere with the policy and information-giving of the attending physician, even though you are the one who is approached by the patient." Students frequently failed to express their uncertainty. In cases where they disagreed with their superiors' values or behaviors, they hesitated to speak up or pose critical questions. Some of them were angry, shocked, or grieved, but they felt powerless to voice their thoughts or emotions.

Another frequently discussed theme pertains to the limits of treatment. Interns often felt that it was time to stop the treatment, but they hesitated to make a judgment because of their limited clinical experience. Wouldn't the supervisor, more experienced, know better? Perceiving the patient's suffering, interns experienced a dilemma that was related not only to the patient's situation, but to their own situation as well. Could they voice their uncertainty or disagreement? In this perspective, it is encouraging that almost half the students had discussed their ethical dilemmas with residents, supervisors, or nurses. Although the level of the students' satisfaction with these discussions is not known, it is clear that they felt a certain openness to express their opinions in the department. Unfortunately, however, 9% of the interns said they had not talked to anyone. In addition, 35% did not specify whether or not they had talked to anyone.

The data show that in dealing with a variety of topics, ethics education should encourage medical students to explore their moral feelings, analyze the values involved, and identify the place and meaning of their own values with respect to their professional behaviors.

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