Original Articles

Ethical Dilemmas and the Moral Reasoning of Medical Students

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Abstract

Objectives: To analyze the responses of medical students to ethical dilemmas commonly encountered in the clinical setting.

Subjects and Method: A questionnaire based cross sectional survey was conducted on final year medical students from three different medical colleges in Karachi, Pakistan.

Results: One hundred and twenty two students participated. Fifty eight percent were willing to withdraw ventilatory support from a terminally ill patient wanting to die, but very few were willing to either prescribe a lethal drug or to administer it themselves. Eighty seven percent students thought that giving false medical certificates was unethical, however 40% (p value: 0.0006) changed their minds and agreed to it if the reason was good. Ninety three percent said it was unethical to give a prescription in the name of a person other than the patient himself but 36% (p value: 0.004) changed their minds and agreed to it and consequently falsely bill a company account if the beneficiary was poor. Eighty three percent of the students regarded breast examination of an un-consenting female patient under anesthesia by male students as unethical. Sixty percent students called human organ trade unethical. However, when a compelling reason was provided for the trade, 41% (p value: 0.00) changed their minds and said it was ethical.

Conclusion: Students from different colleges have a similar outlook towards ethical dilemmas and their perceptions are based on their own moral reasoning, strongly influenced by socioeconomic issues. Bioethics education did not influence their responses. It is important that bioethics curricula be devised keeping the local and regional peculiarities in mind (JPMA 53:210;2003).

Introduction

Clinical training brings with it a multitude of new experiences for medical students. The education they have received in their pre-clinical years is geared towards helping them better understand and deal with diseases they see in the wards and the clinics. They are however left to their own decision when it comes to dealing with the variety of new emotional conflicts that they encounter in the clinical setting. These experiences include situations that pose ethical dilemmas for the students. One of the ways to arm medical students to better recognize and resolve such ethical conflicts is through formal teaching of bioethics.[1] It is for this reason that bioethics is now an established part of the formal medical curriculum in many countries.[2] Despite this, bioethics has not gained entry into the curricula of most medical colleges in Pakistan.

This paper analyzes the responses of Final Year (Year 5) medical students from three medical colleges in Karachi, Pakistan to commonly encountered situations faced by clinicians. It examines the reasoning process of the medical students on which they base their stance in different ethically challenging situations put to them in the questionnaire. The impact of bioethics education on their responses is also assessed as formal bioethics teaching takes place in only one of the three colleges.

Subjects and Method

A Cross sectional survey of final year medical students form three different colleges was conducted using a structured questionnaire (Tables 1-5) after obtaining an informed consent. Confidentiality was ensured by collecting the consent forms separately from the filled questionnaires. Data was entered, cleaned and analyzed by using Epiinfo 6.04b software.

College A was a public sector institution where no formal bioethics teaching was taking place at any level. College B was a private sector institution with no formal bioethics teaching included in the curriculum, while College C, another private sector medical college had formal bioethics teaching for medical students as part of their pre clinical curriculum. One hundred and twenty two students were administered the questionnaire based on the sample size calculated for group comparison.

Results

One hundred and twenty two students were administered the questionnaire. Thirty nine percent were males and 61% females, a ratio corresponding to the general medical college gender distribution. The questions are detailed in tables 1 to 5. College C was the only institution with bioethics as a part of the curriculum. Despite this, 52% of students from this college denied having received any formal bioethics teaching. Bioethics was not formally taught in colleges A and B but 28% of college A students and 29% of college B students said they had received formal instruction in bioethics.

Fifty eight percent of the students were comfortable with the withdrawal of ventilation from a ventilator dependent patient in compliance with the patients' wishes to end his life (Table 1). However, only 8% respondents were willing to prescribe a lethal dose of a drug to be administered by the patient or a relative for the same purpose while 12% were ready to administer it themselves and cause death in accordance with the wishes of the patient. Fifty eight percent of those who chose to comply with the patients wishes, called it an act of compassion while 17% said it was the patients right to decide and they were simply complying with his choice.

Table 1.

Question 1

Is it morally right for a physician to comply with the wishes of a patient wanting to end his life peacefully rather than continue suffering intractable pain due to terminal cancer by one of the following:

	Options	Yes (%)
a.	Withdraw ventilation from a ventilator dependent patient	58
b.	Prescribe lethal drug to be administered by patient himself or a relative	8
c.	Administer lethal dose of a drug himself.	12

Table 2.

Question 2	Yes (%)	No (%)
Should a physician give a medical certificate of leave from work to a person who is not really sick but can avail no other type of leave and needs time off?	13	87
What if there is a compelling reason?	52	48

Regarding the observed practice of physicians handing out false medical certificates to people for obtaining leave from work, (Table 2) 87% said it was unethical. However, 40% of the respondents who had initially said it was unethical changed their minds and considered it within ethical boundaries when told that the person had a compelling reason and there was no other way for that person of getting leave (p value: 0.0006). There was no difference between the responses from the three medical
colleges.

Table 3.

Question 3	Yes (%)	No (%)
Is it morally acceptable if a physician prescribes expensive medicines on one persons company account for another patient who is not an employee of that company?	7	93
Does it become morally acceptable if the recipient is a poor patient otherwise unable to afford such expensive treatment?	60	40

A large majority of students (93%) were of the opinion that it is unethical to give false prescriptions made out in the name of a person other than the patient himself (Table 3). However, when told that the intended recipient was a poor patient and could not buy the medicines himself, 36% changed their minds (p value: 0.004) and now 60% said it was acceptable to make out fraudulent prescriptions on corporate accounts. Again, there was no difference between the opinions of medical students from different medical colleges.

Eighty three percent students were of the view that it is unethical for male students to perform breast examination on an unconscious patient in the operation theater without her prior consent (Table 4). Sixty two percent of those who justified such an examination said it was a teaching hospital and students had to learn irrespective of what the patient had said, while 24% said that the patient would never know and therefore would not be harmed.

Table 4.

Question 4	Yes (%)	No (%)
Is it morally acceptable to allow male medical students to do breast examinations on a female patient with breast cancer under general anesthesia who had initially refused examination by males in the clinic?	83	17

Regarding human organ trade, 60% students felt it was unethical for a person to be able to sell his kidney while 37% thought there was no harm in such a practice, the remaining had no opinion (Table 5). Those objecting to organ trade felt that such a practice would open avenues for exploitation while those allowing such a trade were of the opinion that the donor had the right to decide. Forty one percent of the students who had initially said that organ trade was unethical, changed their minds and said it was fine if the reason for the trade was justifiable and the donor was competent and willing. (p value: 0.00) There was no difference in the responses form different medical colleges.

Table 5.

Question 5	Yes (%)	No (%)	Don't know (%)
Do you consider human organ trade ethical?	37	59	4
Is such a transaction ethical if a rich person on chronic dialysis with no other source of a healthy kidney was to purchase one for transplantation from a poor but mentally competent and willing donor for cash who needed the money desperately?	57	37	6

Discussion

Although the pre-clinical teaching prepares the students to understand and deal with the clinical problems in the wards, they have to be trained to tackle the ethical issues that emerge in the dispensing of healthcare? Formal bioethics education is now considered essential to prepare the physicians of the future to identify and optimally deal with ethical conflicts encountered in the clinical setting.[1] Bioethics in the

either separate essential modules, or as part of existing courses, aims at building the students capacity to apply ethical reasoning skills which help in the resolution of dilemmas resulting form such conflicts.[3,4] It is for this reason that bioethics is now an integral part of medical curriculum in many parts of the world.[2]

Although there is no printed English language data available to corroborate this, but to the best of the authors' knowledge, College C (included in this study) is the only Pakistani medical college where bioethics is formally taught as part of the pre-clinical curriculum. This leaves the vast majority of Pakistani medical students and graduates to grapple with ethically challenging situations using their own moral judgment, unaided by any formal education to help them through the process. Intriguingly, more than half (52%) of the students of this medical college claimed they had never had any bioethics training. One reason for this erosion of their bioethics education could be that this subject was taught mainly in the 1st and 2nd year as a 'theoretical' subject while the students began to encounter ethical dilemmas only in their clinical years (Year 3 onwards) and were unable to apply their theoretical knowledge in practical clinical situations. Conversely, almost a third of the students from the remaining two medical colleges claimed to have had formal bioethics training where in fact no bioethics was being taught. This reflects the impact of the 'informal' bioethics education that is going on in the wards and the clinics by role models and mentors despite no 'formal' bioethics courses.

Students rotating through tertiary care teaching hospitals, often encounter situations where questions of prolonging life versus prolonging the process of death are posed. End of life decision making processes are difficult for the patient, family as well as the health care providers and raise complex ethical issues. The students were given a scenario describing a terminally ill patient with intractable pain desperately wanting to end his misery by hastening death (Table 1). Although all three options given were leading to the same end point of ending life, students were much more comfortable in removing a ventilator from a ventilator dependent patient (58%) than when it involved either the prescription of, or the administration of a lethal dose of a drug. The most commonly quoted reason for their willingness to end life was compassion, while the most commonly quoted reason not to comply with the patients wishes was that doctors don't kill, they preserve and prolong life and that it was like playing God. Bioethics education made no difference in the responses of students. It is clear that across medical colleges there exists some confusion regarding the end of life decision making process, emphasis being placed more on the process of ending life rather than the concept of it.

In most societies of the world, the practice of making fraudulent medical certificates and prescriptions would raise no question of ethics: they are illegal and immoral practices. But the observed practice in Pakistan is different. Handing out false medical certificates for obtaining leave from work and making fraudulent prescriptions for expensive medicines in the name of individuals with health insurance or corporate health coverage for actual use by poor patients, is a commonly observed practice here. The ultimate goal of providing medicines for the needy in this manner raises few eyebrows. When asked about the practice of giving false medical certificates by physicians, a majority (86%) of the students felt that this was unethical (Table 2).Yet a statistically significant 40% of the students, irrespective of their medical education background, were willing to change their stand if given a reason that looked good enough to grant the fraudulent certificate of leave (p value: 0.0006).

Ninety three percent students denounced the practice of writing fraudulent medical prescriptions as unethical (Table 3). A statistically significant 36% however changed their minds and said it was permissible to write a false prescription and bill a company or an insurance firm if the intended recipient was poor and could not afford to buy the medicines himself. Again, prior bioethics training had no impression on their answers.

Responses to these two questions indicate that although initially the students took a principled stand based on ethical norms, but were unable to maintain it when confronting an emotionally challenging situation. Responding to individuals' needs or beneficence seemed the paramount motivation even if it meant major compromises on principles. This attitude seems quite acceptable to society as well. Harsh economic realities and their impact on the affordability of healthcare seem in part to dictate the decision making process, even compelling students to accept actions that they initially considered unethical. Bioethics training did not seem to give them any additional strength to maintain their position, students from all colleges responding similarly.

The dictates of acquiring a medical education have a potential of conflicting with the rights of the patient. A common situation occurs when a female patient refuses males to examine her. When asked if it was ethically permissible for male medical students to do breast examination of a female patient under general anesthesia, who had initially refused males, the vast majority of the students considered this unethical (Table 4) Of the 17% students who said it was fine, 62% quoted their educational requirement as a reason while 24% said that as the patient would never find out, it was alright to go ahead. Here, the demands of acquiring medical education are influencing the basic moral and ethical principles of the students compelling them to ignore the lack of consent from the lady and take advantage of her vulnerability under general anesthesia and go ahead with the examination. Interestingly, 62% of the students who justified the breast exam on the un-consenting anesthetized patient were from the only college where bioethics is a formally taught subject. Here again, bioethics education had little to do with the ultimate response.

The issue of organ trade is also an important one, with a high regional incidence of end stage renal disease on the one hand and rampant poverty driving individuals to extreme choices on the other.[5,6] Consequently, there is a flourishing underground organ trade industry in this part of the world.[7] Thirty seven percent of the students had no problems with a healthy young man wanting to voluntarily sell his kidney. Of the 60% who thought it unethical, a statistically significant 41% changed their minds and allowed it when told that the 'buyer' was rich enough to pay and had no other source for a healthy kidney while the 'donor' was poor but mentally competent and willing for the transaction as he needed the money desperately (Table 5) Again, confronted with unfortunate economic reality, a large number

of students were willing to compromise on their previously stated ethical stand.

The analysis concluded that views expressed by the students having had formal teaching in bioethics were similar to those of their colleagues from the other two colleges. The impact of socioeconomic factors was significant on the moral reasoning process. This area needs to be studied intensly to modify and develop bioethics teaching programmes pertinent to local and regional realities.[8]

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