Ethics education should make room for emotions: a qualitative study of medical ethics teaching in Indonesia and the Netherlands

Amalia Muhaimin^{1,2} · Maartje Hoogsteyns³ · Adi Utarini⁴ · Derk Ludolf Willems⁵

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Abstract

Studies have shown that students may feel emotional discomfort when they are asked to identify ethical problems which they have encountered during their training. Teachers in medical ethics, however, more often focus on the cognitive and rational ethical aspects and not much on students' emotions. The purpose of this qualitative study was to explore students' feelings and emotions when dealing with ethical problems during their clinical training and explore differences between two countries: Indonesia and the Netherlands. We observed a total of eighteen ethics group discussions and interviewed fifteen medical students at two medical schools. Data were interpreted and analyzed using content analysis. We categorized students' negative emotions based on their objects of reflection and came up with three categories: emotions concerning their own performance, emotions when witnessing unethical behaviors, and emotions related to barriers and limitations of their working environment. Our study suggests that addressing emotional responses in a culturally sensitive way is important to develop students' self-awareness. Teachers should be able to guide students to reflect on and be critical of their own thoughts and emotions, to understand their own moral values, especially when confronted with other individuals.

Keywords Emotions · Ethics education · Medical ethics · Medical students · Clinical training

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✉ Amalia Muhaimin
a.muhamin@amsterdamumc.nl; amalia.muhamin@gmail.com

Extended author information available on the last page of the article

Introduction

One of the teaching methods in medical ethics which enables students to share and discuss real cases is the ethics group discussion. During these discussions, students sometimes share disturbing ethical cases along with their feelings and emotions about the case. Teachers, however, may feel uncertain on how to respond to those emotions, or uncertain if discussing emotions is necessary as part of the teaching goal. Previous studies suggest that teachers rarely discuss or explore students' emotions during these ethical discussions (Leget 2004, Gillam et al. 2014). Teachers often discuss the cognitive and rational ethical aspects, but seldom discuss students' feelings and emotions. They also tend to focus on identifying and resolving ethical dilemmas (ten Have and Gordijn, 2014). This is actually logical and in accordance with one of the goals of ethics teaching, which is to enable students to practice ethical reasoning and ethical decision-making. However, ethics is not only about identifying and solving ethical problems (Leget and Olthuis 2007, Saltzburg 2014, Avci 2016). Ethics is also about recognizing personal values (Avci 2017) and critical reflection, which involve both rational and emotional capacities (Mackenzie 2007).

Ten Have argues that there are two main views in ethics education, namely the modest view and the broad view. The modest view aims to assist health professionals in resolving ethical problems or dilemmas, while the broad view focuses more on character building, to create virtuous individuals and health professionals (ten Have and Gordijn, 2014, Saltzburg 2014). In fact, many medical schools have proposed this broad view of ethics teaching within their curriculum (Carrese et al. 2015, Indonesia 2012, NFU 2009). We believe this broad view is ideal to achieve the goals within the medical curriculum, to prepare students to deal with the continuous changes, complexities and uncertainties in healthcare (Campbell, Chin, and Voo 2007) and prepare them for the lifelong learning throughout their professional lives (Avci 2017). In this paper, we wish to explore students' emotions, including differences in the kind and extent of emotional discomforts, which might be related to cultural backgrounds; and discuss what ethics education, in particular teachers in ethics, can offer to students in this matter. It focuses on students' emotions and how they reflect on their emotions in dealing with disturbing cases. It is part of a larger study on ethics education in medical schools in the clinical training phase (clerkship), comparing two countries with substantial social and cultural differences: Indonesia, a developing southeast Asian country; and The Netherlands, a developed western European country.

Method

The study was done at two medical schools, in Indonesia (INA) and The Netherlands (NL). They have been kept anonymized to avoid any consequences for research subjects and teachers, as well as health care providers. Subjects are clerkship students, namely students who are in their clinical training phase in the hospital. This phase refers to the last two years (Indonesian context) or three years (Dutch context) of their medical training. Ethics teaching in the clerkship phase has been organized sequentially, scheduled every 2–3 weeks, in a form of ethics group discussion (5–15 students) in both schools. As a preparation for the discussions, each student is asked to submit one

ethical case which they have encountered during their clerkship. Students need to have at least completed three clinical rounds as one of the inclusion criteria. There were no exclusion criteria for our study, and we included all group discussions conducted between March 2016 and August 2017, with approximately six months of data collection in each setting. We received schedules for the group discussions and asked the facilitators beforehand if they were willing to have their classes observed, and for Dutch facilitators to conduct the discussions in English for the purpose of this study. Classes in the Netherlands were carried out in English with students' agreement, although students were free to speak Dutch if they wished to do so; while in Indonesia, classes were carried out in the original language, Bahasa Indonesia.

During a period of one year, we conducted a total of 18 participant observations (Table 1) involving 162 students (INA = 50; NL = 112) in total, and in-depth interviews with 15 students (INA = 8; NL = 7) (Table 2). Two participant observations were canceled in the Indonesian setting due to changes in the schedule from the facilitators, while two others in the Dutch setting could not be analyzed due to technical problems. All Indonesian students were of Indonesian origin and all Dutch students were of Dutch origin. Due to differences in the teaching organization and time allocation for the group discussions, the number of groups, participants, and cases which were discussed, differed between the two countries. Moreover, not all cases submitted were discussed in class. We informed students about the study, asked their permission to have the discussion audio recorded, and explained that all data will be kept anonymous and unidentifiable to ensure students' and teachers', as well as patients' and healthcare workers', privacy and confidentiality. After each class, students were contacted through e-mail (Dutch setting) or text message (Indonesian setting) and asked if any of them was interested to be interviewed for the study. A written consent, each in English and Bahasa Indonesia, was obtained at the time of interview; and interviews were done in Bahasa Indonesia for the Indonesian students and in English for the Dutch students.

This paper focuses on students' feelings and emotions. The two words are used interchangeably in this paper, although there have been discussions suggesting different meanings between the two. In our study, we observed how students discuss their cases in the small groups, including how they expressed their emotions. We then explored their experience and emotions further during the interviews. Although students sometimes expressed their feelings spontaneously when sharing the cases, we explored this further using questions such as: *"How do you feel about the case?"* or *"Could you describe how you felt at that time?"* Different questions were then formulated according to students' narratives and responses (Silverman 2006, McGrath, Palmgren, and Liljedahl 2018). All data collection, including observations, interviews, and coding were done by AM, while categories and content analysis were checked together with DW and discussed until consensus was reached. We began with looking at how students expressed their feelings and analyzed how they reflected on their emotions, and then made a categorization based on their objects of reflection (Ottesen 2007, Schutz et al. 2006). Interpretations of transcripts were sent to participants to ensure their own meanings and perspectives are correctly represented (Tong et al. 2012, O'Brien et al. 2014, McGrath, Palmgren, and Liljedahl 2018). All participants responded positively, and Indonesian participants have suggested minor corrections for the English translation of terminologies and nuances.

Table 1 Participant Observations

Indonesia			The Netherlands		
Group*	Participants	Cases discussed	Group	Participants	Cases discussed**
I(a)	8	8	I	14	2
			II	14	2
II(b)	13	3	III	15	2
			IV	9	5
III(a)	8	8	V	8	2
III(b)			VI	12	12
IV(a)	9	9	VII	9	9
IV(b)			VIII	9	9
V(a)	12	12	IX	12	3
V(b)			X	10	10
Total	50	36	Total	112	56

*Discussions were conducted in two sessions:

(a) all cases discussed briefly.

(b) two to three selected cases from the first session discussed more in depth.

**Facilitators grouped cases with similar topics and discussed one case from each topic

Results

We analyzed how students reflected on their emotions based on their objects of reflection and came up with three categories: reflections based on emotions related to oneself (*“not performing well enough”*), to the other (*“witnessing unprofessional behavior”*), and to their working environment (*“boundaries and limited resources”*).

Not performing well enough

This first category shows how students can feel emotionally disturbed by their work performance. It is part of the student’s reflection on oneself, on how well they have performed at work and what could have been done better. A Dutch student shared a case during an interview, which he considered emotionally difficult and expressed his frustration several times. The case was about a young mother who was in eight weeks of her pregnancy who had severe headaches and fever. The doctors suspected sarcoidosis but could not prove it because the radiological tests would need a contrast which

Table 2 In-depth interview with students

Indonesia		The Netherlands	
Female	Male	Female	Male
4	4	4	3
8		7	

was teratogenic, nor could they give any medication because it was also teratogenic. After two weeks in the hospital, the patient suffered from severe pain in the legs, so she was given epidural pain medication. The case was complicated and stressful for the medical team, but it became particularly stressful for the student because of a small incident. For this reason, he enthusiastically shared this particular case.

*"...I stood on the side and I just looked at the numbers go up, and I was like... please let this end as soon as possible... and then when we arrived at our floor, we both walked out... I mean I couldn't just walk away, so I looked at him and he looked at me... and I was like (said), 'Well, good luck!', and I felt so stupid immediately... because it was such a... I don't know... like... (as if he said) 'Well f*** you, you should do something!' or something like that... and well... he said 'Yeah thanks'.... and... it became very uncomfortable. I wanted to make him feel more at ease, like help him out, and I couldn't, and that was so annoying, so frustrating, and I didn't know how to cope with that!" (C3, male, 1st year clerkship)*

The student found himself in an awkward situation where he met the patient's husband in the elevator. He did not know what to say and eventually said something he had deeply regretted. The incident was shocking for him and caused negative emotions and distress. Furthermore, he described how he reflected very much on the case in the weeks after and even thought of taking the stairs more rather than the elevator to avoid similar incidents. He considered himself as having behaved unprofessional, and that he could have done better.

In another interview, an Indonesian student also shared her experience during her round in surgery, when a seven-year-old boy was admitted to the emergency room (ER) with a persistent headache due to an accident the day before. The child was diagnosed with epidural hematoma (EDH) and was planned for surgery. At this point, the parents did not give consent and said they needed some time to think. The nurse, student, and neurosurgical resident had respectively discussed with the parents and tried to convince them that there was nothing they could do other than to perform surgery. The resident also stated that the child had a good prognosis. But the parents insisted on bringing the child home because they wanted to try an alternative (spiritual) medicine called "*ruqyah*".

"Well... we missed (the opportunity) ... and the patient was brought home. So... I just feel sad, thinking... there was this kid, who couldn't decide for himself, and his parents perhaps were not well educated... and they decided for 'ruqyah' instead... (sighing...). Because then I also realized... an EDH needs urgent surgical treatment, and if it's an emergency then you don't necessarily need an informed consent, right? Although... (thinking...) in this hospital, you will always need a (written) consent for everything, including cases like EDH, which is considered an emergency." (K4, female, 3rd year clerkship)

The student said that she was disturbed by the case, feeling upset, resentful, and helpless at the same time. During the interview, she expressed her feelings, admitting that she was quite exhausted that day with only two students on duty, and that she

regretted not knowing the reason why the parents refused, whether it was because of their belief or financial reasons. She realized afterwards that the medical team should have tried harder to protect the child who could not speak for himself. Although it had been almost a year since the case, she sometimes thought about the case with guilty feelings, especially when dealing with pediatric patients.

Witnessing unprofessional behavior

In our study, students from both settings shared cases in which they witnessed perceived unethical or unprofessional behavior from their superiors and co-workers. During an interview, a Dutch student mentioned that she had brought up her case particularly because it was emotionally difficult and disturbing for her. During her round in obstetrics, which she experienced more than a year, she had observed a few cases where she felt quite sure that the health personnel on duty had intentionally neglected the patient's request for pain medication during labor and did not communicate or discuss it with the patients. The health personnel said that they would pass the request to the anesthesiologists, but in fact did not do so until it was finally too late to give pain medication when the anesthesiologists came.

"I have seen one midwife who will wait until she was 6 (the dilatation) so she couldn't get it anymore because she thought that it was not necessary, but then I thought... 'I'm sorry, but she's asking for pain medication... Isn't it your job then to call the anesthesiologist'? I really had some ethical problem with this, because I thought... I don't know... I think you're not really taking her (the patient's) request seriously... What I found disturbing is that this is really sensitive... a really sensitive field... and I felt that the women that were working there... they were losing their empathy towards their patients or something, and THAT I found disturbing." (C1, female, 3rd year clerkship)

Although the patients did not complain, the student thought that it was not right. She had discussed the case with her fellow students, but many thought differently about the case. Her peers believed that the midwives were protecting the patients from their own decisions because there are also risks of getting an epidural anesthesia. However, she had a different way of thinking and strongly believed that as health personnel, they should have respected the patient's wish and communicate better with the patients. The student never brought up the case in the group discussion because she thought it was not a serious ethical case. Nevertheless, she still felt disturbed by the case and wondered if any of the patients had said something about it to the hospital or to the doctors afterwards.

In the Indonesian setting, a student presented a case during a group discussion about a 40-year-old woman who was admitted to the ER late afternoon. The patient was unconscious with a Glasgow Coma Scale (GCS) of 6, diagnosed with EDH, and planned for surgery by the surgical resident. The students said that the process of admitting the patient to the operation room took quite long, especially because they had to wait for the anaesthesiologist. Around 8 pm, the patient's GCS had dropped to 3, so the resident decided not to operate and informed the family that the patient's condition had deteriorated and was too risky for the operation. After 15 min the patient passed

away and the anaesthesiologist finally arrived. When he was told that the operation had been cancelled, he replied: *"So why didn't you tell me (that the operation was cancelled)?"* – referring to his disappointment of coming there for nothing. The students felt disappointed and resentful at the same time but were relieved that the patient's family accepted the situation because the resident had explained beforehand about the slim chances of the operation.

During another group discussion in Indonesia, students brought up a case about a surgeon whom they considered very rude to patients, especially during his work at the outpatient clinic. "He is often harsh to patients and does not listen, simply ordering them to open their clothes, take a glimpse at the wounded area, write a prescription, and say nothing else while the patient gets escorted out of the examination room by the nurse", students said. When asked by the facilitator how they felt about working with the surgeon, the majority of students said that it was stressful and uncomfortable being in their position. Their task was to assist the surgeon and they felt ashamed and sorry for the patients. Interestingly, one of the students said that he was not that disturbed. He said that he could understand the surgeon's act considering the number of patients and limited time, and that he actually likes the surgeon because he is willing to share his knowledge despite his busy schedule and usually gives good grades to students. The student said that the surgeon is also actually quite funny, which he considered important for doctors and clinical teachers, to light up the stressful situation.

Boundaries and limited resources

For this third category, all cases came from the Indonesian setting, where students dealt with complex bureaucracy and scarcity on a daily basis. In an interview, one of the students shared a case during his round in pediatrics. He said that he was actually not in charge of the patient, nor was he on duty; but he felt concerned about the case, which he had heard from his colleagues who were on duty that night. One evening, there was a child admitted to the ER, diagnosed with encephalitis, and referred to the ward.

"The patient reached the ward around 11 pm, if I'm not mistaken... then around 1 am the (patient's) condition deteriorated... so they reported the condition to the consultant on duty that night... and the consultant referred the patient to the HCU (High Care Unit). But at that time, the HCU was full, so the patient could only be admitted to the HCU around 4 am... then there was an empty bed at the ICU (Intensive Care Unit), so he was then referred to the ICU... but then around 7 or 8 am the patient died. So, my concern was... if the patient's condition was already poor since the beginning (in the ER), why did he have to go all the way to the ward? Why didn't they send him directly to the HCU or ICU? They should have done better than that!" (K3, male, 3rd year clerkship)

The student said that he was puzzled and felt disappointed about the situation. He tried to make sense of the case and said that there might have been many patients in the ER at that time, so there might have been some information missing or cases of miscommunication between the doctors in the ER and the consultant. He said that this had not been the first case and that students were concerned. From the group discussions, we found similar cases where students felt disappointed and resentful about the healthcare

and training system. Students often questioned the complicated bureaucracy and poor communication among medical staff in the hospital and felt helpless about their working environment.

During one of the group discussions, another student shared her concerns about doctors' workload at the outpatient clinic. She gave an example of dr. X, who is a surgeon. In one day, he has to do a follow up of all his patients in the ward, do the outpatient clinic, and perform surgeries. In the outpatient clinic there are more than 100 patients per day for one doctor, which means 3–4 h of outpatient service for 100 patients, only 2–3 min of encounter, and no time for questions. The service is often not worth the long travel to the hospital plus waiting hours and did not satisfy the patients, who are mostly from the lower class. Patients often looked puzzled because they were not well informed about their illness and on what was going on. Students felt concerned about this and felt sorry for the patients. The limited number of doctors also had a negative impact on patients in the wards. Students said that they sometimes "did not follow the rules" or bend the rules for patients' sake. This included actions such as skipping or jumping the line within the training hierarchy in case of emergencies, buying their own blood pressure monitor for patients, or collectively buying an oxygen mask for a patient due to the lack of medical equipment in the hospital.

There were also multiple cases where students felt concerned about the lack of facilities in the hospital. There is sometimes lack of privacy because the rooms are limited, with no walls or curtains in between, so other patients can sometimes hear and see what is going on. The inpatient wards are divided into different classes (VIP, I, II, III) according to patients' financial ability and the type of health insurance. Hence, patients in the lower classes have less privacy and facilities, and sometimes different medication and treatment. Students often felt concerned and helpless at the same time because they could not do anything. Adding to the unjust situation is the fact that healthcare workers are often given special privilege to cut the queue and have more privacy. When students were asked how they felt about having such privilege as future doctors, students had different feelings. Many expressed their doubts because it was unjust, although they admitted that it is tempting for them. Surprisingly, one of the students clearly expressed his opinion that they deserve to have that privilege and that he would be happy to use it for himself and his family in the future.

Discussion

Reflection and self-evaluation

In medical training, students often feel worried by how well they can perform in front of their seniors and teachers and often feel distressed when receiving negative feedback (Good 1998). However, we found that students can also feel disturbed and distressed when they feel that their work or performance was not as well as they themselves expected in regard to patient care. They believe that they might have caused harm and contributed to poor outcomes of patients (Monrouxe 2012). This is also part of an ethical reflection related to one's responsibility to others, in this case the patients and their families (Burns 2017). We believe it is important to give some space and opportunity for students to share such problems, in which they feel they might have

been ethically responsible for the patient's wellbeing (Gillam et al. 2014, Guillemin and Gillam 2015, de Zulueta 2015). Although it is not always easy to share feelings about such problems in a group, we think it is important for students to learn that having negative emotions of oneself, such as guilt and regret, is normal and can be a good sign of self-reflection and self-evaluation, which is part of the broad view in ethics education (Branch 2005). Moreover, other students might have similar experience and can support each other and learn from the experience as well.

In this first category, we found similarities between the two countries. During the group discussions, students in both settings rarely shared cases in which they felt they have not performed well enough. We suggest that there might be two reasons for this. First, students often feel uncomfortable admitting that they made mistakes or did something unethical in front of their peers and teachers (Good 1998). While during the interviews, students had more freedom and time to express their thoughts and emotions in a relaxed atmosphere to the interviewer, who is not part of the training system. Second, some students may have a higher sense of responsibility for patients than others, considering that as clerkship students, they are not yet responsible for patients. Results of our study also show that in both settings, reflection and self-evaluation have not yet been incorporated much into the learning activities of the ethics clerkship curriculum. Moreover, the group discussion is the only form of ethics teaching during clerkship in both schools, although it is conducted slightly more frequently in the Dutch setting.

Discussing unethical behavior of others

Previous studies have shown that at least 50% of medical students have witnessed unethical behavior from their seniors and teachers during clinical training (Imran et al. 2014, Kovatz and Shenkman 2008, Okoye, Nwachukwu, and Maduka-Okafor 2017). Unfortunately, we have not found any literature on experiences from Indonesian or Dutch medical students regarding this topic, although this does not mean that acts of unethical behavior do not occur or are more prevalent in either setting. Despite the large number of publications, there is limited discussion within those studies on what students thought and felt about their experience. It is clear however, from our study, that many Indonesian students shared negative feelings such as anger, disappointment, frustration, regret, and resentment due to their experiences of witnessing unethical behavior from their colleagues, seniors and teachers in their daily work. Our concern is that these negative emotions may lead to long term consequences such as emotional exhaustion and decreasing moral sensitivity (Monrouxe et al. 2015, Rushton 2017).

Cases of unethical behavior, in our study, were more often brought up by Indonesian students, both in interviews and group discussions. There are perhaps two reasons for this. First, there is a huge difference in terms of the health care system as well as the education system between the two countries, characterized by a more paternalistic system in Indonesia. This may lead to students feeling disturbed by healthcare workers perceived as behaving unethically, while patients, on the other hand, might feel that they are just being treated normally like other patients. Second, there is a difference in the organization of the group discussions between the Dutch and Indonesian setting. In the Dutch setting, students are given a set of criteria for the cases which leads to an ethical dilemma; while in the Indonesian setting, students were free to share any cases

which they felt problematic, without any certain criteria. Cases of unethical behavior are often considered an ethical issue but not an ethical dilemma. Moreover, Dutch students have a mentor outside of their ethics education program, whom they can share their problems and concerns with, including problems about unethical behaviors of seniors. This might explain why there were less cases about this topic reported by Dutch students during the group discussions.

Working in a difficult/intrusive environment

In many countries, poverty and scarcity still provide the most difficult ethical challenges for health practitioners in their daily work (Olweny 1994) and “justice” is a difficult topic for ethics teachers to discuss with students. Today, medical students perhaps see this problem in a different perspective than their seniors. Since the emergence of bioethics education in medical schools worldwide, medical students are now “well equipped” with ethical principles and values. However, in situations where health care access and resources are one of the major issues, ethical principles such as autonomy and justice often become surreal and unrealistic for students, as described in our study. A number of Indonesian students expressed their concerns, that ethics teaching somehow becomes nonsense and useless (*Bahasa Indonesia*: “*percuma*” or “*sia-sia*”) in such an environment, referring to the fact that students can hardly do anything in such situations. Respecting patient’s autonomy become somewhat vague when patients actually do not have any, or limited, choices due to financial reasons and scarcity. At the same time, Dutch students hardly shared any emotional experiences on the topic of health care access and lack of resources. Hence, our study can perhaps contribute to the limited studies about students’ experiences in working in a rather intrusive system and difficult environment with limited resources.

From our study, we learned that clerkship students in the Indonesian setting had numerous tasks, such as performing routine follow-ups, monitoring patients and night shifts duty, to support the overload work of their supervisors. This is very different from the Dutch training system, where clerkship students only encounter a limited number of patients in their daily work, far less than the Indonesian. With the relatively small number of patients and clinical tasks, Dutch students have more time to discuss clinical cases thoroughly with their supervisors and also have more free time outside of their clinical clerkship. Moreover, students in the Indonesian setting shared feelings of exhaustion, of being overwhelmed and of powerlessness (*Bahasa Indonesia*: “*pasrah*”) concerning their workload in the hospital. During one of the interviews, an Indonesian student admitted that he is actually often unaware of ethical problems going on in the hospital due to his workload, both academic and clinical. Therefore, although he appreciated and enjoyed learning ethics during the bachelor phase, he had doubts if it had any benefit for their clerkship phase, not because it was irrelevant, but due to the fact that there is hardly any time and space for ethical reflection. Insights from our study suggests that assigning clerkship students with too many clinical tasks might cause harm, even if it can benefit students in enhancing their clinical skills and is needed for the sake of patients. Teachers and physicians working in academic hospitals should be aware of this problem and try to balance the risks and benefits for both students and patients.

It is also interesting to learn from our study that students have sometimes taken actions based on their own initiatives and moral values for the patient's sake, despite their limited level of responsibility and the potential risks they bear as students towards their senior/superior. Whether or not students have taken any actions, such as not following orders or "bending the rules", students in the Indonesian setting shared mixed feelings of doubts and uncertainties, worries and guilt, in regard to their own decisions. In many cases, students expressed feelings of relief after the group discussions, hearing similar experiences from their peers and receiving support from both peers and teachers for their efforts and courageous actions. Even though many students felt overwhelmed and simply accept the fact that they work in a hospital with limited resources, we believe that willingness from students to take such actions is a positive sign of moral resilience (Rushton 2017, Young and Rushton 2017). Although Rushton suggests that moral resilience is unlikely to flourish in environments that lack a culture of ethical practice, we suggest in contrary, that being in a rather intrusive environment and experiencing ethical challenges may trigger one's need for moral resilience, as opposed to being in a rather ideal or non-intrusive environment where everything is ethically and systematically well organized.

Questioning and educating emotions

Students may have diverse opinions and emotions in dealing with disturbing cases, as shown in our study. Some might have negative emotions, while others can be indifferent or uncertain on how to respond. However, some students might also have positive emotions while the majority find it disturbing, such as the two cases in our study where one of the students was not disturbed by the doctor's unprofessional behavior of being rude to patients, and another student feeling fine with doctors having special privilege in the hospital while it was unjust for other patients. In such cases, teachers might feel uncertain on how to respond to these situations, as they fear that their honest opinions may stop students from being open and willing to share their thoughts and emotions. At the same time, teachers might have the feeling that such positive emotions in disturbing cases might be "not right" and worrying, in regard to students' sensitivity and moral development. Our question is whether we are allowed to question one's emotion and if emotions can be educated. Cates, in reviewing Martha Nussbaum's "Upheavals of Thoughts", stated that *"emotions have some relationship to thoughts, especially to beliefs and evaluative judgments, and they are appropriately subject to critical reflection and moral evaluation"*. She also argues that some beliefs, which influence one's emotions, are sometimes false, and that it is good to correct false beliefs (Cates 2003). Therefore, we suggest that teachers can indeed question students' emotions and that it is possible to educate emotions. We believe that questioning one's emotion is needed to clarify one's beliefs and values, which is also an important step in the process of ethical deliberation.

In our study, there is a slight difference between the two settings with regard to how teachers facilitate the group discussions. Teachers in the Dutch setting used a more structured method compared to the Indonesian, which was more flexible and less structured. Therefore, teachers in the Indonesian setting had more opportunity to ask students how they felt after dealing with their ethical problems. However, students' reasonings were often not explored or discussed further, and teachers sometimes

seemed uncertain on how to respond to students' emotional reactions. Gracia suggests that the role of teachers in this case should be neither "imperative" (indoctrinating values) nor purely "neutral" (value free). Rather, he proposes the so called "Socratic" or "deliberative" method, which emphasizes the practice of reasoning (Gracia 2016). Teachers should not judge the way students feel or think, but rather pose questions until the students themselves realize that what they feel, or think, is false. Differences in knowledge, experiences, and beliefs, indeed may cause different emotions among individuals. By guiding them through their reasonings, teachers can understand where the emotions are coming from and students can understand their own emotions as well as reflect on their own knowledge, beliefs and values. One might say that this brings ethics discussion or moral case deliberation too close to psychological guidance or even psychotherapy. However, we believe that the difference between the two lies on the main goal or purpose. In ethics teaching, the main goal should be the practice of moral reasoning while also dealing with emotions, and not to enhance or improve one's mental health as in psychotherapy.

Conclusion

Findings from our study show that contextual and cultural differences play an important role in shaping students' perceptions as well as emotions in dealing with ethical problems. We found similarities from both settings with regard to students' emotions, in particular related to their satisfaction of their own performances as medical students, and to their evaluation of the work performances of others, namely other healthcare workers in the hospital. We found a difference, however, in regard to students' emotions related to the working environment; Indonesian students more often had negative emotions in dealing with ethical problems related to their training system as well as healthcare system, due to the limited facilities and resources in their workplace. Our study suggests that addressing emotional responses to ethical problems in a culturally sensitive way is important to guide students in understanding their own character, by learning and reflecting from their own responses, as well as others. Ethics education, therefore, should provide room for students to express their emotions; and group discussions may be a perfect medium to achieve these goals by including emotional impacts as part of the structured method. Teachers, moreover, hand, should be prepared in dealing with students' emotions. Hence, teachers may need further training, to be able to guide students to be critical of their own thoughts and emotions, by reflecting on their own knowledge and beliefs.

Limitations

In the Dutch setting, all classes observed and interviews, were conducted in English, which is not the native language of the researcher nor the participants. Hence, slight misinterpretations might have occurred, although students rarely spoke Dutch during the classes (despite the opportunity given) and spoke English fluently. This study was conducted in two academic hospitals, and therefore, the results might or might not be similar elsewhere.

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Compliance with ethical standards

Conflict of interest On behalf of all authors, the corresponding author states that there is no conflict of interest.

Ethical approval This study did not have any direct contact or interventions with patients, and therefore was not required to apply for ethical approval from the research ethics committees of both institutions.

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References

- Avci, Ercan. 2016. Learning from experiences to determine quality in ethics education. *International Journal of Ethics Education* 2 (1): 3–16. <https://doi.org/10.1007/s40889-016-0027-6>.
- Branch, W. T. 2005. Use of critical incident reports in medical education - A perspective. *Journal of General Internal Medicine* 20 (11):1063–1067. <https://doi.org/10.1111/j.1525-1497.2005.00231.x>.
- Avci, Ercan. 2017. A normative analysis to determine the goals of ethics education through utilizing three approaches: Rational moral education, ethical acculturation, and learning throughout life. *International Journal of Ethics Education* 2 (2): 125–145. <https://doi.org/10.1007/s40889-017-0032-4>.
- Burns, L. 2017. What does the patient say? Levinas and medical ethics. *The Journal of Medicine and Philosophy* 42 (2): 214–235. <https://doi.org/10.1093/jmp/jhw039>.
- Campbell, A.V., J. Chin, and T.C. Voo. 2007. How can we know that ethics education produces ethical doctors? *Medical Teacher* 29 (5): 431–436. <https://doi.org/10.1080/01421590701504077>.
- Carrese, J.A., J. Malek, K. Watson, L.S. Lehmann, M.J. Green, L.B. McCullough, G. Geller, C.H. Braddock 3rd, and D.J. Doukas. 2015. The essential role of medical ethics education in achieving professionalism: The Romanelli report. *Academic Medicine* 90 (6): 744–752. <https://doi.org/10.1097/ACM.0000000000000715>.
- Cates, D.F. 2003. Conceiving emotions - Martha Nussbaum's upheavals of thought. *Journal of Religious Ethics* 31 (2): 325–341. <https://doi.org/10.1111/1467-9795.00140>.
- de Zulueta, P.C. 2015. Suffering, compassion and 'doing good medical ethics'. *Journal of Medical Ethics* 41 (1): 87–90. <https://doi.org/10.1136/medethics-2014-102355>.
- Gillam, L., C. Delany, M. Guillemin, and S. Warmington. 2014. The role of emotions in health professional ethics teaching. *Journal of Medical Ethics* 40 (5): 331–335. <https://doi.org/10.1136/medethics-2012-101278>.
- Good, Mary-Jo Delvecchio. 1998. *American medicine: The quest for competence*. Los Angeles: University of California Press.
- Gracia, Diego. 2016. The Mission of ethics teaching for the future.Pdf>. *International Journal of Ethics Education* 1: 7–13.
- Guillemin, M., and L. Gillam. 2015. Emotions, narratives, and ethical mindfulness. *Academic Medicine* 90 (6): 726–731. <https://doi.org/10.1097/ACM.0000000000000709>.

- Imran, Nazish, Imran Ijaz Haider, Masood Jawaaid, and Nauman Mazhar. 2014. Health ethics education: Knowledge, attitudes and practice of healthcare ethics among interns and residents in Pakistan. *JPMI* 28 (4): 383–389.
- Indonesia, Konsil Kedokteran. 2012. Standar Kompetensi Dokter Indonesia. In *Konsil Kedokteran Indonesia*. Jakarta: Indonesian Medical Council.
- Kovatz, Susy, and Louis Shenkman. 2008. Unethical behaviour witnessed by medical students during their medical studies. *Open Ethics Journal* 2: 26–28.
- Leget, C. 2004. Avoiding evasion: Medical ethics education and emotion theory. *Journal of Medical Ethics* 30 (5): 490–493. <https://doi.org/10.1136/jme.2003.004697>.
- Leget, C., and G. Olthuis. 2007. Compassion as a basis for ethics in medical education. *Journal of Medical Ethics* 33 (10): 617–620. <https://doi.org/10.1136/jme.2006.017772>.
- Mackenzie, Catriona. 2007. Critical reflection, self-knowledge, and the emotions. *Philosophical Explorations* 5 (3): 186–206. <https://doi.org/10.1080/10002002108538732>.
- McGrath, C., P.J. Palmgren, and M. Liljedahl. 2018. Twelve tips for conducting qualitative research interviews. *Medical Teacher*: 1–5. <https://doi.org/10.1080/0142159X.2018.1497149>.
- Monrouxe, L. V., and C. E. Rees. 2012. It's just a clash of cultures: emotional talk within medical students' narratives of professionalism dilemmas. *Advances in health sciences education : theory and practice* 17 (5): 671–701. <https://doi.org/10.1007/s10459-011-9342-z>.
- Monrouxe, L.V., C.E. Rees, I. Dennis, and S.E. Wells. 2015. Professionalism dilemmas, moral distress and the healthcare student: Insights from two online UK-wide questionnaire studies. *BMJ Open* 5 (5): e007518. <https://doi.org/10.1136/bmjopen-2014-007518>.
- NFU. 2009. In *The 2009 framework for undergraduate medical education in the Netherlands*, ed. C.L.A. van Herwaarden, R.F.J.M. Laan, and R.R.M. Leunissen. Utrecht: Nederlandse Federatie van Universitair Medische Centra.
- O'Brien, B.C., I.B. Harris, T.J. Beckman, D.A. Reed, and D.A. Cook. 2014. Standards for reporting qualitative research: A synthesis of recommendations. *Academic Medicine* 89 (9): 1245–1251. <https://doi.org/10.1097/ACM.0000000000000388>.
- Okoye, O., D. Nwachukwu, and F.C. Maduka-Okafor. 2017. Must we remain blind to undergraduate medical ethics education in Africa? A cross-sectional study of Nigerian medical students. *BMC Medical Ethics* 18 (1): 73. <https://doi.org/10.1186/s12910-017-0229-2>.
- Olweny, C. 1994. Bioethics in developing countries: Ethics of scarcity and sacrifice. *Journal of Medical Ethics* 20 (3): 169–174.
- Ottesen, Eli. 2007. Reflection in teacher education. *Reflective Practice* 8 (1): 31–46. <https://doi.org/10.1080/14623940601138899>.
- Rushton, C.H. 2017. Cultivating moral resilience. *The American Journal of Nursing* 117 (2 Suppl 1): S11–S15. <https://doi.org/10.1097/01.NAJ.0000512205.93596.00>.
- Saltzburg, Lauren. 2014. Is the current state of medical ethics education having an impact on medical students. *Online Journal of Health Ethics* 10 (2). <https://doi.org/10.18785/ojhe.1002.02>.
- Schutz, P.A., J.Y. Hong, D.I. Cross, and J.N. Osbon. 2006. Reflections on investigating emotion in educational activity settings. *Educational Psychology Review* 18 (4): 343–360. <https://doi.org/10.1007/s10648-006-9030-3>.
- Silverman, David. 2006. *Interpreting Qualitative Data*. Third ed. London: SAGE Publications.
- ten Have, Henk, and Bert Gordijn, eds. 2014. *Handbook of global bioethics*. Dordrecht Heidelberg New York London: Springer Reference.
- Tong, A., K. Flemming, E. McInnes, S. Oliver, and J. Craig. 2012. Enhancing transparency in reporting the synthesis of qualitative research: ENTREQ. *BMC Medical Research Methodology* 12: 181. <https://doi.org/10.1186/1471-2288-12-181>.
- Young, P.D., and C.H. Rushton. 2017. A concept analysis of moral resilience. *Nursing Outlook* 65 (5): 579–587. <https://doi.org/10.1016/j.outlook.2017.03.009>.

Affiliations

Amalia Muhaimin^{1,2} · Maartje Hoogsteyns³ · Adi Utarini⁴ · Derk Ludolf Willems⁵

Maartje Hoogsteyns
m.hoogsteyns@amsterdamumc.nl

Adi Utarini
adiutarini@ugm.ac.id

Derk Ludolf Willems
d.l.willems@amsterdamumc.nl

¹ Department of Bioethics and Humanities, Faculty of Medicine, Universitas Jenderal Soedirman, Kampus Kedokteran, Jl. Dr. Gumbreg 1, Purwokerto, Indonesia

² Department of General Practice, Section of Medical Ethics, Amsterdam University Medical Center, University of Amsterdam, Meibergdreef 15, 1105 AZ Amsterdam, The Netherlands

³ Department of General Practice, Section of Medical Ethics, Amsterdam University Medical Center, University of Amsterdam, Amsterdam, The Netherlands

⁴ Department of Health Policy and Management, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada, Yogyakarta, Indonesia

⁵ Department of General Practice, Section of Medical Ethics, Amsterdam Public Health, Amsterdam University Medical Center, University of Amsterdam, Amsterdam, The Netherlands