Original Article

Access this article online

Quick Response Code:

Website: www.jehp.net

DOI: 10.4103/jehp.jehp_272_19

Obstacles of professional behavior among medical trainees: A qualitative study from Iran (2018)

Neda Yavari[1,2], Fariba Asghari[1], Zahra Shahvari[3], Saharnaz Nedjat[4,5], Bagher Larijani[6]

[1]Medical Ethics and History of Medicine Research Center, Tehran University of Medical Sciences, [2]Department of Medical Ethics, School of Medicine, University of Medical Sciences, [3]Department of Reproductive Health, School of Nursing and Midwifery, Tehran University of Medical Sciences, [4]Department of Epidemiology and Biostatistics, School of Public Health, Tehran University of Medical Sciences, [5]Knowledge Utilization Research Center, Tehran University of Medical Sciences, [6]Endocrinology and Metabolism Research Center, Endocrinology and Metabolism Clinical Sciences Institute, Tehran University of Medical Sciences, Tehran, Iran

Address for correspondence:
Prof. Bagher Larijani, Endocrinology and Metabolism Research Center, Endocrinology and Metabolism Clinical Sciences Institute, Tehran University of Medical Sciences, Tehran, Iran.
E-mail: larijanib@tums.ac.ir

Received: 21-05-2019
Accepted: 12-06-2019

Abstract:

INTRODUCTION: Despite all efforts that have been made to promote professional behavior among medical trainees, unfortunately, reports from medical schools around the world confirm the prevalence of nonprofessional behaviors by medical students. Experts in the field of medical ethics and medical education in different countries have suggested several reasons for failing to minimize unprofessional performance among medical students.

MATERIALS AND METHODS: This qualitative study aimed to promote our understanding from the challenges faced by Iranian medical students in providing professional behavior. The study was first conducted in the form of a semi-structured face-to-face interview with medical students and then completed with a focus group discussion (FGD) session. Forty-nine medical students participated in the interviews and 11 students participated in the FGD session. Qualitative conventional content analysis was used for examining the data.

RESULTS: The participants classified the obstacles of professional behavior into the following three main categories: problems related to educational system, problems related to the society, and problems related to students themselves.

CONCLUSION: Regarding the impact of various personal, social, and educational factors on the creation and expansion of unprofessional behaviors among medical students, it is essential to have a comprehensive approach for solving the problem.

Keywords:

Medical education, medical students, professionalism, unprofessional behavior

Introduction

Professionalism in medicine has been supported extensively by various medical organizations throughout the world since proposed by the American Board of Internal Medicine. The Charter consists of the following three principal basis: "the primacy of patient welfare, patient autonomy, and social justice" and ten moral obligations including the obligation to "preserve the competency, honesty with patients, confidentiality, proper communication with patients, improve the quality of care, fair distribution of limited resources, the promotion of medical knowledge, maintaining trust through the management of conflict of interest, carry out professional responsibilities, and improving access to care."[1]

Professionalism consists of the following three main sections: professional knowledge, professional attitude, and professional behavior. In most cases, professional behavior is the first manifestation of professionalism.

According to several scholars, unprofessional behavior of physicians has serious adverse effects on the relationship between physicians and patients. It specially ruins the trust of community on the health-care system.[2-5]

How to cite this article: Yavari N, Asghari F, Shahvari Z, Nedjat S, Larijani B. Obstacles of professional behavior among medical trainees: A qualitative study from Iran (2018). J Edu Health Promot 2019;8:193.

Trust in physician–patient relationship is critically important due to uncertainties in the nature of medicine and vulnerability of patient who relies on the competence and intentions of practitioner.[6] The impact of physicians' commitment to professional behavior is undoubtable in the consolidation of trust of the community to health provider systems and achievement of the systems' educational, research, and therapeutic goals. Maintaining trust, basically, is considered one of the most important goals of professionalism instructions.[7,8]

In spite of all the efforts taken in medical universities of different countries to incorporate professional behavior among medical trainees, studies reflect the prevalence of nonprofessional behaviors of medical students in different grades.[9]

Medical ethicists have proposed several causes for the prevalence of nonprofessional behaviors among medical students.[10-12] One of the most important detected factors is hidden or informal curriculum. This curriculum often contains certain moral messages which are in confrontation with the ethical instructions of the official curriculum. In other words, educational environment in medical schools often include two overt and covert training systems which simultaneously form the professional identity of medical students.[13]

Among the various types of tacit instructions, training based on interpersonal interactions is of high importance. Students usually receive conflicting messages from higher members of medical team, especially in clinical settings. These messages indirectly present the proper or acceptable moral behavior and attitude in the setting. The hierarchical system in medical teams and the position of medical students at the lowest level of this longitudinal relationship, forces education based on learning from higher medical team members.[14]

The stressful environment of clinical settings in medical schools has been enumerated as another cause of nonprofessional conducts by medical students. On the one hand, frequent exposure of medical students to vulnerability of humankind and the fear, pain, and suffering of the patients and finally death of the fellow human beings plays an essential role in the formation of stressful training spaces in medical schools. On the other hand, numerous educational and professional duties that are placed on the students and the need to satisfy the higher members of the medical team should be accounted as other sources of anxiety, stress, and burnout among medical trainees. Such feelings logically lead to indifference to moral values and behaviors.

In fact, students gradually feel, that in response to stress in educational settings, they have to set aside their own ideals, values, and attitudes, which are their distinguishing points from other students that make up a harmonious and integrated collection. They conclude that matching and conformity with other members of the medical team and putting aside personal virtues is the safest and most reliable way to adapt to this heavy and stressful environment.

Another cause of nonprofessional behaviors in clinical education environments is that medical students, in response to the difficulties and uncertainties in their careers, purposely marginalize their emotions and feelings and adopt a voluntarily indifference. This feature is in fact a defensive reaction to the high volume of undesirable feelings students face within clinical settings including fear, pain, suffering, and death. Medical students learn that being involved with such frequent negative feelings causes emotional fatigue and burnout and ultimately prevents them from focusing on patients "real" problems.[15]

Medical trainees gradually adopt an intentional indifference and suppress their emotions and feelings. Although this is a short-term survival strategy, in the long term, it leads to detached concern, distance from patients, and finally lack of empathy in physician–patient relationship.[16]

It should be noted that, in addition to the points mentioned, medical ethics and medical education experts have also cited many other causes as barriers to professional behavior by medical students. The common ground of all these causes is to create the context for learners to be indifferent to ethical beliefs and values and pave the way for nonprofessional behaviors.

Considering that many of the suggested causes for preventing the occurrence of professional behavior by medical students are culture related and can have a different effect from society to society, the present study addresses these barriers and challenges in the medical education system of our country with a closer look. Study on barriers to the professional behavior of medical students has a long history throughout the world. However, no similar study was found to be conducted in Iran. Naturally, in order to achieve this goal, the views of various groups involved in health-care processes, such as professors, residents, students, nurses, hospital staff, patients, or their fellows, can be used. However, given that medical students are the target group in this study, and because their continuous presence in clinical setting enables them to accurately describe problems from their own point of view, their comments have been used for the assessment of barriers to professional behavior of medical students in this study. Reviewing the views of this group can lead to a deeper and more accurate

understanding of the challenges of professional behavior among medical students and help policymakers in the field of medical education to better target educational planning.

Materials and Methods

This study was a qualitative research that was carried out using qualitative conventional content analysis method in 2018. The study population consisted of medical students of Isfahan University of Medical Sciences in three levels of basic science, clerkship, and internship. The inclusion criteria were studying at one of the mentioned levels in Isfahan University of Medical Sciences and willingness to participate in the research. The study data were obtained through a "semi-structured face-to-face interview" with 49 students and a "focus group discussion (FGD)" session with 11 students. In sum, sixty medical students took part in this study.

In each interview, the students were asked to express their views on the causes of nonprofessional behaviors among medical students. Sampling was purposeful, and interviews continued until the obtained data were saturated.[17] All interviews were recorded and then typed. In the next step, the data from each interview were coded. After 17 interviews with basic science students, 13 interviews with stagers, and 19 interviews with interns, no further new code could be extracted, and data collection was stopped by assuming data saturation. To ensure data saturation, a FGD was held which was attended by 11 students from different grades, and the above question was again raised. A total of 27 female students and 22 male students were interviewed.

All responses were recorded and written and managed using MAXQDA software Version 10 (Udo kuckartz Berlin). To find meaningful comments that were relevant to the research question, the collected data were encoded and classified, and similar codes were placed in a subclass. Next, the subclasses derived from the previous step were re-categorized and in some cases merged based on similarities. Thus, more general classes were obtained, and the data were categorized more abstractly. It should be noted that, in order to increase the quality and acceptability of data, various measures were taken including appropriate and trust-based communication with interviewed students, allocation of enough time for receiving comments, and leaving the right to choose the time and place of interviews to the participants. In order to observe ethics in research, enough explanation was given before conducting the interviews regarding the research objectives and methodology. They were also assured of respect to the confidentiality and freedom to participate in the study. The study's ethical code number is 13951917.

Results

The main barriers to professional behavior of medical students that emerged out of the analysis of the results are summarized in Table 1.

Table 2 shows the main classes and subclasses of barriers of professional behavior among medical students. Each of the mentioned classes will be reviewed below along with its subclasses, codes, and related quotes from the interviewees.

Educational system problems

This class consists of four subclasses, namely "education and supervision problems," "hierarchical system problems in medical education," "negative role models in educational systems," and "burnout of medical students."

Education and supervision problems

One of the issues that was repeatedly mentioned in the interviews as a barrier to medical students' professional behavior was the problems related to the method of education and observation of their activities. The codes were discussed under the subcategory of "education and supervision problems" which includes "theoretical education of medical ethics, failure to meet students' daily needs in medical ethics training, insufficiency of educational assistance facilities, weakness of the supervisory system on students' performance, and lack of a precise definition of the duties of students and residents in terms of profession and education."

"Theoretical education of medical ethics" is an example of the problems outlined in this area. One of the participants said: "*In my opinion, ethics is not essentially something that can be learned in the classroom like other theoretical lessons. In order to learn moralities, students should be trained in clinics and hospitals while they take care of patients. Many times, professors teach a medical ethics subject that is not students' real problem. On the other hand, students may encounter problems in the hospital that are not included in the class curriculum and are not answered.*"

Another problem raised is "failure to meet students' daily needs in medical ethics training." One student

Table 1: Main classes of obstacles to professional behavior of medical students

Obstacles	Subclasses
Educational system problems	Education and supervision problems
	Hierarchical system problems in medical education
	Negative role models in educational systems
	Burnout of medical students
Community problems	Community attitudes toward doctors and medical services
	Community approach to medical students
Student problems	Feeling superior
	Feeling frustrated

Table 2: Classes and subclasses of barriers of professional behavior among medical students

Class	Subclass	Codes
Problems related to the educational system	Education and supervision problems	Theoretical education of medical ethics
		Failure to meet students' daily needs in medical ethics training
		Insufficiency of educational assistance facilities
		Weakness of the supervisory system on student performance
		Lack of a precise definition of the duties of students and residents in terms of profession and education
	Hierarchical system in medical education	Focus on keeping the professors satisfied
		Fear of being humiliated by higher medical team members
		Transfer of stress from residents to interns and students
	Negative role models in educational settings	Contradiction between moral recommendations of professors and their practice
		Observing unethical behaviors by hospital staff and fellows
	Burnout of medical students	Frustration of the future of the job
		High work pressure and lack of opportunities for recreation
		Multiple and heavy responsibilities and insufficient time to carry them out
		Insufficient confidence in dealing with patients
		Economic problems
Problems related to the community	Community attitudes toward doctors and medical services	Negative attitude of community toward some physicians
		Misconception of patients about educational hospitals
	Community approach to medical students	Failure to admit students due to inadequate knowledge
		Unethical encounter with students due to bad psychological condition
		Inappropriate and unrealistic expectations from medical students
		Gender discrimination between male and female students
Problems related to students	Feeling superior	Narcissism and self-assurance
		Excessive humility of patients or their relatives
	Feeling frustrated	Observation of economic injustice in the society
		Unrealistic view of students about medicine before entering the field

said: "*We do not learn what ethical issues should be taken into account timely. Ethical education should be done at the same time as medical education. Especially at the beginning of a clinical course, the need to learn ethical issues is very high and necessary. We need to have access to a reference center for our problems in hospital*."

Another point raised in this regard is "insufficiency of educational assistance facilities." One of the students said: "*Educational facilities in the hospital are not enough for all students. For this reason, instead of using an educational model, for example, the student has to practice on the patient. Many times, as a patient does not cooperate, the student has to pretend that he is doing a therapeutic measure or does it without patient's consent*."

Another problem in the field of teaching medical students was "weakness of the supervisory system on students' performance." One student described the problem as: "*There is not enough supervision over students' ethical behavior. I do not sin when I know that God is watching over my behavior. Likewise, when a system monitors students' conduct, immoral behaviors decrease. But there is not such supervision in medical schools. In addition to the fact that students themselves must adhere to ethical principles, a monitoring system is also needed to prevent immoral behaviors.*"

The last mentioned problem in the field of education and supervision was "lack of a precise definition of the duties of students and residents in terms of profession and education." One of the interviewees believed: "*The tasks of students and interns and residents are not very clear. Because of their workload, residents and Interns see students as unhelpful and disturbing persons and have no interest in teaching them. It makes students to provide with educational opportunities for themselves. For example, they may use the patient to learn the work, even if they are not skilled. This nonprofessional approach to learning is only eliminated if the residents have enough time to train students and see it as a part of their professional duties.*"

The hierarchical system in medical education

Another issue raised in the field of educational system problems as a barrier to students' professional behavior was "the hierarchical system in medical education." Students believe that it makes them "focus on keeping the professors satisfied instead of serving the interests of patients. One student described the problem as follows: "*In present hierarchical system in medical schools, students' goal is to keep their professors satisfied, so the superior members of medical team would not insult them in front of others. This will prevent students from thinking for benefit of patients.*"

According to some interviewees, the hierarchical system of medical education makes the students adjust their

behaviors based on the "fear of being humiliated by higher medical team members." One of the participants stated: *"Attends and residents rarely encourage students for their success or good grades. Conversely, if a student, for example, does not know the answer to a question, may be severely dispraised. For this reason, students do not have enough confidence. They are always worried about making mistakes, especially in relation to patients. Therefore, they are more likely to get in touch with patients with a defensive condition."*

Students believe that "transfer of stress from residents to interns and students" is another result of the hierarchical system in medical education. This problem has a negative impact on students' behavior. One participant noted: *"Residents are often busy and must meet the demands of their superiors. Therefore, they don't care about lower-level learners including Interns and Students. In many cases they condemn students for the slightest error because of the huge workload and the high nervous pressure they endure. Students who are trained in this system, will act in the same way when they are residents and this negative trend continues."*

Negative role models in educational settings

The third issue propounded in the class of educational problems was "negative role models in educational settings." Contradiction between moral recommendations of professors and their practice makes them inappropriate role models for students. A student described the problem as follows: *"Sometimes we do not have good role models. We see so immoral behaviors from our superiors that gradually lose our sensitivity to non-professional conducts. For example, one of our ENT attends did not change the otoscope and forceps for the sick, or some residents repeatedly interrupt patients. Continuous observation of non-professional behaviors from superiors, gradually normalize these behaviors in the eyes of students. It's just like a child who, over time, learns to behave like her parents."* Another student stated: *"An instructor who recommends his students to pay attention to the interests of patients, but in practice, ignores their basic rights, then his verbal recommendations cannot enhance students' positive behavior."*

A student continued to describe the effect of bad role models in prevalence of nonprofessional behavior as follows: *"When a resident in the presence of medical students talks insultingly with his patient or shows with his face that the patient's conversations does not matter to him, naturally students lose their sensitivity to such unethical conducts. In other words, the same view is passed on to students and they place the patient's health and well-being at a lower priority than their own interests."*

In addition to the professors and senior members of medical teams, "observing unethical behaviors by hospital staff and fellows" can also be an inappropriate role model for students. *"I do not know why when it comes to ethics, they are all more concerned with the behavior of doctors,"* said a medical student. He continued: *"In a workplace, where students see unethical behaviors of everyone from nurses and hospital crew to patients and their relatives, one cannot expect them to be completely faithful to ethical principles in practice."*

Burnout of medical students

Another issue that is debatable under the heading of educational system problems is "burnout of medical students." In explaining the relationship between burnout and the prevalence of nonprofessional behaviors among medical students, one interviewee said: *"Obviously, when I see a physician, after spending hard years of studying, diligence and deprivation of rest and recreation, is not able to provide himself with proper amenities, I see myself right to demand my own interests in any legal or illegal way."*

One of the important causes of job burnout propounded by students was "frustration of the future of the job." A student stated: *"In Iran, medical students do not see a promising future for their job. After 7 years of studying and enduring difficulties, a medical student becomes a general practitioner who no one pays much credit for him. Such a frustrated student would not be able to feel good about patients and show them professional behavior."*

Another student described the influence of uncertainty about the future of the job on students' burnout as follows: *"A medical student has no reason to be hopeful and optimistic about the future of his career. After spending years of hard working, he might be able to achieve just a fairly acceptable social and financial welfare in the fifth decade of his life. He feels he has wiped out his life and the value of what has lost is much more than what has earned. Disappointment towards future makes students, in the end, tired and energy less. Obviously, it is an unreasonable expectation from such a frustrated person to be adhered to ethical peculiarities of his behavior. It seems ridiculous, but I believe doctors unconsciously take revenge on their frustrations with insulting behavior to patients."*

Another suggested reason for the burnout of medical students was "high work pressure and lack of opportunities for recreation." One participant stated: *"Students usually start working hard when they enter clerkship. They have a lot of responsibilities and have no chance to have fun. Due to this high pressure, they are impatiently waiting for their graduation. In fact, they do not have much motivation and energy for professional behavior. The situation is aggravated when they think no bright future is expected in terms of their job after graduation."* Another student noted: *"Medical students are under a lot of stress and have no chance of enough rest and recreation in the best years of*

their life. I believe most medical students don't have enough mental health. That's why we cannot expect them to be fully professional."

Furthermore, "low physical strength due to lack of exercise" was noted by interviewees as a potential reason for unprofessional behavior. One participant stated: *"Medical students generally have low physical capacity and follow their work with fatigue and boredom. They get tired soon because they do not have enough time for physical activities and are neither physically nor mentally strong enough to act enthusiastically. Thus, they deal with patients and even their colleagues with distaste and do not consider ethical points in their behavior."*

Another important issue that was noted as a cause of burnout was "multiple and heavy responsibilities and insufficient time to carry them out." One of the participants said: *"The responsibilities placed on medical students during education are so high and time consuming that they do not have the opportunity to think about professionalism."* Another student described the problem as follows: *"Medical students, in comparison with other disciplines, have to learn a great deal of scientific content. At the same time they are expected to be active in clinics and hospitals. I've seen many interns who after completing their work and when returning home, are so tired that are more like moving dead bodies. In such a situation, it is unrealistic if we expect the student to remain committed to delicate tips of professional behavior in his or her practice."* Another student said: *"A student endures many difficulties to become a doctor. When he graduates, he sees himself rightful to have a considerable income. So, for more money, it may be possible to take unethical conducts including putting pressure on the patient."*

In addition, "insufficient confidence in dealing with patients" was noted as a potential reason for unethical behavior by students. One suggested reason for the lack of self-esteem is "scientific incompetence." *"The availability of various quotas for admission in medical schools, encourages some people enter the field while they are not qualified to do so. Since they usually cannot compete with other students, they feel incompetency and their reaction to such a situation is a defensive approach to their colleagues and patients."* said an interviewee.

According to some interviewees, "inadequate opportunity to communicate with patients" also paves the way for unprofessional behaviors through reducing students' self-esteem. One student noted: *"The high volume of theoretical content does not allow us allocate enough time to attend the bedside and to communicate with patients. We do not learn practical work and do not have enough self-esteem to deal with patients. Therefore, when, for example, the patient asks us about his problems and we do not know the answer, we have to distract his mind from the topic or pretend the topic is trivial."*

The last factor brought up under the general class of "problems related to the educational system" was "economic problems." "The impossibility of managing a life financially after graduation" was propounded as a serious economic problem which in turn paves the way for unprofessional behavior by medical students during education. One student stated: *"Medical students go to medical school for up to 7 years to become general practitioners. Then, they should prepare themselves for a specialty exam. During this long period, they don't have enough income to manage their family. They rightly blame the educational system for failing to provide a suitable mechanism for students' economic provision. In such a hard situation, students are forced to use unprofessional methods like taking bribe from patients or referring them to a special pharmacy or clinic for fee splitting, in order to finance themselves."*

Problems related to community

The second class of barriers to professional behavior of medical students that was mentioned in the interviews was a set of problems that come from the community. These problems can be classified under two subclasses, namely, "community attitudes toward doctors and medical services" and "community approach to medical students."

Community attitudes toward doctors and medical services

According to interviewees, the negative attitude of a part of the community toward physicians and medical services provides grounds for disrespectful behavior by the public and conversely, the nonprofessional behavior of the medical team. *"Most community members see doctors as prosperous and wealthy people whose only concern is earning more and more money. They do not know that a medical student should endure a lot of difficulties to reach the level he can practice in his office. This attitude creates a bad feeling in doctors and leads to an unconscious reduction of empathy and compassion toward patients. Practicing in such an environment that lacks enough respect and trust, will certainly affect the performance of medical students as well."* said a student.

"Misconception of patients about educational hospitals" is among the other issues that was propounded by interviewees as a ground for unethical conducts. A student noted: *"Patients usually enter the educational hospitals with the assumption that they are supposed to be available to students as a laboratory mice. That is why some patients do not treat students well and as a result, students cannot establish a moral relationship with them."*

Community approach to medical students

The interviewees believed that nonprofessional behaviors of medical students are sometimes their reaction to the approach of a part of the community toward them. "Failure to admit students due to inadequate knowledge" is an example of this destructive approach. Many patients find it difficult to interact positively with students with the notion that students are not knowledgeable enough to help them. A student stated: *"I do not think medical students should be blamed. Sometimes patients' behaviors are such that we have to react badly. We are constantly dealing with patients who don't accept us at all. They are reluctant to give us even a simple history. Obviously, when you spend all of your student's life that way, you will find a very bad feeling toward patients and would not be able to treat them ethically. In fact, students' inappropriate behavior is often a reaction to patients' mistreatment."*

Some students believe that patients and their relatives initiate inappropriate interaction with medical students due to their "inappropriate psychological condition." One participant noted: *"I understand very well that the patient and his family are not in a good mental state at the time they go to the hospital. But when you try to take a patient's history and he responds to you with boredom or looks at you as an intruder, it would be very hard to behave him respectfully."*

One participant stated another interesting point about issues related to the community. The point was that some patients do not count on compassionate and sympathetic students. She stated: *"Sometimes, when we treat patients very compassionate, they don't take us serious. But when we deal with them with rigidity and put our words firmly, they treat us with greater respect. This is a cultural issue. The more we are sociable, the less patients count on us."*

"Inappropriate and unrealistic expectations from medical students" was another issue raised by interviewees as an obstacle to the professional behavior of students with social origin. One student noted: *"People expect a medical student to know everything. Just because you wear white hood, they expect you to answer all their questions. This, in my opinion, is a cultural problem. People's expectations of students are not realistic. On the other hand, in such a situation, we cannot be honest with them regarding our scientific limitations. Because in this case we lose their trust. We, therefore, have to either make the wrong answer or encounter with patients in a way that they would not dare ask any question."* Another student stated: *"Sometimes patients have inapt expectations from students. For example, one patient urged me to tell my professor to prescribe a drug for him. This pointless insistence makes students feel tired and talk to patients reluctantly which is against professional rules."*

Finally, "gender discrimination between male and female students" was reported by some interviewees as a potential cause for the nonprofessional behavior by medical students. Some students believed that patients are less likely to believe in the academic ability of female students, and this leads to tension in their relationship. One student noted: *"In case of medicine like some other tasks such as engineering, teaching etc., people pay more attention to male students than female trainees. For example, when two male and female students attend in a patient's bedside and ask questions he is more likely to respond to the male student. Unfortunately, even some professors take male students more serious. Thus, female students sometimes have defensive behavior toward patients and cannot feel empathy in dealing with them."*

Problems related to students

According to the interviewees, the third class of barriers for the professional behavior of medical students includes problems that are related to students themselves. These factors can be classified in two subclasses of "feeling superior" and "feeling frustrated:"

Feeling superior

From the interviewees' viewpoint, one problem related to some students is "feeling superior" over the rest of community members. This problem is rooted in "narcissism and self-assurance" of a group of students which leads to unprofessional behaviors. A participant stated: *"Some medical students harbor a sense of superiority due to their own personality traits along with others' inductions. They may resort to unprofessional measures because of this false self-confidence. For example, they may be disrespectful to their professors or do some medical practices that do not have the skills to do so."* Another student noted: *"When a person is accepted as a medical student at the university, sense of supremacy is induced upon him by people around him. Such a self-assured person assumes himself in a supreme position and feels no need to interact with his patient compassionately, to provide her with essential information about her illness or to obtain her consent for conducting clinical examination. In sum, his sense of superiority prevents him from observing ethical rules in practice. He may even change his behavior with hospital staff and become aggressive towards them."*

Furthermore, some participants noted that "excessive humility of patients or their relatives," which stems from the historical dominance of paternalism in physician–patient relationship, produces the sense of supremacy in students and makes them indifferent to professional rules. One student stated: *"It is people themselves who, with excessive humility, enforce the sense of arrogance to medical trainees. Medicine has always been a sacred profession for our people. They expect miracles from practitioners. This view fortifies power imbalance in physician–patient relationship and places doctors in a position that do not feel any need to respect patients' rights and observe other professional rules."*

Feeling frustrated

"Feeling frustrated" is the last subclass of problems related to students, which was mentioned in interviews as a barrier to students' professional behavior. Several factors were identified by the participants as potential causes of frustration and disappointment in medical students. One of these factors was "observation of economic injustice in society." One participant said: *"Inequalities that are seen at the macro level in society make medical students, who study in one of the hardest fields and tolerate many difficulties to achieve an acceptable status, feel loss."* Another interviewee continued: *"While medical students spend the best years of their life bearing a variety of responsibilities and difficulties, they see some illiterate people earn tremendous wealth through illegal methods such as embezzlement, bribery, etc., It is reasonable in such circumstances some students may try to use any social opportunity for income generation, even with unethical methods."*

The "unrealistic view of students about medicine before entering the field" is another potential cause of frustration in medical students. Imagination of people before entering this major has a significant difference with what they encounter with during education. They expect a calm and stress-free life after having passed the difficult entrance examination. When they encounter the reality of studying medicine, which is characterized by various responsibilities, difficulties, and uncertainties, they become frustrated and acquire burnout. One participant stated: *"After passing a difficult entrance exam successfully, students imagine that the work is over, and from now on, they should expect a calm and restful life. They see themselves worthy of social respect, material well-being, etc., At the same time, students suddenly find themselves in front of a host of duties and responsibilities and realize here is the beginning of another overwhelming path. Under such frustrating circumstance, the easiest way for taking revenge and controlling internal pressure, is to show indifference to patients or resort to aggressive behaviors toward nurses and other staff."*

Many students choose medicine on the advice of people around them or because of their own dreamy conception of studying medicine in a prestigious medical school. One interviewee stated: *"Successful high school students are often encouraged by their relatives to continue their education in medicine, but at the university some students realize that medicine is not their favorite field. They do not enjoy working in medical team. Consequently, they perform their duties from coercion and inevitability and are too bored and depressed to pay attention to their patients or observe other ethical peculiarities."*

Another interviewee noted: *"Many students enter the field in pursuit of benefits such as social prestige and high income. While a good physician should be prepare to dedicate himself for patients' well-being, I believe, only few students enter the profession on the basis of their interest in medicine and with a real insight into its difficulties. Since most students don't enter medical schools with such a realistic insight into the profession and their responsibilities, they feel frustrated after confronting the facts."*

Discussion

Problems related to educational system constitute the first class of potential causes of nonprofessional behaviors in medical students. "Theoretical education of medical ethics" and "failure to meet students' daily needs in medical ethics training" are two examples of these problems that have been considered in the present study and numerous other studies. Neutens, for example, states that students get more of their professional values during daily exposures in clinical settings than from scheduled educational programs. He states that the theoretical units of bioethics are too abstract to help students to learn and implement professional values.[18]

Roberts *et al*. believe that the effect of ethical education depends on how much these teachings meet the students' daily ethical needs and the mere teaching of abstract ethical rules cannot be very helpful. The formal curriculum of ethics must be designed based on learners' experiences and real educational needs. This curriculum should equip students with the clinical and ethical decision-making skills and ethical values needed for becoming a good doctor. Roberts *et al*. also believe that educating students on ethical dilemmas that they encounter while studying is far more beneficial than teaching general and boring ethical issues related to patient care, such as euthanasia and global health care.[19]

Therefore, talking with medical students about ethical challenges they encounter in daily activities is one of the appropriate ways for training them how to properly deal with challenging situations and how to behave ethically in such situations. Obviously, such dialog can lead to favorable results if performed in a friendly and scientific environment and with the maximum participation of all medical team members. In other words, any attempt to promote students' ethical attitudes and behavior can be effective only if it is done in parallel with students'' clinical experiences and according to their actual needs.

This study suggests "the hierarchical systems in medical education" and "negative role models" as other subclasses of problems related to educational system. This is also in line with findings from other studies.

The results of one study reported that 90% of medical students adopt at least one role model, often the superior

members of medical team, during their education.[20] Students identify their role models and adopt their attributes and codes of behavior. Another study reported that 61% of medical students had witnessed unethical behavior of their superiors at least once during their education. The likelihood of committing nonprofessional behavior by these students was far more than other trainees.[20]

In other studies also, residents and faculties of medical schools have been blamed for devaluating professionalism principles. That is because they are students' role models and their nonprofessional behavior reduces students' sensitivity and commitment to professional values. Examples of such behaviors are failure to express empathy with patients or preference for effectiveness and productiveness of individuals over patient-centered care.[21] In several studies, lack of suitable role model, high workload, and time constraints have been mentioned among the main reasons for reducing the empathy and prevalence of nonprofessional behaviors among medical students.[22]

Basically, in hierarchical systems like medical education, lower members should observe the professional behavior of their superiors and learn ethical virtues practically. Medical faculties have a vital role in the reinforcement of students' moral development through providing a moral environment that confirms and strengthens them in the pursuit of a professional path. It seems, therefore, necessary to invest effort and resources to promote professors' commitment to professional principles in the first step.

With this explanation, designation of training programs for superior members of medical teams should be considered as a target on the agenda of managers and planners of medical education system. As a matter of fact, ethical attitude and behavior of professors, similar to that of students, are still undergoing change. Therefore, in order for professors to support students' moral development, it is necessary to design special group discussion sessions in which faculty members of universities can discuss and clarify their views and receive recommendations from their counterparts to correctly encounter with moral dilemmas.

One of the other obstacles to the professional behavior of medical students on the educational system is burnout due to economic problems. The fact is that most medical students, despite all the difficulties and stresses of their education, are financially in trouble until the fourth decade of their life. In response to this apparent injustice, students see themselves helpless and often entitled to earn money by any means even through nonprofessional behaviors such as carrying out medical procedures beyond their scientific and practical capacity, receiving bribery, and favoritism. As a matter of fact, only a low percentage of medical specialists with huge income have distorted belief of people about the altruistic nature of medicine. For the aim of solving the problem, structural reform for fair distribution of benefits and revenues by health policymakers seems necessary.

The second class of barriers and challenges of professional behavior that was addressed in this study includes issues that have root in the community and largely depend on the cultural and social context of our country. Unfortunately, in recent years, apart from some unprofessional behaviors by a group of doctors, media activities in the form of comedy or drama promoted distrust of the community to physicians and created negative attitudes in part of the society toward doctors. This negative attitude diminishes the sanctity and respect of the medical profession and conversely provides grounds for professional misconducts.

Logically, medical students, as the youngest and most immature members of the medical team, are not immune to the unkindness and mistrust of these patients. The induced feeling among parts of community that a large number of physicians prioritize their own interest over that of patients has changed physician–patient relationship from a friendly and trust-based communication into a seller–customer one. Obviously, in such a space, especially in educational hospitals, not only learners are not respected and appreciated by patients, but they are also viewed in as the redundant components of medical team who prevent timely treatment of their problems. Several behavioral challenges observed in educational hospitals between patients and medical team members, especially students, are the logical consequences of this approach. Inattention and disrespect to students for their inadequate academic knowledge is another reason that exacerbates behavioral challenges in students' encounter with patients. This disregard in turn is responded with a defensive reaction from students and distorts the friendly atmosphere in clinics and hospitals. In order to solve these kinds of problems, at the first step, the need for cultural constructive activities in relation to the professional status of medical students is felt strongly. These activities should be performed both at the macro level of the society and at clinical settings. In macro-scale level, cultural efforts should be aimed at restoring trust in the body of the health-care system. Using powerful and effective tools such as media can be helpful in this regard. Regarding cultural efforts in clinical settings, a respectful approach to students should start with the hospital staff, including professors and residents, and should be demanded from any individual involved in the treatment process. Only in the shadow of such respect, one can expect medical students to consider ethical and professional principles in their behavior.

The third class of barriers to professional behavior by medical students consists of the problems that are related to students themselves. One of the obstacles noted in this regard was students' sense of superiority over patients, which prevents them from respecting patients, making an empathetic communication with them and providing patient-centered care. Although power imbalance in physician–patient relationship has long existed in different societies and has been the potential source of many professional misconducts, today, this problem has been solved partly through the amendment of physicians' attitude toward the importance of respecting patients' autonomy and understanding the altruistic nature of medical activities. However, it seems that, in our country, the sense of self-assurance and superiority of medical students over other members of the community is still prevalent. A number of reasons can be enumerated for the consistence of the problem such as intense competition for admission to medical schools and the high ability and talent of people who are accepted in this major, induction of the sense of supremacy by the community, and excessive humility of patients caused by the long history of paternalistic approach in physician–patient relationship. Emphasis on the medical team's responsibility to respect patients' autonomy and to adopt a patient-centered approach in providing clinical care, are solutions that can help overcome this problem.

Another subclass of the barriers to professional conducts related to medical students is their frustration in facing difficulties and responsibilities that medical students are in charge of. While the ultimate goal of elite and talented students for studying medicine is to achieve financial welfare and a desirable social prestige, they face a huge amount of educational and professional responsibilities in stressful clinics and hospitals which make them feel frustrated and reluctant to continue their education. Obviously, such students are too exhausted and disappointed to observe ethical peculiarities in their behavior.

To solve this problem, it is suggested that medical students' admission process be modified in such a way that students who are truly interested in this major and have the mental and physical ability to adapt to its difficulties and responsibilities find the opportunity to enter medical schools. Dr. Danielle Ofri, a physician and researcher in the field of physician–patient interaction, says: "The traditional entrance examinations of medical schools should be revised and include sections on ethics, philosophy, medical humanity, and social sciences. Although this examination cannot guarantee the skill of empathy in medical students, it definitely takes the focus away from organic chemistry. Programs that enhance students' understanding from humanism, long-term relationship with patients, and face-to-face counseling can also minimize moral erosion and other toxic and harmful disadvantages of studying in medical schools."[23]

Study limitations

One limitation of this study was that medical students' opinions about barriers to professional behavior were received only from medical students of Isfahan University of Medical Sciences. Obviously, interviews with medical students from other universities in the country can contribute to the richness of discussion.

Conclusion

Several studies have previously discussed the obstacles of professional behavior in medical students from the perspective of curriculum planners and experts in the field of education and ethics. This study, however, evaluates the causes of the prevalence of nonprofessional behaviors among medical students from students' point of view. In this case, interviewees are not just foreign observers who deal abstractly with the problem. Rather, medical students themselves who due to daily involvement with challenges in educational environment have got a more accurate and realistic perspective, put forward their views. We can, therefore, safely say that the barriers and challenges outlined in this study are largely in line with the reality of educational environments, and removing them will expand the professional performance of medical students.

Results of this study indicate that the prevalence of nonprofessional behaviors among medical students is a problem caused by multifactors including defects of medical education system, cultural and social flaws, and finally students' own problems. Regarding the impact of various personal, social, and educational factors on the creation and expansion of unprofessional behaviors among medical students, it is essential to have a comprehensive approach for solving the problem.

One of the most important barriers to professional behavior among medical students is defects in educational system in medical schools. To overcome these shortcomings, curriculum planners should resort to measures such as identifying ethical dilemmas faced by students in their daily practice, teaching professional principles to students along with training other medical courses by using a longitudinal and integrated approach, getting help from clinical professors who are trained and familiar with medical ethics rules for teaching ethical attitude and behavior to students, holding FGD sessions for evaluating students' ethical issues, and suggesting the best solutions for encountering ethical dilemmas. Definitely, such actions can have a significant impact

on removing obstacles related to the medical education system and the spread of professional behavior among medical students.

Acknowledgment

The present study was part of a thesis submitted by the first author for a PhD degree in medical ethics and was funded by Tehran University of Medical Sciences. The ethical code number for the study is 13951917. The authors wish to thank all students who participated in this study and shared their valuable experience.

Financial support and sponsorship

The present study is part of a thesis submitted by the first author for a PhD degree in medical ethics and was funded by Tehran University of Medical Sciences.

Conflicts of interest

There are no conflicts of interest.

References

1. Levinston W, Ginsburg S, Hafferty F, Lucey C. Understanding Medical Professionalism. 1st ed. China: McGraw-Hill Education/Medical; 2014.
2. Ellaway RH, Chou CL, Kalet AL. Situating remediation: Accommodating success and failure in medical education systems. Acad Med 2018;93:391-8.
3. Hickson GB, Federspiel CF, Pichert JW, Miller CS, Gauld-Jaeger J, Bost P. Patient complaints and malpractice risk. JAMA 2002;287:2951-7.
4. Rosenstein AH. The quality and economic impact of disruptive behaviors on clinical outcomes of patient care. Am J Med Qual 2011;26:372-9.
5. Rosenstein AH. Physician disruptive behaviors: Five year progress report. World J Clin Cases 2015;3:930-4.
6. Allinson M, Chaar B. How to build and maintain trust with patients. Pharma J November 2016;297:7895. Available from: https://www.pharmaceutical-journal.com/eye-care/how-to-build-and-maintain-trust-with-patients/20201862.article?firstPass=false. [Last accessed on 2018 Oct 10].
7. ABIM Foundation, American Board of Internal Medicine, ACP-ASIM Foundation. American College of Physicians-American Society of Internal Medicine, European Federation of Internal Medicine. Medical professionalism in the new millennium: A physician charter. Ann Intern Med 2002;136:243-6.
8. Blank L, Kimball H, McDonald W, Merino J; ABIM Foundation, ACP Foundation. Medical professionalism in the new millennium: A physician charter 15 months later. Ann Intern Med 2003;138:839-41.
9. de Oliveira Vidal EI, Silva Vdos S, Santos MF, Jacinto AF, Boas PJ, Fukushima FB, *et al.* Why medical schools are tolerant of unethical behavior. Ann Fam Med 2015;13:176-80.
10. Byszewski A, Hendelman W, McGuinty C, Moineau G. Wanted: Role models – medical students' perceptions of professionalism. BMC Med Educ 2012;12:115.
11. Silveira GL, Campos LK, Schweller M, Turato ER, Helmich E, Antoniode Carvalho-Filho M. "Speed up"! The influences of the hidden curriculum on the professional identity development of medical students. Health Prof Educ 2019;5:198-209.
12. Ozolins I, Hall H, Peterson R. The student voice: Recognising the hidden and informal curriculum in medicine. Med Teach 2008;30:606-11.
13. Hafler JP, Ownby AR, Thompson BM, Fasser CE, Grigsby K, Haidet P, *et al.* Decoding the learning environment of medical education: A hidden curriculum perspective for faculty development. Acad Med 2011;86:440-4.
14. Caldicott CV, Faber-Langendoen K. Deception, discrimination, and fear of reprisal: Lessons in ethics from third-year medical students. Acad Med 2005;80:866-73.
15. Shapiro J. The feeling physician: Educating the emotions in medical training. Eur J Person Cent Healthc 2013;1:310-6.
16. Doulougeri K, Panagopoulou E, Montgomery A. (How) do medical students regulate their emotions? BMC Med Educ 2016;16:312.
17. Strauss A, Corbin J. Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory. 4th ed. United States of America: SAGE Publications, Inc.; 2014.
18. Neutens J. The Hidden Curriculum: What are you teaching? Association of Professors of Gynecology and Obstetrics (APGO); 2008. Available from: https://www.apgo.org. [Last accessed on 2017 Oct 10].
19. Roberts LW, Warner TD, Hammond KA, Geppert CM, Heinrich T. Becoming a good doctor: Perceived need for ethics training focused on practical and professional development topics. Acad Psychiatry 2005;29:301-9.
20. Yamey G, Roach J. Witnessing unethical conduct: The effects. West J Med 2001;174:355-6.
21. Shapiro J. Walking a mile in their patients' shoes: Empathy and othering in medical students' education. Philos Ethics Humanit Med 2008;3:10.
22. Hojat M, Vergare MJ, Maxwell K, Brainard G, Herrine SK, Isenberg GA, *et al.* The devil is in the third year: A longitudinal study of erosion of empathy in medical school. Acad Med 2009;84:1182-91.
23. Ofri D. What Doctors Feel: How Emotions Affect the Practice of Medicine. 1st ed. United States of America: Beacon Press; 2014.