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An interesting result of a qualitative research: Academic exhaustion barrier to professionalism in medical students

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Abstract:

INTRODUCTION: Professionalism is an important measure of the efficacy of the medical education. Some studies showed that dominant values changed during clinical education, and some negative values might replace positive ones. In this regard, this study aimed to explore barrier to professionalism in clinical medical education.

METHODS: This was a qualitative study conducted with the content analysis method. A total of 34 interviews with 23 participants were done.

RESULTS: Two hundred forty-eight original codes were extracted from the research data, which were classified under the theme of "Academic Exhaustion" and the four following categories: "stressful environment, "human conflict," "Poor Inter professional collaboration," and "emotional exhaustion."

DISCUSSION: It can be admitted that having full knowledge of the factors influencing professionalism from the viewpoint of stakeholders can improve the environmental and organizational conditions to prevent professional misconduct.

Keywords:

Medical education, medical student, professionalism

Introduction

Clinical education is a vital part of the curriculum in medical education and plays a significant role in shaping basic skills and professional capabilities of students.[1] Clinical education aims to provide opportunities for students to associate theoretical information with practical facts and acquire experiences through their presence by impatiens' beds.[2]

The process of students' adaptation to the real environment of their profession is not done easily because the complicated and unpredictable nature of clinical experiences makes it difficult for students to achieve their intended goals, and this can provide stressful situations for them.[3] A clinical education environment is an interactive network for the elements in clinical practice that affects the outcomes of the students' clinical learning.[3,4] Hence, improving the quality of clinical education can lead to the training of competent and qualified students in the clinical field.[5] As clinical education is the primary source of learning for students' attitudes, values, and norms, experiences of medical students can present the most critical characteristics of clinical education.

What they have learned and what they have not learned as well as what have been their feelings are the things students can express more than any other group. Since ethics is the center of future developments,[6] medical universities are responsible for training physicians who would be able to improve the health of the community. Therefore,

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becoming a physician is equal to gaining a new identity in life, and the physician starts his/her medical profession by accepting some responsibilities and having a specific set of characteristics.[1] Professionalism means having the attitude and behaviors that include some characteristics such as selflessness, trustworthiness, affection, proper communication, respect, responsibility, excellence, and leadership.[7,8]

The Accreditation Council of Graduate Medical Education and the Board of Specialized Medical Sciences of the United States established six main competencies for resident specialists, one of them is a commitment to professional principles.[9] For development and excellence of commitment to professional principles, occurred errors must be identified and behaviors that reflect the commitment to professional principles need to be strengthened.[10,11] From Sachs' perspective, professionalism has two "ethical" and "technical" aspects. The ethical aspect is the same as a teacher's performance, with the aim of serving the community and responding to its needs, and the technical aspect refers to having a decent performance as well as skills,[12] the prerequisite of which is to acquire wide and complex knowledge through academic education.[13] The developments of science and technology in the 20th century, have led to the advancement of health and medical care.[14,15] Today, teaching professionalism is greatly emphasized in universities around the world.[13,15,16] Professionalism values are expected to be formed during education in medical schools and also during patient care, but some studies showed that the values that students had when they entered the university underwent changes during their studies,[16] and some negative values might be formed instead of positive ones. Although professionalism concepts are sometimes taught in clinical medical education, it is mainly institutionalized by the role of teachers and others.

Despite great efforts by medical professors to teach professional values to the learners, sometimes, contents that are not consistent with these values are learned, and their ultimate effects are even observed at the community level as the following threats to medical professionalism: changing personal and professional values of the graduates through formal education, lack of accountability, non-commitment to respond to community issues such as patients' age, culture, sex, and disabilities, poor quality of service delivery, and inconsistency of university outcomes with the needs and expectations of the community.[17] Many of these problems can be considered a violation of ethical principles by universities and noncompliance with high ethical standards.[18] Today, clinical experts focus on the outcomes of technology development (medical equipment and facilities) more than on human relationships. They are gradually forgetting the main commitment of their profession, which is compassionate and empathic care, recognizing the patients and respecting them as human beings, as the cornerstone of medical ethics and disturbance in customer centeredness is especially observed nowadays. This can be due to financial aspects, differences in physician's and patient's influence, and the entry of trade into the medical profession, which has gradually led to the elimination of ethical conduct in clinical medical practices.[12] The main prerequisite for achieving professionalism is the recognition of factors and barriers that are effective in this process.

The present study aimed to explore barriers of professionalism in clinical medical education.

The critical question of this study is "what are the experiences of medical students from the barrier to professionalism in clinical education?"

Context

Iran's 7-year medical education program consists of three consecutive stages: an initial 2.5 year preclinical education, commonly known as "basic science" stage, 3 years of clinical training, and a final 1.5 years of "internship" which is supervised medical practice at teaching hospitals. Clinical education at Iranian medical universities is a significant issue. Professionalism is a standard of interest to the medical faculty.

In many medical schools, centers called "professional commitment centers" carry out the training, monitoring, and evaluation of students and professors.

Materials and Methods

This was a qualitative study using content analysis. Qualitative content analysis is a method for subjective interpretation of written content through a process of systematic classification of codes and determination of themes and patterns.[19]

Participants

The research population consisted of the students of two critical medical schools in Iran who had attended clinical wards for at least 6 months in 2018. The participants were selected from among the students who had been in an internship for at least 6 months in clinical wards. The purposive sampling started and continued until data saturation, i.e., the lack of receiving new information. The total number of participants in the study reached 23. The duration of the interviews was 30–90 min, and a total of 34 interviews were conducted.

Data collection

Individual semi-structured interviews were conducted for data collection. Qualitative interviewing is generally

regarded as an effective way of understandings about experiences and the meanings people attach to them. In this research, some interviews were repeated because the researcher was looking for opportunities to understand different dimensions or seek clarification or additional information about issues raised in earlier interviews. Additional interviews also were needed because a less familiar concept was found in the first interview. Repeated interviewing led to increases in the amount of information reported repeat interviews to provide opportunities to capture something about events, experiences, and perceptions over time.

Total interview time lasted 35 h and 28 min. After analyzing each interview, the next interview was conducted. There was an interview guide that included four questions on the desired concept. The questions were as follows:

1. What does the word professionalism remind you of?
2. What do you think about the meaning of professionalism in the clinical setting?
3. Can you tell us about your experiences in the environment?
4. What factors do you think affect professionalism or professional misconduct in a clinical setting?

During the interviews, query questions such as "Can you explain more?" or "What do you mean?" were also asked. We used the conventional qualitative content analysis method in the analyses, which is a research method for subjective interpretation of the content of written data. In this method, categories are extracted directly from textual data, and codes and themes are identified through a systematic classified process.[19,20]

Data analysis

The interviews were analyzed using qualitative content analysis. All interviews were recorded and then transcribed verbatim for further analysis. The analysis process was performed by summarizing the meaning units and converting them into codes, subcategories, and categories and using the content analysis method with Graneheim and Landman approach. Data analysis performed with Atlas ti7 software.[19-21] In the data interpretation, obvious and hidden contents were taken into consideration.

Trustworthiness

Numerous frameworks have been developed to evaluate the rigor or assess the trustworthiness of qualitative data[22] and strategies for establishing credibility, transferability, dependability, and confirmability. In this study, the credibility of the qualitative findings was ensured by using member check and immersion techniques as well as the ongoing engagement of the researchers with the data. To increase the reliability of the data, the long-term work with the research subject, the observers' review, and controlling the findings with the participants regarding the extent of reflecting their experiences were used. The principles of confidentiality of information and informed consent for interviewing and recording the conversations were observed as well. The right to withdraw from the research at any time was one of the ethical considerations that were observed too.

Ethical consideration

To observe moral considerations during the research, permission was obtained from the ethics committee of the university, and ethical considerations were observed (obtaining informed consent, confidentiality of information and secrets of the participants, the right to withdraw from the research at any time).

Results

A total of 23 students participated in 34 interviews. The mean age of interview participants was 25.5 years. The distribution of sampling criteria is presented in Table 1. Two hundred forty-eight original codes were extracted and classified under the theme of "academic exhaustion" and four categories as follows: "stressful environment', 'human conflict," "inter professional collaboration," and "emotional exhaustion." Each of these subjects had some subcategories [Table 2].

Stressful environment

From the viewpoint of the participants in this study, environmental factors were among the factors affecting professionalism. The extracted subcategories included the "inappropriate Duty overwork," "Environmental structure," and "role ambiguity."

Duty overwork

The participants in this study believed that in a clinical setting, one could behave ethically so that the relationship between the patient and the physician would be appropriate. In such a situation, instructors and students could observe all human considerations and the patients' dignity. Here are some related quotes from the participants in this study:

Participant 20: "When I enter the ward, I get terrified. How to deal with too many patients destroys me. How many sick people for a medical student?"

Environmental structure

In the opinion of the participants in this study, a safe psychological environment would lead to the effectiveness of education and observation of professional principles.

Table 1: Distribution of sampling criteria in participants

Participant	Sex	Age	Previous experience of clerkship	University location
P1	Male	24	Yes	Isfahan University of Medical Science
P2	Male	25	Yes	Shahid Beheshti University of Medical Science
P3	Male	27	Yes	Isfahan University of Medical Science
P4	Female	30	Yes	Isfahan University of Medical Science
P5	Female	28	Yes	Shahid Beheshti University of Medical Science
P6	Female	25	Yes	Isfahan University of Medical Science
P7	Female	25	Yes	Shahid Beheshti University of Medical Science
P8	Female	27	Yes	Shahid Beheshti University of Medical Science
P9	Female	24	Yes	Shahid Beheshti University of Medical Science
P10	Female	24	Yes	Shahid Beheshti University of Medical Science
P11	Female	25	Yes	Isfahan University of Medical Science
P12	Female	26	Yes	Isfahan University of Medical Science
P13	Female	24	Yes	Shahid Beheshti University of Medical Science
P14	Male	25	Yes	Shahid Beheshti University of Medical Science
P15	Male	25	Yes	Isfahan University of Medical Science
P16	Male	25	Yes	Shahid Beheshti University of Medical Science
P17	Male	25	Yes	Isfahan University of Medical Science
P18	Male	24	Yes	Isfahan University of Medical Science
P19	Male	25	Yes	Shahid Beheshti University of Medical Science
P20	Male	27	Yes	Isfahan University of Medical Science
P21	Female	25	Yes	Shahid Beheshti University of Medical Science
P22	Female	26	Yes	Shahid Beheshti University of Medical Science
P23	Female	26	Yes	Shahid Beheshti University of Medical Science

Table 2: The main theme, categories, and subcategories of the study

Theme	Categories and subcategories
Theme	Stressful environment
	Inappropriate Duty overwork
	Environmental structure
	Role ambiguity
	Human conflict
	Professional satisfaction
	Communication skills
	Interpersonal interactions
	Interprofessional collaboration
	Team working
	Cultural barriers
	Emotional exhaustion
	Inadequate motivation
	Difficulty concentrating

Participant 13: We are not exposed to true role models and professional behavior in hospitals, so I reflect this is a severe challenge in the educational environment."

Role ambiguity

The participants in this study believed that there is role ambiguity in the clinical environment that is unclear circumstances that arise because of a unclear job description where duties and are not obviously defined. Here are some related quotes from the participants in this study:

Participant 12: The description of my duties as a medical student in the department is not clear, and this in itself is a factor that affects the teaching of my disciplinary behaviors in the hospital.

Human conflict

The participants in the study considered the following three subcategories as the factors affecting professional performance: "professional Satisfaction," "communication skills," and "interpersonal interactions."

Professional satisfaction

The participants believed that in a clinical environment, one could act properly when there was Professional satisfaction, and this is also related to the job position.

Participant 8: "I belong to somewhere, and I feel responsible for it, and this will give me maximum satisfaction."

Communication skills

Participant 9: In my idea one of the most important communication skills that every medical student needs to learn is how to be flawless when they link with others. Transparency will avoid misunderstandings, and it will help us maintain a professional behavior.

Interpersonal interactions

Participant 19: "We can see in most internship departments that doctors and nurses are doing their job separately as if they are not in the same area at all. The

only thing they have in common is their clients lying down on the hospital beds."

Poor inter professional collaboration

Team working

One of the constructive themes of effective performance from the viewpoints of medical students is human factors. In this study, the participants paid particular attention to the team working and cultural barriers.

Participant 12: "In clinical settings, each works on his/her own, while the treatment team should act as a single person to improve the system."

Participant 3: "Internship settings are good places to learn what's called the hidden curriculum, but if the nurses, doctors and the treatment team are in the same chain."

Cultural barriers

The participants in this study believed that humans had different cultures, and therefore, respect for all of them, regardless of gender and ethnicity, was necessary.

Participant 1: "From the very beginning, the students must know that all human beings are respectful, and cultural differences are some part of the structure of interactions."

Emotional exhaustion

Inadequate motivation

Participant 13: "I do not like to go to different departments for patients' files. I like the shift to end up sooner to get out of the ward."

Difficulty concentrating

Participant 5: I would never have imagined of looking for the help of a psychologist. I have difficulty in concentration in hospitals. I need some professional help. I can't learn and follow the rules of the department.

Discussion

Medical students cite communication, respect, patient care, medical knowledge, and skills as the hallmarks of professionalism. The results of this study showed that professionalism is affected by various environmental, human, and organizational factors. Clinical education planning forms the essential part of medical education for creating necessary capabilities and skills in medical students.

This research showed that the quantity of health providers is essential to implementing professionalism because the high number of patients affected the quality of care. In separate studies conducted by Marcum and Barbe and Tse, in 2008 concluded that the task of health care providers is exhausting and it is necessary to adjust the proportion of patients to the number of health providers.[23] The research has been conducted in countries such as the United States, China, and Colombia, which shows that there is not a current dilemma is our country. Any problem in clinical education may encounter the efficiency and outcomes of this part of education with barriers, one of which is tension.[24]

During studying, medical students have much stress which can have adverse effects on their learning and clinical success. Some of the stressors in clinical practice include high number of patients, lack of clinical experience, lack of communication with nursing staff, lack of decision-making power in executive works, long hours of internship, and inconsistency between caregivers and physicians and students' unwillingness to clinical work.[24] One of the most stressful environmental factors was the ambiguous position of the hospital. This factor, in the view of medical students, causes disturbance and discomfort. So far, various studies have been done to find effective components for the comfort of users of various buildings. Analysis of the impact and the role of building users' characteristics (gender, age, and country of origin) and physical and non-structural issues related to the building, such as interior space, type of building, color, and spatial arrangement, are only part of a variety of research in this area. The area that is consistent with this research is known to cause ineffective stress people.[25]

Professional satisfaction was one of the subcategories that were placed on the category of human conflict and could be a barrier to professionalism. Professionalism goes through the formation of a professional identity. Multiple factors within and outside of the educational system affect the formation of an individual's professional identity.[26]

Communication weakness can have a negative effect on performance.[27] This is consistent with the results of the recent research. Collaboration between nurses and doctors, team working, joint decision-making on health issues, and follow-up of patient care plans to solve its problems is essential.

The effects of inter professional collaboration can be seen to reinforce positive attitudes toward other members and link them up. Although gender and ethnic differences are factors that affect professional behaviors, the researcher did not find research that directly linked to an agent-based relationship with professional behavior. This result in the present study can show cultural differences in Iran and class divisions which will be followed by it. Furthermore, finally, emotional exhaustion obtained from research. Emotional exhaustion is a job problem that causes negative and pessimistic tendencies toward the

referrers and colleagues and reduces the daily activities of employees. The research suggests that motivation in medical students depends on the accurate feedback and the effective supportive system.[28] In this study, it was also consistent with other studies that poor supportive systems caused the misconduct of medical students. In the present study, some participants pointed out this issue and related clinical unaccountability to unfamiliarity with the clinical environment and familiarity with the clinical environment and its compatibility with it predispose sense of belonging to the environment. Most students in the 1st day of a clinical day find stress in a new environment. The clinical instructor should devise special measures for the 1st day to make the learners familiar with the clinical environment and feel comfortable in it.[29] What was understood from all the categories was called "Academic Exhaustion." Academic exhaustion refers to the students' feeling of fatigue due to the demands and requirements of studying, having a pessimistic feeling without interest in one's assignments, and a feeling of inadequacy as a student. Academic exhaustion affects students' commitment to the college and their degree of participation in health affairs. It also provides grounds for reducing the academic performance of students and increasing their concern about making mistakes in their assignment. Identifying all these factors affecting professional performance, either individual or environmental and organizational, can be useful in preventing professional misconduct in the medical conditions of our community where the entry of some unmotivated and uninterested people in the medical profession has been facilitated.

Conclusion

Having full knowledge of the factors influencing professionalism from the viewpoint of medical students, educational authorities can improve the environmental and organizational conditions to help medical students to prevent professional misconduct to take steps to improve the health of the community.

Research limitations

Since the data collection tool was the interviewers, this study is not error-free, like other qualitative research, because sometimes, the thoughts and beliefs of the interviewers influence the research subject and the process of data collection. The research was attempted to go through the right process by putting the comments of the researchers between parentheses while collecting and analyzing the data.

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Conflicts of interest

There are no conflicts of interest.

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