

Original Article

To develop a curriculum on professionalism: students' and physicians' perceptions, and challenges

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ABSTRACT

Background: Medical professionalism is very important as a main ability of physicians and its notion and teaching and learning is an issue of interest for decades. **Objectives:** The aim of this study was to investigate the perspective of medical students and practicing physicians about the notion of professionalism, their challenges in practice, and opinions for the development of a curriculum in medical professionalism. **Material and Methods:** Data were collected from four focus groups including 28 medical students and working physicians from Isfahan University of Medical Sciences, School of medicine between May and July 2016. All sessions were audio-recorded, transcribed and subjected to inductive content analysis. **Results:** Participants expressed their perception about professionalism and its features, their challenges to follow its conduct, and professionalism teaching methods and helpful tips to develop a medical professionalism curriculum. **Conclusion:** The medical professionalism curriculum will be needed to be developed so as to merge the subject of professionalism at all levels of training and education. Challenges to learning and following professionalism have been identified and students need to be supported to overcome conflicts. The supportive learning environment provides students to have more valuable experiences.

Keywords: Professionalism, curriculum, students, physician

Introduction

The importance of teaching professionalism is the same as medical knowledge and patient care that is generally agreed and emphasized upon during the training of competent physicians [1]. The final goal of medical education is to transform students from an ordinary member of the society to a professional member of medicine.

To meet this aim, the process of socialization of students—including not only knowledge and skills, but also values, attitudes and beliefs, in the essence of the culture of medicine as a profession is necessary [2].

Professionalism and its necessity have been emphasized more and more in medical organizations around the world during the past two decades [3]. Learning of medical professionalism among medical students can be divided into formal, informal, and hidden curricula [4]. Many schools have stated their programs and strategies to explicitly teach professionalism, but the impact

of these strategies on students and how they learn from them has rarely been studied [5].

No doubt, the main reason for learning professionalism in medicine is derived from the hidden curriculum [6]. The hidden curriculum, which is experienced rather than generated, has been defined as having a stronger impact than the explicit curriculum [7]. On the other hand, the fact that there is no sound method to detect the components of the hidden curriculum results in problems in learning professionalism by students [6]. By the way, role modeling as a common method of teaching professionalism is not sufficient any more, and the teaching of professionalism must be explicit [8].

Today, it is clear that having an appropriate curriculum is very important to teaching and learning of professionalism [9-11]. Like the other competencies in medical curriculum, many universities around the world have addressed professionalism in their curriculum [12].

In Iran, there is no study or few study on professionalism and learning methods for medical students [13]. There is also no vocational course in medical curriculum, and only some of professionalism concepts are taught, which includes medical ethics, and most of the research backgrounds are on the current literature in reviewing texts related to other countries. [13, 14], and even considering this issue and its rules in medical curriculum in Iran in comparison with some medical curricula around the world is not significant. [15] The aim of this study was to understand the students' and practicing physicians' views as main stakeholders of curriculum about professionalism, their

Access this article online

Website: www.japer.in

E-ISSN: 2249-3379

How to cite this article: Soolmaz Zare, Nikoo Yamani, Tahereh Changiz, To develop a curriculum on professionalism: students' and physicians' perceptions, and challenges. J Adv Pharm Edu Res 2018;8(S2):70-75.

Source of Support: Nil, Conflict of Interest: None declared.

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challenges in practice, and ways to use their opinion in developing a curriculum of medical professionalism.

Methods

This was a qualitative study in which focus group interview was used as the main method for data gathering. Four focus groups were carried out between May to July 2016 consisting of medical students and practicing physicians from Isfahan University of medical sciences, School of Medicine. The MD course of study in Isfahan University is seven years and consists of basic sciences, Introduction to clinical medicine, and Internship phases. Different students from different stages of medicine course were selected to properly represent the perceptions and challenges understood due to notion of professionalism. We also chose a group of working physicians in order to understand the issue deeply even after graduation. A purposive sample of medical students (groups of students from basic sciences, Introduction to clinical medicine, internship) and practicing physicians were invited separately in our four sessions in order to comprehend their ideas and views about medical professionalism. At the beginning of each session, the aim of study was fully explained and informed consent of participants was obtained, moreover, participation was voluntary. Two same trained facilitators conducted sessions in order to decline method error and moderator bias. To meet the objectives of the study the following questions were answered by participants:

1. Who is being regarded as a professional doctor in your view?
2. What are the barriers and challenges you confronted in following professional manner?
3. Which methods of teaching can you mention as helpful method as you learned professionalism by?
4. In developing a medical professionalism curriculum, what should be considered?

Duration of each focus group was approximately two hours and held in a conference room at Educational Development Center. All sessions were audio-recorded and then transcribed completely. The transcription accuracy was confirmed by replaying the audio file. To assure confidentiality, names were deleted in the transcriptions. Textual data were managed with the software MAXQDA, Version 10.

Inductive content analysis was used to organize and interpret the data. This process included open coding, creating categories and abstraction [16]. In open coding the concepts and meaningful sentences were written in the text while reading it. The transcripts were read several times, and as many concepts as necessary were written down in the margins to describe all aspects of the content [17] and categories were freely generated at this stage. After this open coding, the lists of categories were grouped under higher order headings. The aim of grouping data was to reduce the number of categories by collapsing those that were similar or dissimilation to broader higher order categories. After formulating categories by inductive content analysis the abstraction phase started by formulating a general description of the research topic through generating categories. Each category was named using content-characteristic words. Subcategories with similar events and incidents were grouped together. The abstraction process continued as far as was reasonable and possible [16]. The emerging codes, subcategories and main categories were rechecked by the facilitators.

Focus groups findings

Three focus groups were formed with medical students of different educational levels and one with practicing physicians. The demographic information regarding participants is provided in (Table 1).

Table 1: Participants' demographic information

group	No.	female	Male	Age (average)
Basic science phase	4	0	4	19
Introduction to clinical medicine phase	9	5	4	22
Internship phase	7	4	3	24
Practicing physicians	8	5	3	45
Total	28	14	14	28

A total of 209 pieces of text data in focus groups was coded, and grouped into the following categories and sub-categories: Learning outcomes of medical professionalism, teaching and learning medical professionalism, and context of medical professionalism (Table 2).

Table 2: Emerging categories, subcategories and codes from focus group discussion

Categories	Subcategories	Codes
learning outcomes of medical professionalism	Personal development	Being: confident, caring, lifelong learner, competent, knowledgeable, honest, and dressing appropriately.
	Interpersonal development	Being respectful to patients' rights, dignity and authority, being responsive to patients, keeping patients safe and comfortable, communicating effectively with patients, patients' families, colleagues, protecting patient privacy and confidentiality, working collaboratively as a member of a team.
teaching and learning medical professionalism	Target group	Students, teachers, graduates.
	Time of teaching and learning professionalism	Basic science phase, introduction to clinical medicine phase, internship phase, and integration of professionalism with all courses.
	Measures to develop education of professionalism	Training at the right time, using appropriate educational aids and resources, providing students with appropriate feedback, teaching and learning of reflection and its implementation, developing educational brochures and pamphlets, separating educational and clinical rounds, training by repeating, empowering teachers in professionalism, empowering teachers in educational methods, using role modeling, using someone expert on ethics and professionalism available to students for consultation, inclusion of all teachers in teaching professionalism. Small group teaching, role modeling, direct observation, watching movies, standardized patients, peer learning, team working, OSCE, case based teaching, workshop, and professionalism rounds.
	Teaching and learning methods	

context of medical professionalism	Creating a system to deal with cases of non-compliance with unprofessional behavior, determining the code of conduct for students, setting standards for visiting patients and its implementation, compliance with codes of conduct throughout the organization, training of forensics to medical students, compliance with codes of conduct by students, compliance with codes of conduct by employees, compliance with codes of conduct by teachers, developing professionalism guide in action, setting entrance standards for medical students' admission, assign tasks of medical students, revising the process of recruiting teachers
Rules and Regulations	No misuse of the score for the exploitation of students, Establishment of mutual respect among students and staff, Establishment of teachers' respect to subordinates, Educate students about culture and traditions of region they would work in it, Emphasize the effects of role modeling, Empower of the spirit of cooperation among students in basic science phase, Diminish competitive atmosphere among students, Decrease emphasis on score, Awareness of patients about their rights and laws related to treatment.
Hidden Curriculum	No guarantee of future employment, Lack of Appropriate facilities, Increase in number of medical students.
Students' challenges	

Learning outcomes of medical professionalism

The concepts implied by focus group members as learning outcomes—in order to become professional doctors—were classified in two sub-categories: Personal development and interpersonal development.

Personal development is being confident, caring, a lifelong learner, competent, knowledgeable, honest and appropriately dressed. These were the learning outcomes identified by the participants.

"We should keep a patient's personal and health information private and it is very important to understand that it is one of the patient's rights. It is about trust in the physician-patient relationship." (Physician, male)

"Caring is concern, empathy, and consideration for the needs and values of others. As a doctor, I should pay attention to my patients' need, show empathy with them and concern for their feelings as well as their requirements. (Internship phase student, female)

"As a professional doctor, I should be updated with the recent changes in my profession. I should learn and learn in order to do my best for my patients, and I think it is much more serious in medicine because we save lives." (Internship phase student, male)

"If I become capable of doing what is expected of me as a physician, then I can say that I'm to somehow be professional. Maybe I'm a good person, knowledgeable, and can communicate very well with patients, but I cannot do my duties, tasks and services in a desirable way. If so, how can I regard myself as a professional doctor?" (Introduction to clinical medicine phase, male)

"I think that being aware of the necessary knowledge of medicine is the least and most important duties that I have as a medical student. A professional physician is aware of new

improvements in medicine and tries to keep him or herself up-to-date." (Basic science phase student, male)

"Honesty is something personal in my idea, but as a doctor it is crucial to be honest. It directly affects patients' trust, my perceptions about my qualifications and even when I want to do a search or a procedure, I should be honest with myself and my patients." (Physician, female)

"As a medical student, my dress, my conduct, my hygiene, my hair, my shoes and every detail about my appearance can affect patients' perceptions and attitudes towards me. I remember that one day, I was in a hurry, and was somehow sloppy and untidy. I entered the room and a patient was waiting for me. I said hello to him and he asked me when the doctor would come to visit him." (Internship phase student, male)

The learning outcomes as interpersonal development implied by participants were being respectful for patients' rights, dignity and authority, being responsive to patients, and keeping patients safe and comfortable. It also includes communicating effectively with patients, patients' families and colleagues, protecting patient privacy and confidentiality, and working collaboratively as a member of a team.

"We must respect patients regardless of their age, gender, colour, or any other aspect of human beings. They are our patients and we are their physicians and the most important thing is to try our best to treat them and give them best service as possible." (Introduction to clinical medicine phase, female)

"Sometimes, the patient's choice is not aligned with ours; sometimes their choice is the result of their beliefs, regardless of their decision and its consequences. We must respect their right to choose." (Physician, male)

"As a professional physician, we must listen to patients' questions, pay attention to their ideas, answer their questions, and give them the information they want in a comprehensible way" (Internship phase, male)

"Patient safety and comfort is always a priority for a professional doctor. As a good doctor I must be sure that they receive enough care and their needs are met, and if I am not able to give a patient proper service, I must ask for help." (Introduction to clinical medicine phase, female)

"One of the important skills for a professional doctor is communication. We must be able to communicate with patients effectively to understand them in better way and vice versa. We must be able to communicate with patient families in a proper way because it directly affects their satisfaction, and even it can lead to better treatment of patients. Moreover, effective communication with colleagues results in improved information flow, more effective interventions, improved safety, and even improved quality of care." (Physician, male)

"Keeping patient information confidential is very important. It is our duty to respect patient confidentiality. I think it is about trust and honesty in doctor-patient relationship." (Basic science phase student, male)

"We should know that we are members of a team to give patients qualified services, and it underlies our cooperation with other healthcare team members in an effective and respectful manner. We must share our information with colleagues and ask them to help, if necessary, because we have a common purpose and it is patient treatment and, lastly, patient satisfaction." (Internship phase, female)

Teaching medical professionalism

In this study, four sub-categories about teaching medical professionalism emerged among the participants, including the target group, the teaching methods, the measures to develop

education of professionalism, and the time of teaching and learning professionalism.

"To make sure that professionalism would be regarded in the healthcare system to a larger extent, I think teaching professionalism to medical students and graduates is inevitable." (Internship phase, male)

"Sometimes, I see that my teachers cannot communicate properly with patients or their colleagues. They are our role models and must be perfect and conscious in all aspects of their behaviour." (Internship phase, female)

"When I discuss an issue in a group of my classmates, I think I learn that issue deeply, because we are different people with different visions. I think professionalism is one of those kinds of issues..." (Introduction to clinical medicine phase, male)

"Observation is all we do all the time and it has its effects on us. We learn when we look at the behaviours of our teachers, colleagues, and staff members... I look at them and I save scripts in my mind; sometimes, it comes unconsciously." (Internship phase, male)

Measures to develop education of professionalism

Some ways to develop professionalism are training at the right time, using appropriate educational aids and resources, providing students with appropriate feedback, teaching and learning from reflection and its implementation, developing educational brochures and pamphlets, and separating educational as well as clinical rounds.

Other ways to do it are training by repeating, empowering teachers in professionalism, empowering teachers in educational methods, use of role models, using someone who is expert in ethics and professionalism, and including all teachers in teaching professionalism.

"To improve my performance, I need to know about my strengths and weaknesses. My teacher, colleagues and friends must give feedback to me in a comprehensive way when it is needed. They must make me aware and help me improve myself." (Internship phase, female)

"Professionalism in training takes place through repetition. Time to time, as a student, I must be exposed to the notion of professionalism by means of anything." (Physician, male)

"As the first step, our teachers must be trained in professionalism and its appropriate teaching methods. Many of our teachers still use lectures and show slides. Developing a good curriculum is a key factor for success." (Introduction to clinical medicine phase, female)

Time of teaching and learning professionalism

Professionalism could be learnt during the basic science phase, introduction to clinical medicine phase, and internship phase. Professionalism must be integrated into all courses.

"I think teaching should be started from the first day and last till the end." (Basic science phase student, male)

"I think it is a waste of time to read about professionalism in the basic science phase and then experience it in the clinical phase. Both these phases must be concurrent." (Physician, male)

Context of medical professionalism

The last category to emerge, which was mentioned in focus groups, was the context, which included three sub-categories: rules and regulations, hidden curriculum, and students' challenges.

Rules and Regulations

To implement professionalism in the curriculum, a supportive context is crucial, and rules and regulations are an important part of it. As per medical students' and doctors' perspectives, to develop a curriculum in professionalism, we must create a system to deal with cases of non-compliance with professional behaviour, determine the code of conduct for students, set standards for visiting patients and implement them, comply with codes of conduct throughout the organization, and give forensic training to medical students. It also requires compliance with codes of conduct by students, compliance with codes of conduct by employees, compliance with codes of conduct by teachers, developing professionalism to guide action, setting entrance standards for medical students' admission, assigning tasks to medical students, and revising the process of recruitment of teachers.

Hidden curriculum

With regard to a supportive context, some aspects cannot be performed by means of law, and occur through the dominant culture and the hidden curriculum. As mentioned by participants, there should be no exploitation of students. Also, there should be mutual respect among students and staff, and respect for subordinates.

Students should be educated about the culture and traditions of the region they would work in, and learn the effects of being a role model. Students should be empowered with the spirit of cooperation in the basic science phase: there should be an atmosphere of less competition among them as well as decreased emphasis on grades, and patients should be made aware of their rights and laws related to treatment. These will help develop a curriculum of medical professionalism.

Students' challenges

Another aspect of a supportive context considered by students related to some challenges they face including no guarantee of future employment, lack of appropriate facilities and increase in numbers of medical students

"I see that there are many unemployed general practitioners with a good academic background. I became, to some extent, unmotivated to study, be perfect, be professional, and be confident and so on." (Introduction to clinical medicine phase, female)

Discussion

In this qualitative study, we examined the views of medical students at different levels of education and working physicians regarding their perception of the concept of professionalism, the challenges they face in practice, and what can be useful to prepare a new curriculum on medical professionalism.

The results of this study suggest a consistency between students and doctors' perceptions of professionalism with those in the literature, as stated by GMC in Good Medical Practice ^[18] and the American Board of Internal Medicine Foundation, American College of Physicians, American Society of Internal Medicine Foundation, and European Federation of Internal Medicine in Medical Professionalism in The New Millennium: A Physician Charter ^[19].

The gap between what they learned theoretically and what is happening in the healthcare system is the origin of conflicts and challenges students and physicians confront every day. This gap becomes wider when teachers, as role models, are not proper exemplars of professionalism. Salinas-Miranda' finding was to

some extent similar to this study's^[4]. According to participants' points of view, lack of supportive context, regulations and laws, and culture were the main challenges in applying professionalism. Yamani and Papadakies also in their studies emphasized on the importance of supportive context to learning of professionalism virtues^[13, 20]. To overcome these, the definition of codes of conduct, provision of guidelines of professionalism in practice, and definition of relevant laws and regulations are essential in the first stage as Papadakies mentioned it before^[20]. Then, running them and following them throughout the organization by teachers, staffs, residents and students is essential. Fryer-Edwards's study showed the similar result^[21].

Moreover, the determination of expectations and job descriptions of students and professionalism learning goals are necessary due the finding of this study and Cruess' findings^[22]. In addition revising the admission process of medical students and teachers is helpful^[23].

Several challenges were mentioned in this study by students that are threatening medical professionalism and students' incentives. These include no guarantee of future employment, a lack of appropriate facilities, and an increase in the number of medical students. These challenges did not mention in other studies. Also, due to this study, it is crucial to address the issues of cooperation, teamwork, and mutual respect between teachers, students and staff in the preparation of a professionalism curriculum. Karnieli-Miller findings were similar, too^[24].

Besides considering the effect of role models and their impact on learners and other members of the organization is an issue of interest in developing professionalism curriculum, as both positive and negative role models' effects are very bouncing^[24]. Therefore, faculty development is necessary^[8]. In addition, patients' awareness of their rights is a key leverage in the manifestation of professionalism and of their rights^[25], because these two concepts are integrated and consistent. Karnieli-Miller, Steinert and Passi findings were similar, too^[8, 24, 26]. The advancement of each one induces the improvement of the other.

By the way, addressing professionalism more formally is logical, and it is possible through curriculum development as considered by Cruess^[22]. According to this study and literature, integrating professionalism with all phases of the curriculum should be considered^[27]. To develop a curriculum of medical professionalism, some teaching methods were regarded by participants as effective methods, including small group teaching, direct observation, watching movies^[28], standardized patients, OSCE, case based teaching, peer learning, team working, and professionalism rounds^[29]. Totally, a combination of teaching methods is recommended to be considered in developing a curriculum.

The results of this study should be considered in the context of some of the methodological limitations of qualitative research. Data was collected from only one institution and a generalization to the larger population of medical students and physicians is limited. The findings of the study were authentic and credible, as they were based on opinions of medical students and doctors.

Notwithstanding the limitations, we obtained clarity on students' and doctors' opinions on professionalism, their challenges, and the potential points of improvement required to develop a curriculum of medical professionalism.

Conclusion

The concept of professionalism should be integrated into the general medical curriculum as a longitudinal theme. In order to successfully implement the medical professionalism curriculum, it is necessary to provide appropriate context, use appropriate teaching and learning methods. Moreover, challenges to learning and following professionalism have been identified and students need to be supported to overcome these conflicts. The supportive learning environment provides students to have more valuable experiences.

Acknowledgements: Special thanks to participants of research.

Funding: The present article was extracted from the thesis written by Soolmaz Zare and was financially supported by Isfahan University of Medical Sciences (Grant No. 395056) and it was financially supported by NASRME (Grant NO.960158).

Conflict of interest: The authors report no conflicts of interest. The authors alone are responsible for the content and writing of this article.

References

1. Applebee, G., A brief history of medical professionalism--and why professionalism matters: as the medical profession evolves, the issues and challenges change, but the ongoing discussion continues to enrich professional practice. *Contemporary Pediatrics*, 2006. 23(10): p. 53-60.
2. Goldie, J., Integrating professionalism teaching into undergraduate medical education in the UK setting. *Medical teacher*, 2008. 30(5): p. 513-527.
3. Archer, R., et al., The theory of planned behaviour in medical education: a model for integrating professionalism training. *Medical education*, 2008. 42(8): p. 771-777.
4. Salinas-Miranda, A.A., et al., Student and resident perspectives on professionalism: beliefs, challenges, and suggested teaching strategies. *International journal of medical education*, 2014. 5: p. 87.
5. Baernstein, A., et al., Learning professionalism: perspectives of preclinical medical students. *Academic Medicine*, 2009. 84(5): p. 574-581.
6. Mossop, L., et al., Analysing the hidden curriculum: use of a cultural web. *Medical Education*, 2013. 47(2): p. 134-143.
7. Wearn, A., et al., In search of professionalism: implications for medical education. *The New Zealand Medical Journal (Online)*, 2010. 123(1314).
8. Steinert, Y., et al., Faculty development for teaching and evaluating professionalism: from programme design to curriculum change. *Medical education*, 2005. 39(2): p. 127-136.
9. Kelly, A.V., *The curriculum: Theory and practice*. 2009: Sage.
10. Birden, H., et al., *Teaching professionalism in medical education: a Best Evidence Medical Education (BEME)*

- systematic review. BEME Guide No. 25. Medical teacher, 2013. 35(7): p. e1252-e1266.
11. Jones, R., et al., Changing face of medical curricula. The Lancet, 2001. 357(9257): p. 699-703.
 12. Cuesta-Briand, B., et al., A world of difference': a qualitative study of medical students' views on professionalism and the 'good doctor. BMC medical education, 2014. 14(1): p. 77.
 13. Yamani, N., et al., How do medical students learn professionalism during clinical education? A qualitative study of faculty members' and interns' experiences. Iranian Journal of Medical Education, 2010. 9(4): p. 382-395.
 14. Nemati, S., A. Saberi, and A. Heidarzadeh, Medical professionalism and its education to medical students. Research in medical education, 2010. 2(1): p. 54-61.
 15. Ghaffari, R., et al., Comparative Study: Curriculum of Undergraduate Medical Education in Iran and in a Selected Number of the World's Renowned Medical Schools. Iranian Journal of Medical Education, 2012. 11(7): p. 819-831.
 16. Elo, S. and H. Kyngäs, The qualitative content analysis process. Journal of advanced nursing, 2008. 62(1): p. 107-115.
 17. Hsieh, H.-F. and S.E. Shannon, Three approaches to qualitative content analysis. Qualitative health research, 2005. 15(9): p. 1277-1288.
 18. Council, G.M., Good medical practice. 2013: General Medical Council Manchester.
 19. Medicine, A.F.A.B.o.I., 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(3): p. 243-246.
 20. Papadakis, M.A., H. Loeser, and K. Healy, Early detection and evaluation of professionalism deficiencies in medical students: one school's approach. Academic medicine, 2001. 76(11): p. 1100-1106.
 21. Fryer-Edwards, K., et al., Overcoming institutional challenges through continuous professionalism improvement: The University of Washington experience. Academic Medicine, 2007. 82(11): p. 1073-1078.
 22. Cruess, R.L. and S.R. Cruess, Teaching professionalism: general principles. Medical teacher, 2006. 28(3): p. 205-208.
 23. Cohen, J.J., Professionalism in medical education, an American perspective: from evidence to accountability. Medical education, 2006. 40(7): p. 607-617.
 24. Karnieli-Miller, O., et al., Medical students' professionalism narratives: a window on the informal and hidden curriculum. Academic Medicine, 2010. 85(1): p. 124-133.
 25. Thiel de Bocanegra, H. and F. Gany, Good provider, good patient: changing behaviors to eliminate disparities in healthcare. The American journal of managed care, 2004. 10: p. SP20-8.
 26. Passi, V. and N. Johnson, The impact of positive doctor role modeling. Medical teacher, 2016. 38(11): p. 1139-1145.
 27. O'Sullivan, H., et al., Integrating professionalism into the curriculum. Medical teacher, 2012. 34(2): p. 155-157.
 28. Klemenc-Ketis, Z. and J. Kersnik, using movies to teach professionalism to medical students. BMC medical education, 2011. 11(1): p. 60.
 29. Passi, V., et al., Developing medical professionalism in future doctors: a systematic review. International journal of medical education, 2010. 1: p. 19.