

ORIGINAL ARTICLE

FACULTY AND STUDENTS' PERCEPTION ABOUT APTITUDE OF PROFESSIONALISM IN ADMISSION PROCESS OF MEDICAL COLLEGE

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Background: Historically, knowledge and skill were of prime focus in medical education, where as professionalism was perceived as an attribute to be acquired during their MBBS studies. In the past decade, trends have changed and graduating medical students are expected to competently deliver care in a professional manner. The selection of applicants with professional attributes at the time of admission is a stepping stone for the formation of a good doctor. This study was conducted to determine the students' and faculty's perception about aptitude of professionalism in the admission process in our setting. **Methods:** In this descriptive cross-sectional study an interactive/scenario-based conversation regarding institutional values, contribute to personal reflection of what will be expected of them in the medical profession and inclusion of such discussion in admission process was made to assess the aptitude of Professionalism of 100 students and 100 faculty members of Avicenna Medical College Lahore. After this conversation the questionnaires were filled by both the groups to record their responses on the aptitude of professionalism. The data was analysed to determine the response patterns of both the groups by using Pearson Chi-Square analysis through crosstabs. All analyses were carried out using SPSS-18. **Results:** The response of students to professionalism discussion was more positively influenced (91%) compared to the faculty (59%), ($p < 0.05$). The students agreed that such scenarios do indicate what our institution values in its students and contribute to personal reflection of what will be expected of them in the medical profession. However, faculty agreed more (85%) than the students (67%) for inclusion of such scenarios in admission process, $p < 0.05$. **Conclusions:** Medical Colleges should include some form of assessment regarding aptitude of professionalism in the admission process to identify future medical students' capacity for professional behaviour. Future studies are needed to determine innovative interview strategies for this purpose.

Keywords: Students' perception, professionalism, admission process, medical colleges

INTRODUCTION

Centuries ago it was well quoted by Aristotle that 'Educating the mind without educating the heart is no education at all'. More than any other type of education this is most relevant in medical education, where the attributes of a good doctor include characters qualities such as compassion, altruism, respect and integrity. In our region medical ethics and professionalism is taught to the 3rd year medical students as a part of the curriculum of Behavioural Sciences, and it is expected of them to learn the attributes of an ethical and professional doctor during the course of their education. Thus, the question arises that is it relevant to assess professionalism in prospective medical student at the time of admission? The Association of American Medical Colleges (AAMC) reported that competency in professionalism, as well as the ability to engage and communicate with others, are skills "that students have likely begun to develop in experiences prior to medical school. The purpose of the undergraduate medical curriculum is to advance and refine these foundational competencies."¹

Emphasising character qualities of physicians in the admission criteria and selection process involves a paradigm shift. Currently, the objective merit for

admission into a medical college is calculated as an aggregate of the marks in Intermediate (or an equivalent exam, e.g., A-Levels) and Medical College Entry Test. One potential pitfall of the admission process in general is an over-emphasis on the cognitive aspects of an applicant relative to the non-cognitive aspects such as communication/interpersonal skills, social awareness, cultural competency and professionalism.² Recently, Pakistan Medical & Dental Council (PM&DC) has approved a regulation that "the admitting authority shall determine the order of merit while allocating the weightage to the marks as Matric (10%), Intermediate (40%) and Entry test (50%). The admitting authority may allow an institutional aptitude and entry test which can have a maximum weightage of 25% from the total value of weightage of the entry test"³

Interest in humanistic factors and other attributes of the profession have not always been given high priority in the selection of medical school candidates. This is not out of lack of desire on the part of admission committees. Difficulties in agreeing upon important variables and how to obtain valid and reliable measures by which to support the use of these variables have proven much more challenging.⁴ Assessment at this stage of applicant may be of significant importance

as evidence suggests that exhibiting unprofessional behaviour while in medical school is associated with subsequent action by state medical boards.⁵ Therefore, medical college admission processes should include methods to select and subsequently admit students who are not only academically capable but who will also demonstrate appropriate professional behaviour during medical careers.

A safe and high-quality medical care is a basic human right. Our country needs a system of a safe health care where patients and public can have a confidence on the professionals graduating from medical colleges. Thus the selection of applicants with ethical and professional attributes is the first stepping stone in the formation of a good doctor. This study was conducted to determine the 2nd year MBBS students' and faculty perception to assess the impact and effectiveness of the use of scenario-based questions on professionalism in the future admission processes at our institution.

SUBJECTS AND METHODS

In this descriptive cross-sectional study an interactive/ scenario-based conversation regarding institutional values, contribute to personal reflection of what will be expected of them in the medical profession and inclusion of such discussion in admission process was done to assess the aptitude of Professionalism of 100 students and 100 faculty members of Avicenna Medical College Lahore.

The student's population was of 2nd Year MBBS class of which 100 students of Avicenna Medical College, Lahore were taken and a discussion on Medical Ethics and Professionalism was intervened. It was followed by 10 scenario-based questions on professionalism for which their responses were recorded and discussed later. The questions for discussion included:

1. You are a medical student and you come to know that your room mate is using drugs for mental relaxation. What would you do?
2. You accidentally administered a wrong injection to a hospitalised patient, although the situation is not life threatening. What would you do, give reasons for your response.
3. You are a doctor and your friend requests you to prescribe a medicine for his sister, who cannot come to see you. How would you handle this issue with your friend?
4. Your Senior Medical Officer (SMO) asks you to carry out a procedure, which you feel is in-appropriate or unsafe for the patient. What would be your decision?
5. One day your class mate declares that he has obtained a copy of the Question Paper for an upcoming examination. You would ...
6. You discover that your good-looking class fellow of the other sex is taking special interest in you. How would you handle him/her?
7. You are deeply inspired by and admire one of your subject teachers. How would you show your feelings to the teacher?
8. Your best friend who is in a habit of getting up late asking you to mark him/her present on lecture attendance sheet (put a proxy). You would you do?
9. One of the Professors of a subject is not being able to deliver the lectures properly. What would be your response to the situation?

10. You are a Doctor on duty, and despite all your best efforts, an admitted patient dies of cardiac arrest. The relatives are infuriated and accuse you of giving wrong injection to the patient. You would be your reaction?

The students were encouraged to give their view point about the situations and the dilemmas in these scenarios. After this discussion on above scenario-based questions, the students were asked to fill the questionnaires to assess their perception on inclusion of such scenarios in the upcoming admission process. The questions along with the responses of students and the faculty are shown in Table-1.

On the 10th September 2011, a similar presentation was given to 100 faculty members who were normally involved in the admission interviews at Avicenna Medical College, Lahore. They included a variety of designations from Professors, Associate Professors, Assistant Professors and Senior Demonstrator or lecturer. The same 10 scenario-based questions were discussed with them and their opinions were obtained on questionnaires similar to those of students.

The data were entered and analysed using SPSS-18. The qualitative data given in cross tabulation to determine the response patterns of both groups as well as the differences between students and faculty responses. Association among the responses for both the students and faculty questionnaires was tested using Pearson Chi-Square analysis through Crosstabs. $p < 0.05$ was taken as significant.

RESULTS

In this study the mean age of 100 students and 100 faculty members was 21.9 ± 1.30 years and 41.61 ± 12.79 years respectively. In 100 students there were 28 males and 72 female students while in 100 faculty members there were 47 males and 53 females. For First-item, 77% students ranked the lecture experience as highly positively, whereas only 10% of faculty members were 'highly positively influenced' by the lecture experience. The most frequent response of students and the faculty for item 2 (what our institution values) was in the 'agree' and strongly agree category, i.e., 85% and 76% respectively. For item 3 (personal reflection) more students (82%) responded as 'strongly agree' or 'agree' compared to 65% of faculty. For item 4 (enhance the ability) the most frequent answer of students was 'strongly agree' and 'agree' amounting to a total of 96%, whereas 67% faculty had similar views. The faculty agreed more 85% than the students 67% to item 5 on inclusion of similar scenario-based questions on professionalism in the admission process

Overall, a favourable response to item 1 was associated with more favourable responses to the remaining questions by both groups. Of particular note, none of the students or the faculty responded as 'strongly negatively influenced' or 'moderately

negatively influences' to the item 1 regarding lecture experience. However, almost a similar number of students responded to question 2, 3, 4, and 5 as 'strongly disagree', these were 11, 16, 14 and 14 respectively. Such a trend was not observed by the faculty very few faculty members mark the category 'strongly disagree' to the above items. A neutral ranking to the all the 5 items was given by a greater number of faculty members than the students.

Similar questions were asked to both groups in questionnaires and a highly significant statistical difference was found in responses to question 1, 2, 3, and 4 ($p=0.000$) with the students ranking it more positively than faculty. For question 5 'Similar scenario-based questions on medical professionalism and ethics are important to be asked as a part of Interview prior to admission in a Medical College', the statistical difference was significant ($p=0.010$) with more faculty members ranking it positively than the students.

Table-1: Comparison of different items in students and faculty

Questions	Reponses	Students (n=100)	Faculty (n=100)	p-value
After the lecture on medical ethics and professionalism and discussion on scenario-based questions, My experience was.	Natural	9	41	0.000**
	Moderately positively influenced	14	49	
	Highly positively influenced	77	10	
The scenario-based questions presented in the lecture influenced my impression on what my Alma Mater i.e. Avicenna Medical College values in its student's body	Strongly Agreed	21	22	0.000**
	Agreed	64	54	
	Neutral	3	19	
	Disagreed	1	5	
	Strongly disagreed	11	0	
Asking the professionalism / Ethics scenario in this lecture resulted in personal reflection about what is expected of a Physician.	Strongly Agreed	46	13	0.000**
	Agreed	36	52	
	Neutral	1	20	
	Disagreed	1	14	
	Strongly disagreed	16	1	
Such scenario-based questions and discussion can enhance the ability of a Student / Physician to resolve the Ethical problems encountered during Medical Education and in career as a Physician.	Strongly Agreed	49	22	0.000**
	Agreed	35	47	
	Neutral	2	20	
	Disagreed	0	8	
	Strongly disagreed	14	3	
Similar scenario-based questions on medical professionalism and ethics are important to be asked as a part of Interview prior to admission in a Medical College.	Strongly Agreed	39	46	0.010*
	Agreed	28	39	
	Neutral	10	9	
	Disagreed	9	4	
	Strongly disagreed	14	2	

DISCUSSION

The discussion on professionalism scenarios was described as having a positive influence on the student as well as the faculty experience. This was also associated with positive responses of the students that such scenario-based questions would leave an impression on the future applicants desirous of admission, about what our institution values in its students and contribution of an element of personal reflection about what will be expected of them in the medical profession. In addition, students felt that asking questions about the aptitude of professionalism is an important aspect of the interview process.

Overall, there was an association between the students' response to the aptitude of professionalism scenarios and the faculty's perspective. However, there were a number of faculty members who, despite marking the response to the scenario-based discussion as having a positive influence, were neutral with respect to the most of the questions. In these instances, perhaps the faculty looked at the other factors of constituting the merit of the applicant, such Intermediate and Entry Test marks. In their view or responses these overrode the issue of professionalism when it came to a final ranking of the applicant. Some faculty members gave response that over a period of time, the applicants may become

aware of being asked specific scenario-based questions through the senior students or sources on the web and may come prepare with well memorized answers. To avoid this, the scenarios should be used in rotation; with new ones being introduced in each admission process and the faculty members involved in the process should be trained and given written instructions about the professionalism scenario with each applicant file prior to the interview day. Generally, it is important that faculty development should focus on professionalism as well. Previous studies done on professionalism in medical school or colleges suggest that students may model the unprofessional behaviours of their mentors or refrain from questioning their mentors because of concern about the impact on their evaluations.⁶ The need for improved role modelling, better student behaviour and focused faculty development should be reviewed.⁷

One of the important findings was in responses to question whether professionalism questions were important to be asked as part of the interview process and most of the students and faculty responded to it positively, and the faculty more so. It is understood that the selection of future doctors to medical college is only one piece of the puzzle for maintaining professionalism in the medical profession. A recent study has also shown similar results with students more positively influenced than the faculty.⁸

Fortunately, professionalism is gaining increased recognition as an integral component of medical education that needs to be specifically taught, modelled, and monitored throughout the curriculum.⁹ As professionalism is becoming a vital part of medicine today and it needs to be promoted and implemented at every level of medical education. While there are a number of potential ways that an admissions interview process could evaluate facets of professionalism, it is but one aspect of a multi-pronged approach.¹⁰ Tools utilised for identifying unprofessional behaviours have ranged from a question regarding interpersonal skills on the overall clinical evaluation to developing a specific form for assessing unprofessional behaviour.¹¹ In conjunction with formal instruction during medical school in the classroom and at the bedside, as well as attempts to change the culture of an institution leading to a paradigm shift in exposing the 'hidden curriculum', the medical profession can address those factors that impede the highest standard of professionalism being realised.¹² The medical school and residency curriculum should be altered, not only by including lectures on professionalism but also by inculcating the skills necessary to promote it.¹³

While much of the focus on teaching professionalism and ethics occurs during medical school, perhaps simply promoting thoughts about professionalism in the MBBS applicants at this early stage may be worthy first steps as an introduction to the practice of professional and ethical behaviour. There is now consensus among medical educators that learning how to deliver care in a professional manner is no longer a peripherally acquired skill but is as integral to medical education as learning the core scientific data.¹⁴

There were several limitations of this study. The questionnaire was not validated and the results should be considered as preliminary. Further studies should expand the sample to include the applicants of the admission interview to record their feedback on the scenarios of professionalism. Despite these limitations, we believe this study provides new information on the impact of asking professionalism scenarios to the applicants, from both the students and the faculty perspective, demonstrating that they can be worthwhile in the admissions process. More studies are needed to determine other interview strategies in the admissions process that help identify future medical students' capacity for professional behaviour.

CONCLUSION

It is important that students with ethical and

professionalism deficits are identified during the admission process, otherwise such students are at an increased risk of subsequent disciplinary actions and on-going difficulties with professionalism beyond their student and training years. There is a myriad of tools available to assess deficiencies in knowledge and clinical problem solving skills, but there are a few guidelines for addressing unprofessional attitudes.

Professionalism/ethical scenarios can be a worthwhile tool for development of affective domain of medical education.

Medical Colleges should consider inclusion of professionalism scenarios in the admission process to identify future medical students' capacity for professional and ethical behaviour. Future studies are needed to determine innovative interview strategies for selection of students with appropriate attitude for professionalism in the field of medicine.

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