

Research Article

Professionalism in Hospitals: House Officers and Residents Understanding of Medical Professionalism

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Abstract

Background: Current medical training focuses more on hard skills training and technical aspects of medicine with less emphasis on soft skills including Medical Ethics and Professionalism.

Objective: To assess the understanding of medical professionalism among the house officers and residents in a tertiary care hospital setting.

Methods: The study was conducted at King Edward Medical University, Lahore from July to December 2018. Following ethical approval of the study from the Institutional Review Board and informed consent, the data was collected by a self-administered proforma including 'Barry challenges to professionalism questionnaire' and 'ABIM (American Board of Internal Medicine) Scale' to measure professionalism through random sampling. The data was analyzed using SPSS 20.

Results: 320 participants completed the questionnaire (164 House officers & 156 Residents) with the mean age of 26.12 (\pm 2.786). The most challenging case for participants in Barry Questionnaire was the Physician Impairment scenario, in which merely 43.4% of participants responded with best or Second-best response, followed by Acceptance of Gift Scenario with 46.6% best or second-best responses. Conflict of Interest, Harassment, and Honesty scenarios had a relatively better response rate. The mean score for ABIM scale overall was 49 (\pm 12.85), pertaining 20.72 (\pm 6.99) to 'Excellence' subscale, 15.57 (\pm 6.55) to 'Altruism/Respect' subscale and the lowest score of 12.69 (\pm 7.70) to 'Honor/Integrity' subscale. No statistically significant differences were noticed in responses of house officers and residents.

Conclusion: Junior doctors have a poor understanding of the challenges in medical Professionalism. Current teaching and training appear to be insufficient in helping them deal with Professionalism challenges.

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Keywords | Medical Professionalism, Barry Questionnaire, ABIM Questionnaire, Undergraduate Medical Education, House Officers, Residents.

Introduction

ABMS (American Board of Medical Specialties) defines Medical Professionalism as a system of values, in which the professionals proclaim to both colleagues as well as the public, the competent standards, and high ethical values, which they will uphold

in their duties. It also includes the expectations of both public and patients from those professionals.¹ Physicians Competency Framework CanMEDS 2015 emphasized the role of medical graduate as a communicator, collaborator, professional as well as a scholar, highlighting that just biomedical knowledge is not enough for the practice of medicine.² The

General Medical Council's (GMC) report on undergraduate medical education, *Tomorrow's Doctors*, recommended the inclusion of "ethics and legal issues relevant to the practice of medicine" as a knowledge objective and "awareness of the moral and ethical responsibilities involved in individual patient care and the provision of care to populations of patients" as an attitudinal objective.³

Given the abstract nature of this term, it is very difficult to assess the actual paradigm of professionalism but the concept is becoming more prevalent among the medical fraternity. Interaction with the consultants is still a major factor in developing a professional attitude among the students.⁴ Though in the past decade or so, many competent authorities have started emphasizing on ethics and professionalism during the formal medical education, yet very few institutes have developed a certified curriculum.⁵ Researches have shown that formal education is fundamental to the basics and smooth performance in ethical crisis at the level of both medical students as well as residents.^{6,7,8}

Measuring professionalism is another challenge in itself. Gifts, confidentiality, harassment, error disclosure, and conflict of interest are among the few challenging areas where professionalism is vigorously tested, hence requiring formal assessment.⁹ Pakistan Medical and Dental Council (PM&DC) has highly recommended the affiliated institutes to incorporate formal ethical education in the medical education curriculum.¹⁰ Despite its importance in healthcare in Pakistan, researches on this topic are very limited.^{11,12} The objectives of this study were to assess the understanding of medical professionalism among different tiers of healthcare professionals (fresh graduates and residents), in a tertiary care hospital setting and determine if there is difference between these two groups due to residents being at a different level of training and having increase experience in the field.

Methods

Ethical Approval was sought from the Institutional Review Board of King Edward Medical University. The study was conducted in compliance with "Ethical principles for medical research involving human subjects" of the Helsinki Declaration. It was a cross-

sectional study with 6 months duration from August 2018 to January 2019. The minimum sample size to detect statistically significant difference was calculated as 150 using 95% confidence interval, and 5% margin of error. 211 responses were received out of 250 that were distributed. Inclusion criteria were house officers and resident physicians working in both medicine and allied plus surgery and allied departments in the Mayo Hospital Lahore, who agreed to participate in the study voluntarily. Responses from doctors with less than 3 months of clinical experience were excluded. The data was collected through a self-administered questionnaire. This Questionnaire had three parts; Demographic information, 'Barry challenges to professionalism questionnaire' and ABIM Scale' for measuring Professionalism.

Barry challenges to professionalism Questionnaire is an open-source, validated questionnaire which includes 5 challenging clinical scenarios, each testing different aspect of Professionalism with multiple choices to select the most appropriate answers from. It includes scenarios based on accepting Gift, Conflict of Interest, Impairment, Harassment, and Honesty. Respondents are asked to choose a single best answer. Details of questions and their answers can be found elsewhere.¹³

ABIM (American Board of Internal Medicine) Scale is an open-source scale developed by the American Board of Internal Medicine to measure professional attitudes and behaviors in medical education.¹⁴ It includes a series of 12 statements where respondents report on their peers and perception of the educational environment around them on 9 points Likert scale (0 indicating 'never' and 9 indicating 'always'). These statements are grouped into 3 subcategories i.e. Excellence (linked with educational practices, Questions 1-5), Honor/Integrity (honesty and righteousness, Questions 6-9), and Altruism/Respect (selflessness, Questions 10-12). Some of the example items are shown in Table 1 below.

Participants were also asked if they were formally taught about professionalism at medical school, how many hours of teaching they received, and if they were satisfied with that course or not. Questionnaires were distributed among the participants through their respective departments. The data was analyzed by

Table 1: Summary of ABIM Scale Statements Categorized into three Aspects of Professionalism

Category	Statements
Excellence	During my most recent clinical posting, I have encountered individuals who display and promote professional behavior.
	My colleagues have assisted me in attaining educational material (e.g., journal articles, textbooks) pertaining to my patients.
	I have observed that my colleagues place the needs of their patients ahead of their own self-interest.
	I have observed that the colleagues I have worked with educate their patients about their illnesses.
Honor/ Integrity	I have been instructed to withhold data from a patient's chart without being given an explanation by my senior resident or consultant.
	I have observed my colleagues lie to a patient.
	The colleagues I have worked with asked me to write orders or fill out forms and sign their names.
	I have been urged by my colleagues to copy their history and physical examination rather than gather my own information from the patient.
Altruism/ Respect	I have observed my colleagues referring to patients as 'hits, gomers, real citizens, walkie-talkies, players, frequent flyers' or other offensive terms.
	During this clinical rotation, I have met individuals, whom I consider role models.
	I have observed colleagues making derogatory statements about other medical/surgical specialty groups or other health care workers.
	I have observed colleagues scheduling tests or performing procedures at times that are more convenient for themselves than for the patient.

using SPSS 20 version for Windows 10. Descriptive statistics were computed for the whole data. Mean and standard deviation (SD) were measured for ABIM scales and subscales and frequency and percentages for Barry's Questionnaire. Independent samples t-test was used for comparison of means between genders, and also between the house officers and residents, departments, and colleges. $P < 0.05$ was considered statistically significant.

Results

About 320 participants completed the questionnaire (164 House officers & 156 Residents) with the mean age of 26.12 (± 2.78). Almost half of the participants were females (157; 49.1%). Out of 320, about 179

responses (55.9%) were collected from Medicine and Allied departments, while the remaining 141 responses (44.1%) were collected from Surgery and Allied departments.

The most challenging case in Barry Questionnaire was the Physician Impairment scenario, in which merely 43.4% of participants responded with the best or second-best response, followed by Acceptance of Gift Scenario with 46.6% best or second-best responses. The remaining scenarios had a relatively better response rate with Conflict of Interest (56.9%), Harassment (57.5%), and Honesty (58.1%) with best or second-best answers. Table 2 shows a brief comparison between the House Officers' and Residents' responses. All the responses had a p-Value below our predetermined alpha cut-off indicating that there is no significant difference between the two groups. While the most difficult scenario for House Officers remained Gift, yet Residents performed worst in the Impairment scenario.

The mean (\pm SD) score for ABIM Professionalism

Table 2: The Frequency of Best or 2nd Best Responses for each Scenario in Barry Challenges to Professionalism Questionnaire: House Officers and Residents. Note: *p-Values are Estimated based on Fisher's Exact Test

	House Officers (1)		Residents (2)		p-Value* (1) vs. (2)
	N = 164		N = 156		
	n	%	N	%	
Acceptance of Gifts	72	43.9	77	49.4	0.370
Conflict of Interest	94	57.3	88	56.4	0.910
Impairment	75	45.7	64	41.0	0.430
Harassment	90	54.9	94	60.3	0.366
Honesty	94	57.3	92	59.0	0.821

scale was 49 (± 12.85) out of the total 108, pertaining 20.72 (± 6.99) to 'Excellence' subscale, 15.57 (± 6.55) to 'Altruism/Respect' subscale and the lowest score of 12.69 (± 7.70) to 'Honor/Integrity' subscale. The participants averaged Excellence forming items as 4.15 (± 1.39), Altruism/Respect as 5.19 (± 2.18), and Honor/Integrity as 3.17 (± 1.92). Table 3 shows the results of these subscales stratified by different factors. After stratification, only the difference between public, private, and foreign medical graduates was found to be significant for an overall total score while no significance was found among gender, designation, and departments the participants belonged to.

Table 3: . Mean (\pm SD) Score for Subscales Stratified by Gender, Designation, Departments (Medicine & Allied vs. Surgery & Allied), and the College from where the Respondents Graduated (Public vs. Private vs. Foreign). *P-Value $<.05$ Statistically Significant

Characteristics		Excellence	Altruism/ Respect	Honor/ Integrity	Total	p-Value
Gender	Male	20.77(\pm 6.58)	16.1(\pm 6.17)	13.04(\pm 7.29)	49.92(\pm 6.17)	>0.05
	Female	20.67(\pm 7.41)	15.03(\pm 6.91)	12.33(\pm 8.11)	48.04(\pm 14.45)	
Designation	House Officers	20.25(\pm 6.66)	15.96(\pm 6.76)	12.94(\pm 7.89)	49.10(\pm 13.27)	>0.05
	Residents	21.21(\pm 7.31)	15.16(\pm 6.33)	12.43(\pm 7.51)	48.82(\pm 12.43)	
Department	Medicine & Allied	20.90(\pm 7.24)	15.94(\pm 7.03)	11.86(\pm 7.84)	48.71(\pm 14.13)	>0.05
	Surgery & Allied	20.49(\pm 6.68)	15.11(\pm 5.88)	13.75(\pm 7.42)	49.36(\pm 11.06)	
College	Public (n=249)	20.33(\pm 6.85)	15.82(\pm 6.33)	12.94(\pm 7.70)	49.10(\pm 12.48)	0.04*
	Private (n=53)	22.20(\pm 6.06)	15.88(\pm 6.86)	12.71(\pm 8.15)	50.81(\pm 14.28)	
	Foreign (n=18)	21.77(\pm 10.46)	11.27(\pm 7.56)	9.16(\pm 5.63)	42.22(\pm 12.07)	

51.6% of participants said they were formally taught about ethics/professionalism at medical school and among them 7.2% had been taught for more than 10 hours, followed by 10.6% who were taught for 5 to 9 hours. Remaining 32.8% were taught for just 1 to 4 hours. Among those who received formal education in medical professionalism/ethics, 66.5% were satisfied with their courses, while 33.5% remained unsatisfied.

Discussion

All over the world including Pakistan, medical professionals are considered as highly respectable members of society, entrusted with human lives. Our medical graduates must acquire the necessary knowledge, skills, and attitudes to develop into emotionally intelligent competent physicians who are capable of handling challenges of real-life Medical Practice.¹⁵ Some of the biggest challenges in improving quality of care and satisfaction of patients are communication skills, awareness of ethics and professionalism among medical professionals.¹⁴

Our study highlighted that medical graduates are poorly equipped with skills to handle Ethical and Professionalism challenges. World Health Organization recognized that in South East Asian countries, the teaching of ethics is in a state of infancy and recommended that measures be taken to improve the situation.¹⁶ A study of health ethics education in junior doctors in Pakistan revealed that although more than half of the respondents encountered ethical problems on daily basis, these ethical issues were being discussed with the clinical supervisor in only 25% of the instances.¹² Unethical behavior of seniors towards

junior doctors and patients were observed by >75% of the respondents.¹² Another study reports that exposure to unethical behavior continues to increase with each passing year in medical school, starting with 35% of first-year medical students who observe ethical misconducts by colleagues, which gradually rises to 90% of final year medical students who witness unethical behavior by colleagues.¹⁷ Experiences during these formative years shapes professional attitudes and ethics skills of future physicians.

Professionalism includes all the expectations from health care providers that the public has and all the essential duties they need to perform to deliver the best possible care.¹ The basic concept was introduced in the Hippocratic Oath which has since evolved and developed nations have inculcated it in their curricula long ago.¹⁸ Professionalism is broadly conceptualized as three attributes. The first is attribute is Professional excellence (linked with educational practices and respondent opinions of their colleagues as health service providers who demonstrate professional conduct, support their colleagues, place their patients' needs above their own, and educate their patients). The second attribute is integrity (honesty and righteousness i.e. the extent, respondents consider their colleagues to be honest and refrain from behaving unprofessionally. The third attribute is Altruism (selflessness and respect for their patients, their colleagues, and the rules of the hospital, which prevent them from using resources and tools inefficiently).¹³ Our study tried to assess these three traits by using the ABIM scale. Results indicated the highest score pertained to the 'honor/integrity' subscale and the lowest to the 'excellence' subscale. The

same order of subscales was also reported by many international researchers like DeLisa et al¹⁹ and Aramesh et al²⁰ as well as Ahadi et al.²¹ A study was done in Karachi using the same scale in 2013 showed that average score attributed to Excellence was 5.70 (± 1.43), Altruism/Respect was 6.48 (± 1.77) while Honor/Integrity got 7.09 (± 1.74).¹¹ Compared to their study, our participants had lower scores in all³ domains with Excellence averaging at 4.15 (± 1.39) while Altruism/Respect was 5.19 (± 2.18) and Honor/Integrity as 3.17 (± 1.92). One of the possible reasons for the difference in results may be that the study was done in a highest-ranked academic medical college in the region, where the significant emphasis is given on Professionalism and ethics teaching, training, and assessment with mandatory sessions on communication skills, bioethics, etc.¹¹ The rest of the medical education system in Pakistan still follows the conventional method of vigorous testing of medical knowledge more than behavior and social skills.²²

Comparison of our results of Barry's Questionnaire scenarios for Gift, Conflict of Interest, and Impairment scenarios with the previous study done in Japan showed that we are lagging far behind in those areas.⁹ Another study was done in Pakistan comparing private vs. public hospital residents using the same Barry Questionnaire also showed no difference between the two in any of the five corresponding scenarios.¹² Though the ABIM scale showed statistical significance between the participants, when stratified according to the medical college they graduated from (p-Value 0.04), but when the results for Public vs. Private vs. Foreign graduates for Barry Questionnaire were compared, interesting trends were noticed. Foreign graduates did exceptionally well in Gifts scenario with 77.8% best or 2nd best responses. Although no statistical significance was found for the rest of the Impairment, Harassment & Honesty scenarios, Conflict of interest scenario showed a p-value of 0.031 (<0.05) with Private sector graduates leading the way (62.3%).

It is believed that professionalism comes with age and training. But our results showed no significant difference between House Officers and Residents at our tertiary care setting. Recent literature points towards an inverse relationship between professionalism, empathy, altruism, and level of medical training, which is a cause for concern among medical

educationists.²³ Feudtner et al found that 62% of medical students believed that during the course of their training their ethical principles had been eroded.²⁴ This depicts how the inculcation of professionalism in medical curricula is necessary as mere training is not leading to any significant improvement in the approach of residents towards any of the three aspects of professionalism. ABMS not only approved of making it an integral part of the assessment of the trainees but also emphasized its importance on teaching it in medical schools.¹

Ethics teaching & Professionalism is often not correlated with clinical practice in Pakistan. Informed consent and confidentiality are informally discussed during clinical ward postings but it is variable depending on teachers/wards and not being systematically taught in the majority of institutions. Often, there is limited opportunity to develop and defend a personal moral view on ethical dilemmas according to religious, cultural, and legal perspectives. The regard that the medical profession in Pakistan used to enjoy has been consistently declining and the public is also becoming more critical of it through the media. Although the competent authorities like Pakistan Medical and Dental Council (PM&DC) and Higher Education Commission (HEC) have stressed time and again on incorporating medical professionalism into the curriculum, its practical results are yet to be seen.^{10pm&dc}

The results of the study need to be seen in the context of its limitations. It was a cross-sectional study and has inherent limitations in the study design. Being a single-center study, the generalizability of results is limited. The strengths of the study included the use of a pre-tested and validated questionnaire, good sample size, and assessment of both individuals as well as the perception of professionalism in peer and educational environment.

Conclusion

To conclude, our study participants had a relatively inadequate level of Professionalism and ethics understanding. The duration of training alone has no significant correlation with professionalism. Different setups like primary and secondary care hospitals should be included in future studies. The state-wide study can provide stronger data regarding the trend in

medical professionalism. It is time that we inculcate it thoroughly in our medical education and test it vigorously. Formal steps at the institution level are needed for improvement.

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Conflict of Interest: The authors declare no conflict of interest

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