

## ORIGINAL ARTICLE

# Assessment of Professionalism Attitudes in Students of Government and Private Medical College Using Learner's Attitudes to Medical Professionalism Scores (LAMPS)

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## ABSTRACT

**Objectives:** To assess and compare the student's attitude to professionalism among government and private medical colleges.

**Research question:** Are there any differences in Professionalism attitudes of students studying in government and Private medical colleges of Pakistan?

**Hypothesis:** Professionalism attitudes of Medical students studying in government and Private medical colleges do not differ from each other.

**Method:** A government medical college of Sargodha & a Private medical college of Lahore were chosen for the study. Study was conducted from May to June 2019. 200 Final year MBBS students were given a questionnaire named Pakistani LAMPS validated through a pilot study. Non probability purposive sampling technique was used. We applied statistical test chi square used for analysis in SPSS 21 version.

**Results:** Out of the study participants, there were 76(38%) were male &124(62%) female. The Pakistani LAMPS had an acceptable reliability index with a Cronbach's alpha of 0.71. The items mean scores vary between (1.93+ 1.03 and 3.00+ SD 3.78, scale 1–5). The score was high significantly in Private medical college students (107/140) than Public medical college (95/140) with p value of 0.0001.

**Conclusion:** The null hypothesis was rejected because the professionalism score of private medical college students was higher than that of government medical college students.

**Keywords:** Professionalism, Attitudes, LAMPS Government, Private, Medical Education

## INTRODUCTION

Medical professionalism is founded on a contractual relationship between society and medicine that includes a set of obligations and expectations<sup>1</sup>. Amongst the significant factors identified for appearance of professionalism, local customs should be respected, cultures & beliefs is thought to be worth mentioning, hence it is named as a 'culture-sensitive paradigm'<sup>2</sup>.

Professionalism was not taught explicitly in the traditional subject based curricula in the last decade, but now it is an integral component of integrated medical curricula across the globe<sup>3</sup>. People belonging to different cultural backgrounds have a different perspective and expectations from a doctor. While designing and assessing a course of professionalism in the integrated medical curricula, the community's expectations must be kept in mind so that it is acceptable and relatable for the medical professionals<sup>4</sup>.

Blakey et al<sup>5</sup> described a medical student as a "socially-exclusive" person who enters medical school with positive attitudes toward professionalism. His ethics, expertise & professional values are in fact shaped by pre medical college life experiences with his family, teachers, friends, and other social contacts<sup>6</sup>.

A lot of research work has been done on medical professionalism in Western countries which stimulates the understanding of professionalism of other ethnic groups<sup>7</sup>.

The South Asian culture, religious believes and traditions are quite different from the American and European cultures, so the ABIM professionalism frame work cannot be applied here without modifications<sup>8</sup>.

In Pakistan, our professional bodies like PMDC, HEC and CPSP have started to identify and document deficiencies in medical professionalism<sup>9</sup>. Many Arabian countries have also recently recognized the importance of teaching and evaluating professionalism in medical education, for example, Saudi Arabia has added professionalism in the competency framework for undergraduate and postgraduate medical education<sup>4</sup>.

A serious attrition of compassion and empathy towards patients is noted in medical students by various authors worldwide<sup>10</sup>. Similarly, in Pakistan the factors identified for this reduction in empathy are mainly, long working hours, strict deadlines and competition during medical college, residency and job acquisition later on<sup>11</sup>.

At the residency level, the college of Physicians and Surgeons of Pakistan (CPSP) had made it mandatory for the residents to obtain certifications in ethics and communication skills but it does not address all of the professionalism traits as defined by the American college of Graduates Medical Education (ACGME)<sup>12</sup>.

Recently some of the medical colleges in Pakistan tried to bridge this gap in professionalism by adding some courses of behavioural sciences, bioethics, social sciences electives and communication skills in their curricula<sup>13</sup>.

An Arab Scholar Muhammad Mustafa Al Eraky with his co-authors felt the need to modify ABIM domains and developed a questionnaire in a survey, enrolling medical education experts. They validated the ABIM domains in the Arabian context and named it Learner's attitude to medical professionalism score "LAMPS"<sup>14</sup>. They identified another domain in the context of professionalism and named it 'Autonomy'.

The reason for choosing the Arabian LAMPS questionnaire was the similarity in ethical values, religious beliefs and traditions amongst Muslim countries. The Arabian LAMPS was tested in the Pakistani context and the newly validated questionnaire was named as "Pakistani LAMPS".

**MATERIAL AND METHODS**

The study was conducted from May to June 2019. The LAMPS questionnaire was translated into Urdu. It was sent to two of the native Urdu speaking medical educationists for validation. After minor modifications it was distributed for pilot testing to 30 final year MBBS students of University College of Medicine, Lahore. Mean & SD for each item or domain were calculated. Reliability was measured by computing Cronbach's alpha of all the items of the questionnaire. After ensuring an acceptable internal consistency of Pakistani LAMPS questionnaire, it was given to 200 students, one hundred each from a Private & public medical college by three of the authors of this study. Chi square test was applied for analysis by using SPSS version 21. P value with a confidence interval of 95% was calculated for comparison of professionalism among the students of government and private medical colleges.

**RESULTS**

In this study, total 200 students from a government and a Private medical college were included. There were 76.0 (38.0%) male & 124.0(62.0%) were female students. Table 1.

Table 1: Distribution of participants were divided into groups based on their medical school and gender.

		Medical Colleges	
		Public n(200)	Private n(100)
Gender	Male	33	43
	Female	67	57

Each item's and domain's mean and SD were reported. The mean + SD scores of items varied between 1.93+1.02, scale 1 to 5) and 3.00+0.77, scale1 to 5). The items included in the domain of "Respect to others" got the highest score, while the lowest scoring items belonged to 'Excellence / Autonomy' shown in Table 2.

The reliability of Pakistani LAMPS was calculated by computing Cronbach's alpha which showed a score of 0.71 shown in Table 3. Cronbach's alpha of 0.7 and above is considered to be an acceptable internal consistency of a questionnaire<sup>15</sup>.

The Professionalism difference of medical students based on the type of medical college, they're studying in was found to be significant statistically (p: 0.0001). It was higher among students at private medical schools. So, the null hypothesis was rejected. (Table 4).

Table 2: Pakistani LAMPS final version includes means and SD for each domain

	Mean	Median	SD
Duty Accountability			
Admits wrong diagnosis before a patients	3.26	4	1.232
Encourages patients to participate in the decision-making process.	2.4192	4	1.21373
Leaves before handing over patients to the next colleagues on duty	3.72	2	1.22438
Participates actively in new resident orientation.	2.405	2	1.16091
Refuses to attend a meeting of the infection control committee.	3.045	4	1.08112
Discusses cases with colleagues in a crowded elevator	3.73	3	1.14176
Excellence. /Autonomy			
	2.285	2	1.06274
Attends patients' questions to explain their disease in a busy clinic.	2.71	2	1.78094
Collaborates with colleagues to draft new hospital guidelines.	2.27	2	1.06902
Searches for the best proof available in patient care.	2.25	2	1.44149
Make deal with a pharmaceutical company to have his or her conference sponsored.	3.355	3	1.18575
Attends medical conferences with a portion of his or her salary.	3.15	3	2.339
Honour/ Integrity			
Give wrong information to a patients to defend colleagues	3.625	4	1.10929
Actual data change in research according to supervisor's advice.	3.72	4	3.15935
Problems a fake sick leave for a child of a friend to study at home.	3.53	4	1.16873
Patients are introduced to medical students as doctors.	2.795	3	1.20425
Hide's information about fatal diagnosis to avoid patient disturbance.	3.08	3	1.18347
Altruism			
Declines sports club to respond to an emergency call.	3.005	3	3.78239
A family appointment is cancelled, for an urgent patients' requirement.	2.6	2	1.18194
Frequently avoids clinical teaching, when prepare for conference.	3.365	3	1.82715
Turns down a visit home to a disabled patient, due to busy clinic.	2.725	2	1.23165
Doesn't witness in court against an employer or a hospital in favor of a patient.	3.12	3	1.1455
Respect			
Respects the roles of members of the department's healthcare team.	1.9397	2	1.03298
Without apologising, keeps the people waiting in his/her clinic.	3.5729	4	1.1999
Patient background when explaining their clinical condition.	2.4322	2	1.1994
Criticizes a prescription written by a colleague in front of patients	4.3131	5	0.9437
Gives importance to some patients based on socioeconomic class or nationality	5.6016	4	19.734

Table 3: Cronbach's Alpha

No. of Items	Cronbach's Alpha
28	0.717

Table 4: Professionalism scores of students of Private & Public Medical Colleges

	Value	p-value
Chi Square Test	76.34	0.0001

## DISCUSSION

Adaptation of Arabian LAMPS in Pakistani setting, the "Pakistani LAMPS" is fit for purpose as it creates from a well-known and internationally accepted ABIM framework of professionalism<sup>16</sup>. It has also been used in non-Western cultures such as Taiwan<sup>17</sup> Iran<sup>18</sup>, and Japan<sup>19</sup>.

Pakistani LAMPS can be used as an assessment tool to identify professionalism flaws among medical and dental students and practicing physicians. Teachers can also be assessed and their scores can be matched with that of students. The medical education department can identify communication and perception lacunae between the management of medical college and the teachers<sup>20</sup>.

In overall scores of the basic aspects of 'Pakistani LAMPS,' there was no significant difference between gender ( $p=0.386$ ), professionalism domains such as respect, excellence/autonomy, altruism, duty/accountability and honour/integrity, which corresponds with studies done in medical schools of Malaysia<sup>21</sup>.

Private medical colleges in Pakistan are generally thought to be inferior to Public medical colleges due to induction of students having a lower merit, their inferior teaching environment, meagre clinical exposure and poor employability of their graduates<sup>22</sup>. This may be correct to some extent but regarding the quality of graduates it is difficult to predict as very few studies have been done in Pakistan. Students from private medical colleges scored higher on professionalism than those from public medical colleges. This observation differs from other studies conducted in Pakistan<sup>14</sup>, Iran<sup>18</sup>, Bangladesh<sup>23</sup> and Malaysia<sup>21</sup>.

## CONCLUSION

Pakistani medical authorities have to allow all Public and Private institutions to design an integrated medical Professionalism curriculum that strives for alliance of all the stakeholders. This should engage International recommendations and is in accord with the local culture.

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