

## ORIGINAL ARTICLE

## LECTURES IN MEDICAL EDUCATION: STUDENTS' VIEWS

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**Background:** Lectures are considered most effective mode of information transfer amongst teachers and students in medical education, but in recent years there has been a noticeable decline in the attendance of lectures. Our objective was to assess the reasons of medical students' disinterest in lectures. **Methods:** A cross-sectional survey was conducted in Department of Community Medicine, Fatima Memorial College of Medicine and Dentistry from December 2010 to June 2011. A non-probability technique of consecutive sampling was used to collect 307 participants from all five years of MBBS. Reasons of disinterest of medical students were asked in the questionnaire. The data was analysed on SPSS-17, Chi square test was applied and  $p$ -value was fixed at  $\leq 0.05$  as significant. **Results:** Factors affecting the lecture attendance of these medical students include distance of residence from the college 215 (70%), strictness of teacher in marking attendance 227 (73.9%), interest in subject 216 (70.4%), subject is part of examination 257 (83.7%), and university requirement 249 (81.1%). The personality traits of teacher affecting attendance of medical students in lectures include good communication 216 (70.4%), command on subject 194 (63.2%), students' interaction in class 180 (58.6%), friendly attitude 202 (65.8%), good control on class 163 (53.1%), punctuality 100 (32.6%), sense of humour 160 (52.1%), and humane behaviour 135 (44%). **Conclusion:** The interest of medical students can be enhanced and better attendance achieved with slight modifications in identified reasons.

**Keywords:** Medical students, Attendance, Lectures, Medical Education

## INTRODUCTION

Worldwide Undergraduate Medical Education aims to produce competent physicians with adequate knowledge of health and disease, appropriate clinical skills and affective attitude towards patients.<sup>1</sup> Many instructional tools are identified for effective transfer of information to students, but as a rule lectures remain an important component of medical education.<sup>2</sup> Interestingly many medical instructors insist that there is no other efficient method of delivery than lectures that combines content delivery and student interaction simultaneously.<sup>3</sup> Logistically, a lecture is easier to organise and deliver to characteristically large number of students and it saves a lot of resources.<sup>4</sup> Many medical educationists believe that lectures promote students to become auditory learners and this equips them for their role on the clinical floor where taking patient history is predominant.<sup>5</sup> In recent years there has been a noticeable decline in the attendance of lectures.<sup>6</sup> Students' disinterest in lectures is apparent from their absences as they miss lectures every now and then giving priority to other academic activities, extracurricular involvements, or personal problems.<sup>7</sup>

Significant learning occurs during lecture and it has been proven that students with good lecture attendance show higher examination scores.<sup>8</sup> It has been observed that 80% of the medical students make deliberate decisions about attending a lecture based on different criteria.<sup>2</sup> The ability to communicate with clarity and providing well organised and structured lectures emerge as important teaching competencies and give explanations for high student attendance rates.<sup>9</sup>

Limited research exists on student's experiences and their reactions to lectures.<sup>10</sup> This particular study aims to identify the reasons of disinterest of medical students in lectures in various years of under graduate medical education and to assess the student's perspective about competencies of a medical teacher.

## MATERIAL AND METHODS

This is a cross-sectional survey conducted at Fatima Memorial Hospital, College of Medicine and Dentistry, from December 2010 to June 2011. A total of 307 medical students of undergraduate level consented to participate in this study. A non-probability technique of consecutive sampling was used to collect 307 students from all classes of MBBS in the College. A preformed questionnaire was distributed to get students' responses about their views of reasons of disinterest in lectures and about the competencies of a good medical teacher. Data was collected initially on 50 students as a pilot project and necessary changes were done in data collection tool. Data was analysed on SPSS-17. Chi square test was applied to have comparison between qualitative responses, and  $p \leq 0.05$  was considered as significant.

## RESULTS

A total of 307 students participated in this study after the informed consent. Maximum number of students who responded to our questionnaire belonged to 2<sup>nd</sup> year MBBS (78, 25.4%). Least number of response 39 (12.7%) was observed from final year MBBS (Table-1). Age of the students ranged between 19 and 24 years. Out of 307, 104 (33.9%) were boys and 203 (66.1%) were girls. Day-scholars were 159 (51.8%) and boarders

were 148 (48.2%). It was observed that 146 (47.6%) students had more than 80% attendance, 82 (26.7%) had 80% attendance, 26 (8.5%) had 70% attendance and only 53 (17.2%) students had less than 50% attendance in the current academic year. Factors which can affect the lecture attendance were identified as: distance of college from place of residence, strictness of teacher in marking attendance, interest in subject, subject is part of examination, and requirement of university to appear in examination (Table-2).

**Table-1: Class-wise participants**

Year of MBBS	Frequency	Percentage
First	62	20.2
Second	78	25.4
Third	63	20.5
Fourth	65	21.2
Fifth	39	12.7
Total	307	100.0

**Table-2: Factors influencing the lecture attendance**

Factors affecting lecture attendance	Yes	No
Distance of college from place of residence	215 (70%)	92 (30%)
Strictness of teacher in marking attendance	227 (73.9%)	80 (26.1%)
Interest in subject	216 (70.4%)	91 (29.6%)
Subject is part of examination	257 (83.7%)	50 (16.3%)
Requirement of university	249 (81.1%)	58 (18.9%)

The medical students of MBBS have also identified the traits of teacher which influence their lecture attendance which include good communication skills, Command on subject, Interactive lectures, Friendly attitude, good control, punctuality, sense of humour, humane behaviour gender of teacher and their position in department. There is difference of opinion between male and female medical students about the personality traits of medical teachers which have been calculated by application of Chi-square test (Table-3).

**Table-3: Gender differences in grading personality traits of teacher [n (%)]**

Personality traits of teacher	Male n=104	Female n=203	Total n=307	p
Communication skill	70 (67.3)	146 (71.9)	216 (70.4)	0.239
Command on subject	54 (51.9)	140 (69)	194 (63.2)	0.003*
Interactive lectures	58 (55.8)	122 (60.1)	180 (58.6)	0.272
Friendly attitude	62 (59.6)	140 (69)	202 (65.8)	0.06
Good control in class	41 (39.4)	122 (60.1)	163 (53.1)	0.001*
Punctuality	30 (28.8)	70 (34.5)	100 (32.6)	0.193
Sense of humour	54 (51.9)	106 (52.2)	160 (52.1)	0.528
Humane behaviour	37 (35.6)	98 (48.3)	135 (44)	0.02*
Gender of teacher	28 (26.9)	29 (14.3)	57 (18.4)	0.006*

One-hundred and twenty-five students (40.7%) like to attend the lecture of a professor 34 (11.1%) attend lecture of associate professor, 28 (9.1%) of assistant professor 75 (24.4%) students like to attend the lecture of a demonstrator and only 45 (14.7%) students said that they would like to attend lecture of any of the teacher (Table-4). Two-hundred and thirty-six (76.9%) of the students preferred morning lectures.

One-hundred and forty-eight (48.2%) students admitted that they sometimes take interest in the lecture, 27 students mostly take interest in the lecture (8.8%) and 64 (20.8%) students never take interest in the lecture. Out of 307 students, 230 (74.9%) said that capacity of the lecturer to be an internal examiner affects the lecture attendance; 217 (69.4%) students said that timing of lecture affects their attendance; 213 (69.4%) students admitted that content of the lecture adds to the knowledge and 228 (74.3%) students admitted that lecture attendance is useful to pass the exams. The most preferred method of delivering the lecture is through board teaching 131 (42.7%) followed by multimedia. 99 (32.3 %) by the medical students.

**Table-4: Gender difference in lecture attendance according to rank of teacher**

Teacher	Males (n=104)		Females (n=203)	
	No.	%	No.	%
Professor	35	33.65	90	44.33
Associate Professor	9	8.65	25	12.32
Assistant Professor	8	7.69	20	9.85
Lecturer	34	32.69	41	20.20
All	18	17.32	27	13.30

Out of 307, 284 students (92.5%) said that clarity of lecture affects their level of understanding. When the students were asked about the ideal duration of a lecture, it was noticed that 151 students (49.2%) said 30 min lectures are the best; 141 (45.9%), 8 (2.6%), and 7 (2.3%) preferred 45 min, 60 min, 120 min respectively. Students were asked to enumerate the reasons for not attending the lectures and they included Leisure time activity, Boring lecture, Boring subject, Strictness of teacher, Subject is not part of examination, Lectures does not add anything to knowledge, Lecture can be replaced, Content can be covered by student themselves (Table-5).

Out of 307 students, 177 (57.7%) admitted that during the class they sometimes do other jobs without paying any attention to the lectures, 29 (9.4%) always were engaged in other activities and only 49 (16%) were never diverted during the lecture.

**Table-5: Reasons of not attending lectures [n(%)]**

Reasons	Male	Female	Total
Leisure time	20 (19.2)	29 (14.3)	49 (16.0)
Lecture is boring	44 (42.3)	88 (43.3)	132 (43.0)
Teacher is strict	26 (25.0)	41 (20.2)	67 (21.8)
Subject is boring	22 (21.2)	53 (26.1)	75 (24.4)
Subject not included in examination	29 (27.9)	73 (26.0)	102 (33.2)
It does not add to knowledge	22 (21.2)	26 (12.8)	48 (15.6)
It can be replaced by other methods	23 (22.1)	42 (20.7)	65 (21.2)
We can study ourselves	23 (22.1)	63 (31.0)	86 (28.0)

## DISCUSSION

Lectures remain the mainstay of medical education. They remain the easiest and most convenient way of imparting education to a large number of people even with limited resources.<sup>11</sup> As a rule medical students have more lectures as a mode of teaching and their attendance

rates are falling.<sup>5</sup> In our study, less than half (47.6%) admitted to having an attendance ratio of >80% while 26.7% attended <80% of all the lectures conducted. Remaining 25.7% had attendance <70% which is the minimum requirement of University to sit in examination.

A fairly large number of reasons have been identified for the medical students disinterest in lectures.<sup>8</sup> Distance of campus from place of residence remained a significant factor for both boarders and non-boarders (who traditionally live on or close to campus) and an overwhelming 70% answered positively to longer distance affecting lecture attendance. It has been identified by Hunter and Tetley that transport problem and distance from place of residence affects lecture attendance.<sup>5</sup>

Our study has revealed that strictness of teacher in marking attendance greatly affects the lecture attendance and 73.9% of the students have responded that if teacher is strict it influences the attendance rate but in another study it is observed that if teacher was strict lecture attendance dropped significantly.<sup>11</sup> Teacher's interest plays a significant role, 70.4% of respondents answered positively to attending if teacher generated interest in the lecture. This is supported by the study of Chaudhry R *et al.*<sup>13</sup>

Ironically, 81.1% of respondents admitted to attending lectures because it was a requirement by the University while 83.7% attended because it was part of examinations. It has been identified by Mattick K that medical students are generally not attending the Non-compulsory lectures, which are not part of current examination.<sup>10</sup> A teacher combines the roles of instructor, colleague, motivator and listener during a lecture and is required to develop all these traits to capture and maintain his students' interest in the lecture.

The results of our study have revealed that 70.4% of respondents cited good communication by the teacher as a significant feature in their decision to attend lectures. This remains consistent throughout many studies as conducted by Chaudhry<sup>13</sup> and Bollimier<sup>14</sup>. Command on subject of a teacher is another influencing factor in decision of lecture attendance by students. Our study has shown that 63.2% of the students attend lectures because of the good command of teacher on subject which is supported by another study which has revealed that most students make deliberate choices for attending or not attending the lectures.<sup>14</sup> However, even with the interest generated by teacher being a significant factor in a student's choice to attend a lecture, 58.6% of the respondents admitted to attend interactive lectures. It has been observed that even with student's interaction with a teacher in lecture; many students still perceive themselves to be the passive party in a lecture.<sup>10</sup>

Influencing factors on attending a lecture were identified as Friendly attitude of the teacher, Good

control on class, punctuality, sense of humour, capacity of being internal examiner, and humane behaviour. It has been documented that personality traits of teachers greatly influence student's interest in lectures.<sup>14</sup>

Gender of the teacher was cited as a factor by more male than female students. Rank of a teacher generally takes preference, perhaps the students associate a higher rank with more experience and informative lectures which has been approved by another study conducted at University of Wollongong.<sup>15</sup>

Majority of the respondents agreed that lecture adds to their knowledge. In another study it was observed that students make decision to attend or not to attend lectures on cost benefit analysis.<sup>13</sup> Majority of our respondents agreed that lectures are useful in exams. It has been clearly shown in previous studies that there is a positive correlation between success in exams and lecture attendance.<sup>9</sup>

Over the preferred mode of delivery of a lecture 42.7% students preferred board teaching, 32.2% preferred multimedia, while 15.3%, and 3.9% preferred oral presentation and transparencies respectively. This was consistent in the study by Szebo A, *et al.*<sup>17</sup> In the Susskind study, PowerPoint was deemed a more efficient approach and student declined after PowerPoint was discontinued in lectures.<sup>18</sup> Duration of a lecture seems a pertinent factor in a students' choice to attend a lecture. The ideal duration of class time veered closely between 30 and 45 minutes with 49.2% voting for the former and 45.9% voting for the latter. Lectures longer than the 45 minutes saw sharply falling attendance records. Students generally want the shortest duration possible for lectures.<sup>13</sup> Also closely associated are lectures conducted at extremes of the day. Lectures too early in the day or too late are generally not well attended.<sup>13</sup> The Massingham study, however, concluded that timing may not be an influential factor in absenteeism.<sup>9</sup>

It is pertinent here to analyse what does a student do when he is not attending a lecture? By and large 43% admitted that the main factor in their decision not to attend a lecture is for the simple fact that the lecture is boring, and it has been approved by another study conducted by Ghengesh P.<sup>19</sup> Around 28% students said that they can read the lecture contents themselves and it is supported by some other studies that students generally agree they can cover content without lectures.<sup>5,20</sup> This is the most alarming indicator as it shows that perhaps educators are not going the extra mile to make the lecture more interesting or interactive enough for the student to feel that not attending the lecture may mean missing out on something significant. On the other hand, it is heartening to note that one of the reasons students do attend a lecture is that they feel that the instructor is providing something complex to them to catch up on their own.<sup>20,21</sup>

Alarming 57.7% students admitted that most of the times, they are involved in doing some other job while sitting in a lecture. This clearly points to disinterest in the lecture and such students would perhaps skip the lecture completely if perhaps the shadow of falling attendance affecting their ability to sit in the examination was not hanging over their heads. A study conducted in 2006 showed that by giving interactive lectures we can involve students and reduce their element of engaging themselves in some other activities.<sup>22</sup> Another study conducted in Saudi Arabia has shown that attendance to lectures in medical schools was related to both quality of subject and to the lecturer, emphasised the importance of a good lecture and lecturer.<sup>23</sup>

## CONCLUSION

The medical students are generally losing their interest in lectures due to the personality traits of teachers, their individual preferences, timing and mode of lecture delivery. By making careful changes in content, timing and mode of delivery and improving personality traits in teachers we can bring back the interest of medical students in lectures.

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