### **Original Article**



# Perception of Medical students regarding lectures

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<sup>1</sup>Substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work.

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#### ABSTRACT

**Objective:** To assess the interest of medical students in lectures.

**Methodology:** This prospective study was conducted in four different medical colleges of Pakistan from 1st January till 30th March 2015. Total of 600 students were included in this study. Data collection procedure used was questionnaire which contained both open and close ended questions. Written consent was taken from all the participants & permission was taken from the ethical review board of college. SPSS 15 was used to analyze the data.

**Results:** Almost 59% of students in our study consider the lecture as uninteresting tool in medical studies and only 46% consider lecture as essential part of their education during the college timings. Good part of our study is majority of the students managed to reach lecture in time. 77.25% students consider use multimedia helpful during lectures.

**Conclusion:** According to our study, students consider lecture as not very important and uninteresting part of medical education.

Key Words: Lecture, medical education, multimedia.

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### Introduction

Lectures remain the most popular form of teaching. Although a lot of criticism has been raised against the effectiveness of the lecturing sessions, particularly in relation to educational objectives to be fulfilled. This problem has been further compounded due to the remarkable electronic revolution. Presently computer assisted teaching programs in various disciplines of medical education are being used effectively and have been found to be quite valuable<sup>1</sup>. Rapid and constant development and innovation in software technology resulted in the application of Windows-based software for learning the basic science aspects and clinical scenarios and complemented the traditional modes of teaching medicine very effectively<sup>2</sup>. Unless the criteria of effective lecturing sessions are fulfilled, the learning objectives would not be achieved. The success of lectures depends on

the ability of the presenter to capitulate the undivided attention of the audience by learning and developing basic lecturing skills. To ensure success and quality of the lectures strong organization and adequate performance of the presenter must be assured<sup>3</sup>. The main problem with the lecture is that it is teacher centered approach. Education in medical science at the undergraduate level needs continuous improvement and critical thinking to meet the changing demands of society in 21st century. Most important point we noted is the change from teacher centered to student-centered approach. Now a days, teaching is more flexible so as to meet the needs of the individual student, and it is proved that students taught in this way retain more material for longer periods of time<sup>4</sup>. Student centered approach make the future doctors more independent, more efficient and self-reliant in their learning and more responsive to the growing needs of society and ever-demanding field of medicine.<sup>5</sup>

Now a days, small group discussion partly replaced the lectures. All over the world, teaching institution related to medical science adopted this strategy of teaching. This strategy give more opportunities for students to take part in discussions make the classes more interactive. <sup>6,7</sup> Medical teachers realized that only lecture as mode of transfer of knowledge is a more archaic becoming obsolete now and prepare themselves for a change. <sup>8,9</sup> Lianas, et al. suggest that novel methods such as problem-based learning are only financially feasible with a class size below 60<sup>10</sup>. Another aspect of teaching is feedback and assessment are also very important in generating valuable skills of both teacher & students and will encourage learners to self-evaluate and take responsibility for their own skill development. <sup>11</sup>

There are lot of positive things regarding lectures. Lectures remain economically effective as large number of learners can accommodate in one lecture hall & one teacher require. Paying salary to one professor and few junior assistants, institutions can enroll as many students as they have seats in a lecture hall. Also, lectures are very effective for clarifying complex concepts and discussing most important topics of a certain subject.

Having said this, still lecture is a very important tool of transfer of information in medical colleges and its role cannot be under estimated. It is important for teachers to know the perception of students towards lectures and in the light of their recommendations, changes should be made in lecture theatres in order to keep their interest in this tool of education. The rationale of this study was to assess the interest of medical students of different classes in attending lectures.

## Methodology

This survey based snapshot study was conducted at Rawalpindi Medical College Rawalpindi, Islamic International Medical College Rawalpindi, Foundation University Medical College Rawalpindi and Islamabad Medical & Dental College Islamabad. Study was conducted from Jan to March 2015. Total of 600 students of first, third year & Final year were included in this prospective study. All those students who failed to give written consent were excluded from the study. Data collection procedure used was a questionnaire which contained both open and close ended questions. Written consent was taken from all the participants & permission was taken from the ethical review board of college. SPSS 15 was used to analyze the data.

### Results

Still, lecture is considered to be one of the most important tools for transfer of information in medical education. The first question we asked to the medical students was whether they consider lectures as an interesting tool of education in medical college. A total of 1170 students participated in the following question. Most of the medical students consider lecture as not an interesting tool in medical education (59%). Next question in our study was also related to the role of lecture in colleges. Only 46% students consider lectures as an essential tool in medical education. According to our study, most of the students reach the lecture on time (73.3%). Interestingly, the highest percentage of students were from 3<sup>rd</sup> year i.e. 71% who don't like lectures.

Table I: Lectures are an interesting tool of education in medical colleges or not?

	Number	Percentage	
Yes	452	38.63	
No	690	58.97	
DNA	28	2.40	
Total	1170	100	

Regarding the use of multimedia in medical colleges, 77.25% of students consider it useful for their studies. Almost 80% of students are in favor of multimedia except 3<sup>rd</sup> year where only 71.54% students voted in favor of use of this type of technology in medical education. As a whole, 77.25% of students were happy with the use of multimedia during lectures.

As far as sound quality during the lectures, 65.95% and 68.20% of 1<sup>st</sup> and final year students respectively were satisfied. Again a very low percentage of 3<sup>rd</sup> year students (33.58%) were happy with the conditions of their medical college. We don't know the exact cause of dissatisfaction of 3<sup>rd</sup> year students.

Table II: Showing level of satisfaction of students with quality of sound system in lecture halls.

	Number	Percentage
Yes	654	53.12
No	552	44.84
DNA	25	2.04
Total	1231	100

Again 1<sup>st</sup> year students were happy with the level of comfort provided in lecture theatres. 75.92% of students say yes to question no. 6 regarding the satisfaction about

level of comfort in lecture theatres. While more than 59% of third year students were not happy with the comfort provided to them in lecture halls. Final year students were also less happy (48.06%) as compare to, when they were in 1st year.

### Discussion

Importance of lecture as a tool for transfer of information is one of the most commonly discussed topics in medical education today. Medical teachers wanted to know the importance of lecture as a tool for transfer of information. In our study, 59% of our students don't like the use of lectures in medical education. This topic was discussed by Khan H et al in an article published in 2003. According to him, disinterest in lectures is apparent from the absence of students from lecture classes. They give priority to other academic activities, extracurricular involvements, or personal problems over the attendance in lectures.<sup>12</sup> Researchers identified some important factors which can affect the lecture attendance as strictness of teacher in marking attendance, subject is part of examination or not, requirement of university to appear in examination & interest in subject.<sup>13</sup> On the other hands, many senior faculty believe that there is no alternative to lectures that combines student interaction & content delivery simultaneously.14 Though Harrington et al presented a contrary view in his study. He calculated that there is no statistically significant difference in the grades of students who didn't attended lectures and those who regularly did<sup>15</sup>. 80% of students in our study were in favor of use of multimedia for education. The term multimedia was first time used by Bob Goldstein who was a singer and artist to promote the July 1966 opening of his "Light Works at L'Oursin" show at Southampton, Long Island. The German language society, Gesellschaftfür deutsche Sprache recognize the significance of this word and awarding it the title of 'Word of the Year' in 1995. Multimedia has now become a very important tool in the wonderful new media world<sup>16</sup>. We can present text, pictures, video and sound in a single presentation. Use multimedia is a completely new approach in teaching methadology. When users view a page, they can only view one page at a time. As a result, multimedia users must create a 'mental model of information structure'. 17

Our last two questions were related to the quality of sound system and comfort of lecture halls. In our study, 55.91% of students were satisfied with the sound system. 54.97 % of students were satisfied with the comfort level of lecture halls. Lot of factors can influence the attendance of students in the class. Studies showed that presence of

microphones & good sound quality is a very important factor in addition to the distance of teaching campus from their residence, marital status of students, socioeconomic condition of their family, transport facilities, etc. can influence their attendance.<sup>18</sup> It is now proved that effective use of class room technology can enhance the attendance during lectures. Also, the education environment constitutes or actually a combination of all the above mentioned factors. Use of these technologies can help in improving the educational environment to a significant level.

Latest trend in education is teachers should guide the students and trained them to become autonomous problem solvers. <sup>19</sup> The traditional methods of teaching have clashed with what is now expected in the present workplace. This has become a significant barrier to effective training. Now students are increasingly being asked to work in teams, draw different sets of expertise, and collaborate with each other in solving problems. <sup>19</sup> These experiences are not routinely practiced in traditional teaching methodology. These are twenty-first century skills that can be attained through the incorporation of technologies in teaching <sup>20</sup>. Changes in instruction and use of technology is not restricted to medical education and can promote a higher level of learning among students at any level.

## Conclusion

Though students consider lecture as unimportant and uninteresting part of medical education but still it is considered an integral part of teaching strategy in medical colleges. It is recommended that seating arrangement should be comfortable with good sound system and multimedia so that students feel high level of comfort during lectures.

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