

## UNDERGRADUATE STUDENTS' PERCEPTION ABOUT CURRENT LECTURING PRACTICES

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### ABSTRACT

**Objectives:** To determine final year medical students' perception about current lecturing practices and to explore students' justifications for the acceptance of lectures or otherwise.

**Study Design:** A sequential mixed method.

**Place and Duration of Study:** The study was conducted on 250 final year students of Fatima Jinnah Medical College Lahore, Pakistan from January 2013 to June 2013.

**Participants and Methods:** For the quantitative phase a survey questionnaire containing 15 close ended questions with categorical scale of "Yes" or "No" was distributed among the final year students selected through non-probability convenience sampling. Out of 250 students, 195 students returned the questionnaire. For the qualitative phase, 26 final year students were selected by non-probability purposive sampling to participate in the focus group discussion with five open ended questions. Quantitative data was analyzed by calculating simple percentages of the categorical variables through SPSS version 18. Qualitative data analysis was done by identifying themes and patterns using content analysis. This data was triangulated with the data from the quantitative phase for the validation of results.

**Results:** A survey questionnaire was distributed amongst 250 students out of which 195 participants returned the proforma (response rate 78%). Five themes emerged through the focus group discussion. Twenty five students remarked that motivation to attend the lecture was largely external to prevent shortage of attendance. Twenty four students out of 26 were of the opinion that notes' taking was most annoying about lectures. Attributes desired in a good lecturer as described by 25 students were focus on the subject, grasp on the language, pleasant personality, adequate energy level and variation accordingly and able to maintain discipline in the class. Regarding suggestions for improvement, almost 23 students suggested that audio visual aids / multimedia, white/black board should be used judiciously. Recapitulation of previous lecture and prior intimation of lecture topics to students should be ensured. Teacher student interaction can be enhanced by use of triggers e.g. case scenarios and real patients. Brainstorming and question / answer session should be encouraged. Concerns about environment were voiced by all 26 students, mainly related to inadequate seating arrangement, with stuffy classroom in summers due to non availability of air conditioners and unable to open doors and windows due to outside distractions.

**Conclusion:** Students perceived lectures as a potential tool for information transfer but with certain shortcomings. Although certain objections were raised, however, they endorsed that with relevant modifications, they are an important viable option of information transfer in the current prevailing situation.

**Keywords:** Didactic teaching, Students' perception about lectures, Traditional lectures.

### INTRODUCTION

Lecture format is the oldest and the best known of all the modes of information transfer<sup>1</sup>. The main advantages of lecture in our setting is content coverage within economical means,

sharing of information with a large number of students, transmission of factual knowledge and providing an overview of a particular area in a subject<sup>2</sup>. Due to time constraints, limited resources and logistics e.g. limited classroom and teacher availability, it is not possible to exclude them altogether<sup>3</sup>. Although content coverage is an advantage, it is also a major disadvantage since it does not provide an opportunity to use, link or apply knowledge and thus becomes of little educational value<sup>4</sup>.

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Can't learn with them, can't learn without them.

Teachers in most Asian countries have been taught in learning environments that were instructor centered, therefore, they teach in this way too and it also induces a hidden curriculum that teaches students to be obedient and inexpressive thus reducing their self-confidence<sup>5</sup>.

Lecturer's subject knowledge, willingness to help and use of inspirational teaching methods along with being pleasant and able to provide speedy feedback were important factors in the transmission of knowledge from students' perspective<sup>6</sup>. Students' perceptions about current lecturing practices indicate that their reservations are not about lectures, but poor quality lecturing<sup>7</sup>.

Lecturers must therefore ensure that they maintain the interest of the students throughout the lecture by engaging them fully thus improving their overall satisfaction<sup>8</sup>.

This study was designed to answer the research question, "What are students' perceptions about current lecturing practices?" and to explore students' justifications for the acceptance of lectures or otherwise.

Based on the above, the purpose of this study was to determine undergraduate students' perception about lectures and their justifications for its acceptance or otherwise.

## **PARTICIPANTS AND METHODS**

A sequential mixed method study design was adopted. The target population was 250 final year students of Fatima Jinnah Medical College, Lahore who were present in the class on the day when the questionnaire was distributed. There are 256 open merit seats out of which 67 seats are allocated to federal government for the four provinces according to population, FATA and federal government gazetted and non gazetted officers. Thus there are students from urban and rural background as well as foreign students applying on self finance scheme. Average age of the students was 23 years  $\pm$  6 months. The study was carried out from Jan 2013 to June 2013

following approval from Ethical Review Board (ERB). Research was conducted by using survey questionnaire for quantitative analysis, followed by in depth interviews for qualitative analysis. All the final year students who had qualified their third professional exam were requested to participate. Repeaters and those awaiting the result of their supplementary exam were not included. Participants' informed consent assuring confidentiality and anonymity was taken by a qualified medical educationist, not directly involved in teaching of undergraduate students in order to ensure un-restrained responses.

Through non probability convenience sampling, quantitative data collection was done by survey questionnaire which had 15 close-ended paper and pencil type questions, along with having instructions for the participants and the categorical scale of YES or NO. Survey questionnaire with close ended questions was distributed amongst 250 students out of which 195 participants returned the proforma (response rate 78%). Fifteen questions were subdivided into five categories later, each category including three questions in the order of their appearance in the table. These categories were general conduct of the class (Q 1-3), preparedness of the teacher (Q 4-6), content coverage (Q 7-9), interaction with the students (Q 10-12) and presentation of the material (Q 13-15). Quantitative data was analyzed through SPSS 17 for calculation of simple percentages.

For qualitative data collection, 26 participants selected by non-probability purposive sampling, were invited to participate in the focus group discussion and five predetermined questions were posed to them. The questions were used to explore in detail, potential areas that required further explanation identified during the survey. In depth discussion was audio recorded for subsequent transcription. Participants were named according to the alphabets to conceal their identities in the interviews. They were given briefing about the study and the technical terms explained. These interviews were conducted and moderated by a

medical educationist with past experience in qualitative data collection. The moderator was unknown to the participants to encourage students to express fully and in anonymity. Qualitative data obtained through interviews was analyzed through content analysis to identify themes and patterns. This data was triangulated with data from the quantitative phase for validation of results.

## RESULTS

These questions along with number of respondents and non respondents and their percentages are given in table-1.

Twenty - six students selected by non - probability purposive sampling were also interviewed through five predetermined questions. Content analysis of the transcribed interviews resulted in the emergence of five main themes with supportive evidence of results obtained through survey questionnaire for triangulation.

**External motivation:** Twenty five students were of the opinion that motivation to attend the lecture was external, 24 students did so to prevent shortage of attendance and one student thought it was to pass the exams.

**Internal motivation:** Remaining one student thought it was internal motivation as lectures helped to understand the topic well and are interesting.

Twenty four students were of the opinion that meaning cannot simply be transferred to students even by dictation and it was most annoying for following reasons.

**Pace:** The pace at which the lecturer is talking, may well be faster than the rate at which she can make sense of what is said and she has no control over this. Some lecturers just read from the lecture notes "in parrot form". If you wanted to deliberately interfere with someone's thinking, one way of doing it would be to talk to them continuously whilst demanding their attention.

**Lack of concentration:** Unable to concentrate while writing. Not all students are kinesthetic

learners, some are visual and others are auditory learners. Once their concentration is broken, it becomes very difficult to get back on track and many students 'tune-out'.

**Outdated notes:** Notes provided by the teachers are obsolete and no text in the books matches them. It becomes difficult to decide whether to read the standard textbooks or rusty notes.

**Attention:** Majority of the students found 20-30 minutes to be the maximum length of lecturing to which they could attend. There is something of a consensus that about 25 minutes is a reasonable maximum to expect attention during lectures after which they lose interest, get restless and start talking.

**Minimum interaction:** as the students are writing, there is only one person talking who is the teacher and is least bothered if anyone understands what is being taught. No one is allowed to ask a question. The teacher is not explaining any concept neither is making any effort to hold the attention of the class. No real life experiences or those from daily routine are shared.

**To the point teaching:** Twenty five out of twenty six students were of the view that the desired attributes in a teacher were that he should be focused with complete hold on the subject as well as on the medium of instruction and should be teaching to the point. But at the same time it does not mean that they "rush through because they don't want to be there or have somewhere better to be".

**Pleasant:** "Personality of the teacher has important implications on learning" was the opinion of 23 students. Teachers with "mask like" face, frowning, glaring and passing derogatory negative remarks are not welcome by the learners.

**Energy level:** A teacher should have adequate energy level with voice and tone variation accordingly was the opinion of 23 students out of 26. Otherwise the lecture gets boring and the entire class goes off to sleep. Students have observed lecturers "droning on in a monotone".

**Democratic:** A teacher should be neither too strict that students avoid going to the class nor so lenient that the class gets out of control and noisy. This was the view of 21 students. Four students were of the opinion that a teacher should not be democratic, rather autocratic, only then will he be able to maintain discipline in the class.

Regarding suggestions for improvement, 23 students remarked that different educational strategies should be used variably to get the topic across. Some of the suggestions made were regarding the:

**Audiovisual aids:** Multimedia / videos / white or black board should be regularly used during the lecture as it keeps the interest alive and subject becomes easy to understand.

**Recapitulation:** Recapitulation of previous lecture or topics already taught along with highlighting important points only briefly serves as a flashback and the new topic is thus easy to comprehend.

**Previous intimation of topics:** Lecture topics should be known to the students beforehand and learning objectives should be formulated after taking students into confidence. They can do some relevant reading or internet search before coming to the class so that they are not totally blank. Then the teacher can explain important points to them or highlight the salient features.

**Triggers:** Use of case scenarios and live patients brings the class alive with a flavor of real life situations and having a feeling of becoming a doctor.

**Interaction:** Brainstorming and question/answer session is considered an advantage as the students come to know the relevance and importance of the subject and how it should be read and tackled.

Adverse classroom environment has a negative effect on learning, was the observation made by all 26 students participating in the focus group discussion.

Seating is inadequate as the number of students has increased tremendously and lecture theatres were not built initially to accommodate such a large number. Most of the students are sitting crammed up on the benches or else occupying the steps and windows.

**Physical climate:** Almost all the students complained about stuffy classroom due to non availability of air conditioners in summers. They are unable to open doors and windows due to outside distractions in the corridors, noise from the traffic on the road and nearby cafeteria.

**Harassment:** Almost all students complained that derogatory remarks by the teachers have adverse effects on the learning environment. They avoid going to such classes where the teacher is constantly humiliating and targeting students and telling them they are not capable of doing anything.

## DISCUSSION

This study proved to be successful in terms of gaining an insight into the students' perception of current lecturing practices. The results have revealed the areas in which students commonly agree on a number of aspects of the lectures that makes them more effective and at the same time identifying gaps in knowledge, communication, organization, learning environment, empathy and inability to establish rapport. There is a general acceptance of lectures by the students but there is a need to break away from one pace teaching and to use multi-resourced learning strategies. They are a major stake holder and at the receiving end of teaching-learning process<sup>9</sup>. Therefore, an important question to consider, when planning a teaching session should be, 'How can I help my students to learn during my lecture?'<sup>10</sup>.

Both teaching and learning are dependent on combinations of contextual factors, including the overall conduct of the class, the teacher, the subject matter, the learner and the teaching methods as observed in the survey questionnaire.

Regarding the general conduct of the class if Faculty should be punctual and should turn up

**Table-1: Response of the students on survey questionnaire.**

No	Survey questions	Yes %	No %
General conduct of the class			
01	Are timelines strictly followed?	43 (22%)	152 (78%)
02	Is tense environment unpleasant?	165 (85%)	30 (15%)
03	Are students disruptive when bored?	175 (90%)	20 (10%)
Preparedness of the teacher			
04	Are teachers well prepared with the subject and focused?	25 (13%)	170 (87%)
05	Does the teacher recapitulate last lecture at the beginning?	41 (21%)	154 (79%)
06	Is teacher too talkative and dictates notes?	152 (78%)	43 (22%)
Content coverage			
07	Are learning outcomes discussed and formulated mutually?	0 (0%)	100 (100%)
08	Are lectures relevant to clinical teaching?	10 (5%)	185 (95%)
09	Does the subject become easy to understand after the lecture?	30 (15%)	165 (85%)
Interaction with students			
10	Are students encouraged to participate in teaching sessions?	22 (11%)	173 (89%)
11	Is it a routine for teacher to take questions at the end?	20 (15%)	165 (85%)
12	Are regular feedback sessions held?	10 (5%)	185 (95%)
Presentation of the material			
13	Does teacher use black/white board frequently?	28 (14%)	167 (86%)
14	Is it a routine to give small tasks during the lectures?	26 (13%)	169 (87%)
15	Are any efforts made to make lecture interesting?	20 (10%)	175 (90%)

the lecture is boring the students lose interest and become noisy. Ninety percent students believed that lecturers who are unable to maintain discipline have a noisy classroom and disruptive students with no one paying attention and especially those in the back benches become out of reach. Simultaneously, it is also important to relax the students as a strict environment can be extremely unpleasant as reflected by 85% students. Effective control of the student behavior is more successful by ensuring that the lecture remains interesting, rather than by trying to exercise excessive regimental authority. Thus interactive education techniques should be introduced in the lectures to establish good rapport which reduces fear promotes learning and make students feel understood<sup>11</sup>.

Seventy eight percent students complained about the teachers not being punctual, thus wasting their time and making them frustrated.

before the class starts not only to follow timeline but also to check the venue, the seating, the resources and also to set an example<sup>12</sup>.

Preparedness of the teacher; only those teachers are fond of dictating notes who do not have a strong grip on their subject. Students thus memorize facts but do not develop a deeper understanding thus reinforcing the point that learning and memorization are not the same<sup>13</sup>, seventy eight percent teachers are very talkative, like to hear their own voice and do not take students on board, was an observation recorded in the Survey Questionnaire. Eighty seven percent students were of the view that that the teachers are not focused and 79% do not recapitulate the last lecture or do not summarize what has been already taught. Lecturers are generally little concerned whether the students understood what they were taught last time nor whether they are on board during the current



lecture was an observation made by Hewson in his study<sup>14</sup>. In order to facilitate learning teachers must be competent, hold authority within the classroom, show compassion and respect for individuals and be flexible in the range and style of teaching methods. They should have a total grasp over their subject and should recapitulate the last lesson at the beginning<sup>15</sup>.

Content coverage; one hundred percent students were of the view that it is not a norm to discuss, modify and formulate the learning outcomes according to their needs. Curriculum committees all over the world have student representatives. The problem of dividing courses up into lecture topics, the content of which is only known to the lecturer, is most marked where different lecturers teach on the same course with little coherence in the minds of those who are teaching. This causes students terrible problems in making links with other course elements, such as ward rotations and practical work somewhat tenuous. There should be realistic learning objectives clearly stated or the course content should be written down in order to avoid confusion. Here there is no concept of needs assessment at any time and much of what is learnt is thus forgotten, 95% students replied that lectures are not relevant to clinical teaching. Ward teaching and classroom lessons are poles apart and one does not compliment the other. What is not realized here is that knowledge is most effectively applied when it is contextual<sup>16</sup>. The student should be better able to understand the topic after lecture rather than thinking that it would have been a good idea to sit back home and read the text book on their own, 85% students were of the view that to attend or not to attend the lecture makes no difference. One of the reasons for this could be that most of the teachers receive no formal training to teach. In our set up, after doing fellowship although they become only content specialist, they are also required to take classes but they only learn to teach with experience. This phenomenon is not peculiar to Pakistan. Preston-Whyte observed that over two thirds of academic and clinical staff all over the

world receives no formal training in teaching skills<sup>17</sup>.

Interaction with the students; 89% students were of the view that they are not encouraged to interact in the classroom. This is the responsibility of the teacher and can simply be done by following formal lectures by question answer session<sup>18</sup> which is not done in 85% cases. Brainstorming in class or illustrating a point from the prior lecture using black/white board has also been a very successful approach and has resulted in attendance having been significantly improved<sup>19</sup>, 95% students replied in negative to the question regarding the feedback by the teachers which underscores the significance of assessment for learning rather than assessment of learning and encourages students to reflect thus making any educational activity more valuable<sup>20</sup>.

Presentation of the material using educational media effectively; 86% students replied in negative to the question regarding use of black/white board by the teacher, 87% replied that no task is given or activity generated in the class and 90% said no effort is made on the part of the teacher to make the lecture interesting, whereas several strategies can be employed by the teachers to make the lectures effective. Students viewed effective lecturers as those in which a variety of methods of instruction are used thus actively engaging in class discussions and to ask questions<sup>2,11</sup>.

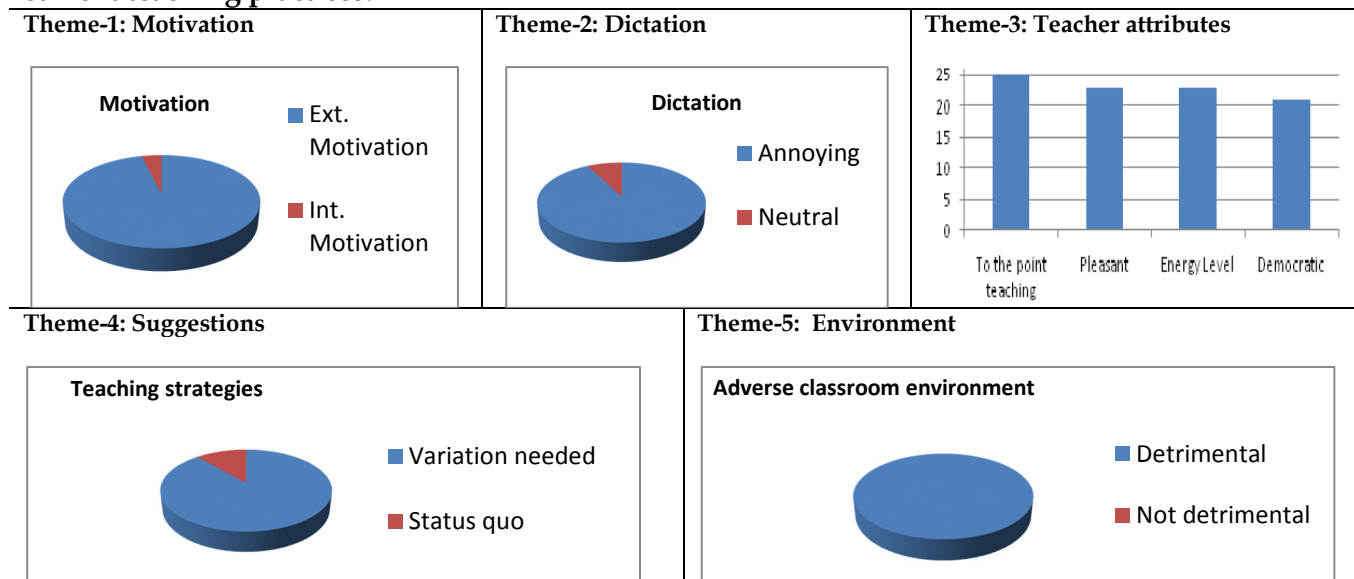
Some very valuable points were raised by the students during focus group discussions regarding the lectures.

Twenty five students were of the view that motivation behind attending the lectures was mainly external; to avoid shortage of attendance by 24 participants and to pass exams was the aim of only one student. Only one student was of the view that they were really interested in the subject. This is the usual problem with the traditional lectures. Students can be motivated by the stimulus of clinical contacts<sup>21</sup>.

Twenty four students were of the view that taking dictation was the most annoying about the

lectures, associating note-taking with no better punctual, delivers well prepared lectures, gives

**Figure-1: Diagrammatic presentation of the thematic analysis of the students perception about current teaching practices.**



learning outcome than not taking notes from lectures. They can't keep pace with the teacher, can't concentrate on the subject while writing, notes are outdated and do not match with the latest edition of the textbooks, attention span is only 20-25 minutes after which it becomes difficult to concentrate and lack of interaction in the class all make it simply more complicated. What teachers do not realize is that the students' role is not just to copy new information but also to actively make sense and construct meaning<sup>22</sup>.

Twenty five students were on consensus that personality of the teacher was considered the most important attribute of the teacher. As Wright put it, students view effective lecturing as personality driven. If the person is right, the lecturing is right resulting in good learning experience<sup>23</sup>. The teacher should have a strong grip on the subject, should be focused and variation in his voice and energy level should be such that it does not allow the class to go off to sleep. These findings are similar to earlier findings by Oregbeyen<sup>2</sup> and later with those of Barnes and Lock<sup>11</sup>. An effective lecturer is perceived as one who is knowledgeable in the subject area, has personality attributes that promote rapport with students, is organized,

clear explanations, gives out handouts and extra reading materials, is fair and actively engages students in the learning process<sup>24</sup>.

Several suggestions were put forward by the students for the improvement of lectures, 24 students suggested that different educational strategies should be used variably to get the topic across. Powerpoint should be used more frequently but only for mapping and directing the flow of a classroom discussion on a topic than as a mean of presenting the materials themselves<sup>25</sup>. White/black board should be more frequently utilized for illustrations, explaining through flow charts, diagrams and figures thus increasing the level of interaction. Case histories as case scenarios can be given in the beginning of the lecture or even better a patient can be taken to the classroom. This will generate interest in the class and make the topic relevant and interesting<sup>26</sup>. This will also act as a trigger, questions will be asked with more questions by the teacher. This oral questioning with informal responses encourages participation and a sustained attention span. Effective lecturers were seen as those who delivered their lectures well, gave clear explanations and handouts and used teaching aids<sup>11</sup>. Not taking notes initially and

then revising from an accurate teacher-prepared handout is the optimum strategy and will result in better tests scores than any other combination of activities.

Environment of the classroom mainly including seating arrangement, black/white board displays and physical climate should be carefully considered with students' needs. The seating arrangement is usually not appropriate with increasing number of students in medical colleges and was the problem of all the 26 participants of the focus group. Lecture theatres should be designed in such a way that it helps the students to feel more organized. The entrance to classroom and the corridor outside should not cause distractions to students during lessons including traffic distractions as was observed by 95% students. Classroom's lighting and temperature should be comfortable and conducive to student learning. Room temperature should be moderate to cool. A warm classroom tends to make students sleepy, inattentive and consequently bored and disruptive. If necessary, use a fan to maintain a good airflow, keeping the room cooler. If room has windows that open, check to make sure they can be opened easily. Outside air is a bonus for several months of the year. Plants are an excellent way to make any room look more welcoming. They also improve the air quality in air-conditioned buildings. The lecture hall is a less than ideal environment for learning to occur. But nevertheless with increasing student population, it remains the only viable option to convey information bulk to large groups of students within extremely densely packed curricula<sup>7</sup>. A study by Dornan illustrates that healthy climate welcomes the students but does not belittle them and draws them into the team<sup>27</sup>.

Students believe that there are both good and bad lectures as well as good and bad teachers. The students' ultimate comprehension of the subject matter, rather than the week by week incremental regurgitation of the curriculum must therefore be the goal of each and every teacher. Majority of students favour a judicious

mixture of didactic lectures and case -oriented problem solving classrooms to be an efficient modality<sup>28</sup>.

This study proves that a well structured, well paced, varied and lively lecture can be the most efficient teaching method.

## CONCLUSION

Students perceived lectures as a potential tool for information transfer but with certain pitfalls. Disruptive classroom, lack of student interaction, note taking, autocratic teachers and not so good physical environment were the main significant objections. However, within limited resources, time constraints and bulk of material that is to be taught, they remain the only viable option of information transfer with a clear lecture structure, a roadmap, a logical flow that is easy to follow, the use of application examples complemented by interaction and adult oriented education strategies and a variation in delivery format will all help to maintain the students' interest.

## Limitations of the study

It was not possible to involve students from all the medical colleges of Lahore and other parts of the country. Non probability sampling technique with a limited sample size and one institution used for this study impose limitations. Therefore caution should be used to attempt to generalize the results beyond the participants of this study. There will be statistical limitations due to standardization. Participants were reluctant to provide correct information. Quantitative analysis with closed ended questions resulted in loss of spontaneity of the answers.

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## Conflict of interest

The ideas presented in this article are solely of the author and are in no direct conflict to any individual or institution.



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