

Study of Medical Students Opinion in Power Point and Chalkboard Lecture Delivery Methods

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Abstract: Chalk board talk lecture is the oldest and most commonly used teaching method. After introduction of digitalized teaching in medical colleges Power point presentation Lecture method is commonly used. To evaluate the feedback from first MBBS students regarding opinion and preferences of chalk board and PPT lecture delivery aids. A cross sectional questionnaire based study was conducted in medical college in Telangana State .150 first MBBS students participated in this study. Students were divided into 2 groups .In one group Lecture was delivered by using chalk board, for second group same topic was delivered using PPT presentation, two such lecture were delivered. Multiple choice questions paper was used for assessing the knowledge gained on next day. A questionnaire containing 10 questions was used to study students opinion for blackboard and power point teaching method. The differences in marks obtained in the 2 groups were analysed by independent student t test. Students who attended the lecture using chalk board obtained higher score in MCQ test as compared to those who attended the same lecture using PPT. The chalk board teaching method was preferred by 65% of the students. The blackboard teaching remains the best preferred teaching method, which can be supplemented by PPT presentation for better understanding.

Keywords: Black board, Power point, Teaching methods.

INTRODUCTION

Lectures can be traced as far as back as the Greeks of fifth century BC and in medieval times, lectures were the most common form of teaching [1]. Chalk board aid is inexpensive, is easy to clean and reuse; allows students to keep pace with teacher and is not dependant on electricity. But it is time consuming, one cannot go back to what has been erased .PPT has advantage of using colours, fonts, diagrams, and animations. Its disadvantages are that dim light causes loss of eye contact, note taking is difficult, needs electricity and projector [2]. Educationists are divided on the superiority of chalk board teaching or PPT use for teaching. Technological advancements have revolutionized in every field including teaching [3]. Use of electronic presentation has become very frequent, and Microsoft PPT is now the most popular teaching aid used of all electronic presentation even in medical education. Teaching and learning is active process occurring simultaneously on a continous basis [4]. Both teaching and learning are dependent on teacher, learner, subject matter, environment and teaching methods [5]. The responsibility lies on the teacher to ensure that the

student is given the opportunity to think in classroom [6].

MATERIALS AND METHODS

This study was conducted in the department of physiology of medical college in Telangana state. Total of 150 medical students who were from first MBBS were included in study. Informed consent was taken from students. The students were divided randomly in 2 groups.

Lecture 1:

Group A: Teaching was done with Chalkboard.

Group B: Teaching done with PPT presentation.

Lecture 2:

Group A: Teaching done with PPT presentation.

Group B: Teaching was done with Chalkboard.

Multiple choice questions (MCQ s) 25 marks paper was used for assessing the knowledge gained on next day. The differences in marks obtained in 2 groups were analyzed by students t test. The sample was described using mean and standard deviation for

quantitative variable. A level of statistical significance was established at a p value < 0.05. A questionnaire with 10 various attributes were given to students to determine their preferred method of teaching. Students were asked to choose the preferred method of teaching (chalk board or PPT). Attributes listed included, flow of thoughts, lecture well organised, stress on important points, able to take notes, problem solving better, copy diagrams, able to take notes, clarity of concepts, best

mode to recall important points, student – teacher interaction better in.

RESULTS

Table-1 shows the comparison of marks obtained by the students using 2 teaching aids. Significantly higher marks were obtained by students who were taught using chalk board compared to those students who were taught using PPT.

Table-1: Marks obtained by students in 2 groups

Parameters	Group A	Group B	p Value
	PPT Lecture (n = 75) (Mean \pm SD)	Blackboard Lecture (n = 75) (Mean \pm SD)	
Lecture 1	15.34 \pm 1.82	18.56 \pm 2.40	0.04*
Lecture 2	16.24 \pm 1.44	18.68 \pm 2.26	0.03*

* p < 0.05 significant

Table-2 shows students opinion for the various attributes by Black board and PPT teaching methods. Black board teaching was chosen by more students for following attributes: Flow of thought was better,

lecture wellorganized, able to take notes, copy diagrams and charts, clarity of concepts, best mode to recall important points.

Table-2: Students (150) opinion for Blackboard and PPT teaching method

Attributes	Chalk board Number of students (in %)	PPT Number of students (in %)
1. Flow of thoughts	97 (65%)	53 (35%)
2. Lecture wellorganized	82 (55%)	68 (45%)
3. Stress on important points	69 (46%)	81 (54%)
4. Able to take notes	90 (60%)	60 (40%)
5. Problem solving better	87 (58%)	63 (42%)
6. Copy diagrams/ charts	90 (60%)	60 (40%)
7. Clarity of words	49 (33%)	101 (67%)
8. Best mode to recall important points	100 (67%)	50 (33%)
9. Clarity of concepts	105 (70%)	45 (30%)
10. Student teacher interaction better in	90 (60%)	60 (40%)

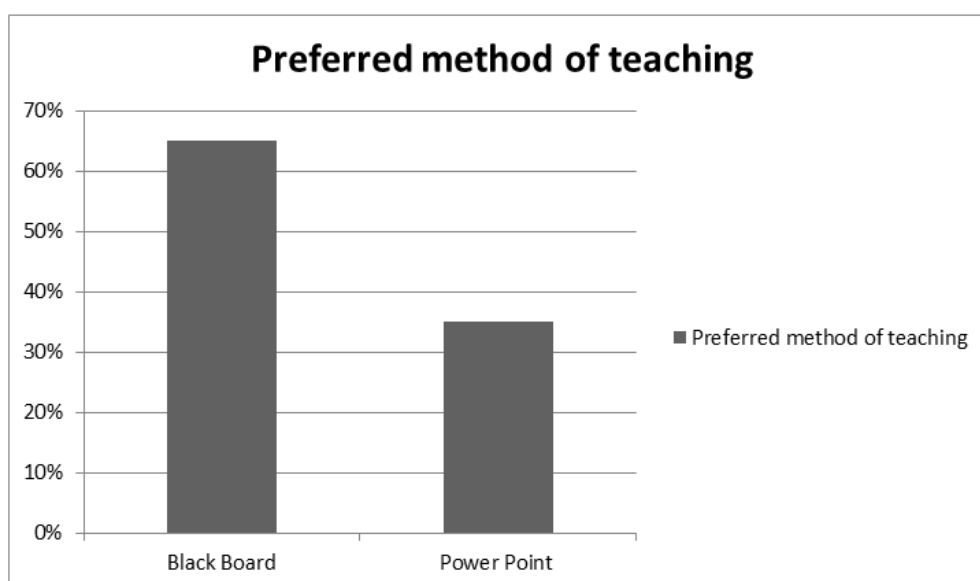


Fig-1: Bar Diagram shows that 65 % students prefer blackboard teaching over teaching using PPT

DISCUSSION

The teaching learning process in medical professional is crucial; because this is the time when students are taught about pathophysiological concepts of diseases and their management and also they come in touch with patients in the hospitals. Moreover, the curriculum in medical education is changing continuously. Needs of learners are changing and role of teachers is being redefined at the same time. One has to keep pace with the ever changing needs of the learners and changing trends in education. Hence, if the needs of the learners are considered while during teaching, the process of teaching-learning can be made effective. In this study, we tried to find out the gaps, if any, by taking students' feedback, in the 1st year medical students about their teaching opinion in physiology subject. Learning and teaching are continuous processes which act simultaneously. This can be demonstrated when learners acquire the ability to express their gained insight, realization, facts, and new skills [7, 8]. A good teaching needs a good communication for exchanging ideas and information. It is a complex process and has five main components viz. source (teacher), receive (audience/students), message (content/lecture), channels (medium/traditional blackboard, OHP, and PPT), and feedback (effect). The major limitation of lectures is that listener passively receives the material and feels bored and sleepy. Lectures can be made more effective by using visual aids [9]. Blackboard is most commonly used visual aid as it has easy access and relatively simple to use. It needs no special equipment except for chalk, board, and duster which are easily affordable. Moreover, handouts are not given out in advance in blackboard teaching, so the students tend to focus more intently on the lecturer. Hence, a good lecturer can motivate the students on a journey of discovery, exposing students to one interesting fact after another by blackboard teaching method. Students will have better retention of the subject afterward if the notes are written with the lecturer's explanation. However, blackboard teaching aid may cause note-taking fatigue, especially after continuous and long lectures. In blackboard, teaching can be difficult to catch continuation with the lecturer if student lose focus for even a moment. In Microsoft PPT presentation, the lecturer prepares photographic slides and distributes the same to the students before the lecture. The lecturer shows the PPT slides and explains the important points during the lectures. The lecturer has to work in preparing slides well in advance. PPT promotes better organization and understanding of the lecture topics as the coverage and flow of subject are well fixed within a finite number of slides. During lecture, the individual PPT slides serve as memory aids, which reduce the mental strain on the lecturers. As most of the contents are already given in the form of handouts, this reduces the need to take notes during the lecture and students find this PPT method less tiring.

Moreover, students able to pay more attention to the discussion part of the topic instead of taking notes. PPT slides can be reused or can be edited with ease for future lessons; this makes lectures to prefer this aid. However, few drawbacks come with PPT presentation. Some lecturers tend to create PPT slides that are more suitable for them to read rather than explaining. Present study has shown that blackboard teaching is still remains the most preferred teaching aid by our students (65%) when compared to PPT teaching method (35%). In blackboard-based teaching, the students are active participants and are able to cope with the teaching speed of the teacher. It also motivates an interest in students and helps in holding attention in the class [10].

CONCLUSION

Traditional blackboard teaching method just cannot be completely neglected. Blackboard teaching aid still stands at the top. However, it can be made more and more effective by combining it with other teaching aids.

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