

Attitude of BDS Students towards Power Point Presentation and Chalk and Board in Anatomy –An Evaluative Study

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ABSTRACT

Background: It is an undisputed fact that the comprehensive knowledge of anatomy plays a vital role in proper understanding of any other branch of Medicine. Traditionally, most of the lectures are taken with chalk and board (C&B) in India. With the advancement of technology the use of power-point presentations (PPT) has been increasingly adopted by many of the medical colleges. **Methods:** The present study is conducted on BDS students to assess which methodology of teaching anatomy they preferred: traditional (chalk and board), power point presentation or both when combined. BDS students of 1st year of the Faculty of Medicine of Aligarh Muslim University, Aligarh were selected for the study after obtaining their informed consent. **Results:** The questionnaire was circulated to all the 23 students. The perceived efficacy of 2 different teaching methods namely PPT and C&B teaching was assessed using a 5- point Likert scale i.e. 5 (agree strongly), 4 (agree), 3 (no opinion), 2 (disagree) and 1(disagree strongly). Response rate in the study was 86.957% (20/23). Among the respondents, combination of C&B with PPT was the preferred mode of teaching in 45% students whereas 35% preferred PPT over C&B. C&B was preferred only in 20% students. **Conclusion:** Though PPT was found suitable for the visual content and presentation style, students preferred joint use of C&B and PPT for lecture delivery. The study establishes and recommends that chalk and board should be combined with PPT in order to increase the efficacy of teaching learning process.

Keywords: Chalk and Board, Power Point Presentation, Anatomy lectures, Efficacy, BDS students

INTRODUCTION

Lectures can be traced as far back as the Greeks of the fifth century BC and since medieval times, lectures were the most common form of teaching.^[1] Therefore, the lecture has its merits, otherwise this form of teaching would have ceased. In medical colleges, where the number of students attending the college is so large, small group teaching is not possible.^[2] Hence, as Walton notes, the lecture is here to stay, so it is imperative that it should be as effective as possible.^[3]

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Traditionally, most of the lectures are taken with chalk and board(C&B) in India. There is very little documentation of the effectiveness of various active learning strategies, and often faculty are reluctant to incorporate new strategies into the

teaching curriculum.^[4] Recently, the use of electronic presentations has become common and Microsoft power point is now the most popular package used out of all electronic presentations.^[5] According to one study, traditional classes with blackboard presentation were the most favoured by students from biomedicine and medicine courses^[6] while another study observed that most students preferred PPT presentations over traditional ones.^[7] It has been suggested that the use of PPT can help teachers to 'help their students learn.'^[8] Till date, researchers are debating about superiority of either PPT or C&B.^[6,9-12] So, the present study is conducted to assess which methodology of teaching anatomy BDS students preferred: traditional (chalk and board), power point presentation or both when combined.

MATERIALS AND METHODS

BDS students of 1st year of the Faculty of Medicine of Aligarh Muslim University, Aligarh were selected for the study after obtaining their informed consent. The questionnaire was circulated to all the 23 students. The perceived efficacy of 2

different teaching methods namely PPT and C&B teaching was assessed using a 5- point Likert scale , i.e., 5 (agree strongly), 4 (agree), 3 (no opinion), 2 (disagree) and 1(disagree strongly). For each of the two methods, the students were asked to rank the following parameters on a five-point scale:

1. Lecture contents were informative
2. Lectures were clear and understandable
3. Lectures were well organize
4. Helped grasp concepts better
5. Lecture aroused interest in the topic
6. Lecture visually enhanced & better perceived
7. Increased impact of the lecture delivered
8. Helped retain concepts longer
9. Improved overall delivery of the topic
10. Helped maintain concentration throughout lecture
11. Better for self-study later on
12. Lectures were overloaded with information

RESULTS

Response rate in the study was 86.957% (20/23). Among the respondents, combination of C&B with PPT was the preferred mode of teaching in 45% students whereas 35% preferred PPT over C&B. C&B was preferred only in 20% students [Table 1]

Table 1: Student's Response Regarding Preferred Mode of Teaching

Preferred mode of teaching	Frequency	Percentage
Chalk and board	4	20
power point	7	35
combination of both	9	45

PPT was far superior for the information content, visual enhancement, organized nature and overall delivery of the topics. Its disadvantage is dim light causes loss of eye contact, note taking is difficult, has tendency to overload information and needs electricity. Chalk and board was considered a better tool for making the lectures understandable, for a better grasp and retention, for self-study later on resulting in better impact. But it is time consuming, one cannot go back to what has been erased and is not so effective for large no. of students.

DISCUSSION

Efficacy of any teaching method for anatomy should be assessed under three domains – understanding the concept, retention of lecture information in memory and reproducibility of diagrams. Liking or disliking of any method by the student is dependent on the fact whether it is fulfilling their requisite or not and the prime

concern of student is not only understanding the subject but also obtaining good marks in the examination. Students are directly benefitted from any teaching programme that is why they are the ones whose feedback counts.

Ability to explain i.e. make students understand a concept is an important skill of a good teacher. In addition, while learning anatomy, some facts need to be remembered as they are, as no logic is applicable to them. Even if the teacher is a very good artist, reproduction of 3- D diagrams and time constraint is a big challenge. Poor handwriting and faulty chalk and black board are other drawbacks.^[13] In lectures, where only PPT was used for teaching, students reported that they faced difficulty in taking down notes and were not able to draw diagrams, not good for self-study later on. Similar reflections were given in a study by Shallcross.^[14] Educational value of the class can be enhanced by proper and intelligent use of both PPT and C&B. If line diagrams are drawn by teacher on the black board and complex diagrams are shown on PPT, then the student is able to follow the hand of the teacher, keep pace with the lecture, take notes and at the same time, able to understand the complexities of the diagram. Prasad notes that 'a good teacher with lack of audiovisual aids will be better received than the poor teacher with the best audiovisual aids. So in our set up, combination of both is preferred because C&B is student centered in reproducing the diagrams and retention of lecture information whereas PPT by way of 3-D diagrams help in understanding the subject.^[5]

About 20% of the students preferred C&B alone because PPT is not good for self-study later on and student becomes a passive observer rather than an active participant.^[15] PPT is overloaded with information which students find difficult to assimilate within time constraints.

CONCLUSION

Though PPT was found suitable for the visual content and presentation style, students preferred joint use of C&B and PPT for lecture delivery. The study establishes and recommends that chalk and board should be combined with PPT in order to increase the efficacy of teaching learning process in Anatomy.

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