# **Original Research Paper**



## **Medical Education**

## PERCEPTION OF DIFFERENT TEACHING AND LEARNING MEDIA BY THE FIRST YEAR MBBS STUDENTS.

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**Introduction:** Time to time evaluation of medical curriculum is the routine practice in medical education. Now it has **ABSTRACT** been revolutionized with adoption of new CBME teaching methods. Perception of student is an essential component for evolution process of the medical curriculum which has a profound effect. Aim: To assess the preferences and perception of medical students about the recent methods of teaching and learning media. Methods: We studied the feedback from students about the effectiveness of prevailing teaching and learning methods, so that best teaching and learning medium can be adopted to improve academic performance of students. Study comprises 150 students of 1st year MBBS who have completed academic year 2020-21 in Dr. K. C. Patel Medical College, Bharuch, Gujrat. Results: Result showed medical students are preferring combined teaching and learning methods for their best perception.

### **KEYWORDS**: E- learning, Perception, Teaching methodology.

### INTRODUCTION:

It is said that learning style of learner, whether visual, auditory, or kinesthetic, is usually resistant to change. Orthodox-conventional teaching methods aids like blackboard, Charts, Overhead projector (OHP) are already has been used. Now a days use of Power point presentations (PPT) is in routine practice in medical colleges as well as other professional colleges, universities and schools too. The 2020 pandemic disease (COVID-19) has been a major disruptor to teaching and learning activities at all levels.

The educational system, from pre-school to higher education, in the world, had to accept and rapidly adopt online learning models. e.g., online learning, distance learning, mobile learning, blended learning etc., Most of the online and live sessions were provided through collaborative tools, including Microsoft Teams, Google Classroom, Zoom, and Blackboard or digital board Collaborate. Use of E-learning is generally confined to "on-line learning" carried out through the Internet or Web-based technology, with no face-to-face interaction.

E-learning is pedagogy empowered by digital technology. Mobile learning is an additional or supporting source of learning that are available any time; anyplace; any network; on any wireless device, etc2 Thus online teaching -learning technology i.e. E – learning is also entered in the field of education.

So now a days use of e-learning in medical education is one of the key issues and it would be as a challenge in the future.4

To know the differences between perception of different teaching and learning media is more useful for teachers which can help them to adopt best techniques. So, the present study helps in evaluation of teaching -learning methodology by the students in a medical college may further help in modification and construction of the medical curriculum.3

#### AIM:

To assess the preferences and perception of medical students about the recent methods of teaching and learning media.

### **METHODS:**

Study comprises of total 150 students of 1st year MBBS course who have completed academic year 2020-21 in Dr. K. C. Patel Medical College, Bharuch, Gujrat. After taking permission from the head of the Anatomy department and the Dean of the college, IEC approval was

A questionnaire-based survey of students of first year MBBS receiving lectures using either chalkboard or PowerPoint (PPT) presentations and E-learning was conducted. E-learning are based mainly on online learning.

A questionnaire was prepared having 16 items covering the different

aspects of teaching and learning aid in the form of opinion by the medical students. Irrespective of the teacher and topic, the students were asked to grade the teaching and learning media that were used to understand Anatomy subject. students were asked to assess the impact of three lectures given by three different methods of lecture delivery.

### Aspects covered in Questionnaire -

- Well organized topic
- Simple and clear language
- Generate interest
- Cover more points per topics
- Understanding of subject
- Stress on important points
- Better demonstrations of clinical conditions
- Cope up with speed
- Hold attention
- Enhances visual quality of text and figures
- Better doubt solving
- Communication skill development
- Summarization
- Best mode to recall important points

There is no conclusive study stating the superiority of one method over the other.

Students were also given option to suggest any other teaching method which would improve their academic performance.

Table no.1- Comparison of PPT, Chalk-talk and E- Learning Methods.

Sr.	Questions		Chalk-board	E – Learning
No.		PPT %	%	%
1	Well organized topic	56.66	30.66	44
2	Simple and clear language	50.66	58.66	36.66
3	Generate interest	40	42.66	61.33
4	Cover more points per topics	58	23.33	50
5	Understanding of subject	40	53.33	40.66
6	Stress on important points	58.66	58	34
7	Better demonstrations of clinical conditions	56.66	15.33	66
8	Cope up with speed	44.66	37.33	39.33
9	Hold attention	38	50.66	46
10	Enhances visual quality of text and figures	58	13.33	69.33

11	Better doubt solving	30	68.66	38.66
12	Communication skill development	33.33	65.33	20
13	Summarization	67.33	26	40.66
14	Best mode to recall important points	58	42	40
15	Students' teacher interaction	31	75.33	14.66
16	Your preferable grades.	46.66	41.33	33.33

Above table showed comparison of PPT, Chalk-talk and E-Learning individual methods, there was mixture of feedback based in this present study and it was not clear whether the use of a particular lecture delivery method is superior to others. Therefore, to find out students' opinions of the impact of lectures combined teaching methods was introduced, Chalkboard + PPT, PPT + E-learning, Chalkboard + Elearning. Teaching and learning are active and continuous processes. Teaching is an art of facilitating and supporting learning character in students. Students were asked to grade combined teaching learning methods in different aspects as following -

A Grade (Excellent): Most helpful to understand, remember and

BGrade (Good): Helpful to understand, remember and recall

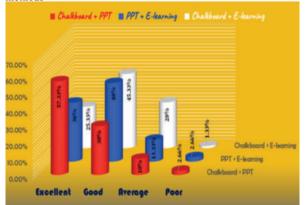
C Grade (Average): Only helpful to understand.

D Grade (Poor): Not effective.

Table no. 2 - Comparison of combined Teaching and learning methods

Grades	Chalkboard + PPT Percentage %	PPT + E-learning Percentage %	Chalkboard + E learning Percentage %
Excellent	57.33	36	25.33
Good	30	48	45.33
Average	10	13.33	28
Poor	02.66	02.66	01.33

Graph No.1 -Comparison of combined Teaching and learning methods



### DISCUSSION:

It is a complex process and has five main components

- Source Teacher or Internet (E-Learning)
- Receiver Students,
- Message Content/Lectures
- Channels Medium/traditional blackboard, PPT and E-learning
- Feedback Effect of media

Short time (12 months) of duration given to students should be effectively used to get best outcome from the students.

According to Novelli and Fernandes (2007), traditional classes with blackboard presentation were the most favored by students in biomedicine and medicine courses, while Rocklin (1998) suggests that the use of PowerPoint is a driving force for teachers to "help their students to learn".

Learning with audio-visual aids does seem to have a great impact on students (Sharma et al., 2004) 5

Study By Chaudhary et al 2009 on 100 Medical students of 1st Year MBBS, showed 67.1% preferred the combined of teaching method. Blackboard (31%) ,OHP (11%) and Power point (3.4%) Even they favored seminars along with different teaching aids (82%)

Priyadarshini et al 2012 conducted the study in Biochemistry on 117, 1st MBBS students Results showed PPT in combination with Blackboard (66%) was the most helpful teaching aid to understand, remember and reproduce; followed by combination of OHP and blackboard (46%). Teaching using OHP alone and PPT alone was opined not effective at all. 8

In present study students has preferred combined PPT + chalk board method.

Result showed that Power point presentation is excellent media according to 56.66% topic is well organized, 58% it can cover more points, 58.66% stress on important points, 67.33% summarization is better than other media, 58% it is also best mode to recall.

Chalk board media holds more attention 50.66%, It is most doubt solving method 68.66%, 65.33% develops communication skills,75.33% student-teacher interaction is more.

In case, if E-Learning students preferred it for better visual quality in text, figure 69. 33%, better demonstration of clinical conditions 66 % So result for combined method students preferred combined PPT + chalk board 57.33%, PPT + E learning 48%, E-learning + chalk board 45.33%. Thus study showed needs of learners are changing and role of teachers should be redefined at the same time.

#### RESULTS:

Result of present study showed that medical students are preferring combined teaching and learning methods for their best perception. 57.33 % medical students has given 'A grade' to combination of chalk - board and Power point presentation (PPT). According to students it is an excellent method to understand the subject. according 36% students PPT and E - Learning combination is excellent method to understand the subject. 25.33% of students preferred chalk-board and E-learning combine method is excellent.

According to 48% medical students, combination of Power point presentation (PPT) and E - Learning method is good method which is helpful to understand, remember and recall so they have given B grade to this method. 45.33% students preferred Chalk board and E -Learning, 30% students preferred Chalkboard + PPT combination is Good. So there is a mixture of views based on feedback of students.

#### CONCLUSION:

- When individual teaching- learning aids are considered, multimedia teaching PPT aid is most preferable and acceptable.
- However, by combining PPT with traditional chalk board learning can be more perceptive or effective because the inherent deficiency of one aid is compensated by the other.

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