

## Medical students and the use of mixed audio - visual aids in lecture classes

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**Abstract:** Use of teaching aids in medical education technology is an active area of educational research. Lectures can be supplemented with the use of mixed audiovisual aids for better illustrations, clarity and learning. This study was designed to know the views on the use of mixed aids in lecture classes. The Information was collected by a pre-structured, pre-tested, pre-coded questionnaire among the first year medical students of Tripura Medical College & Dr. B.R.A.M. Teaching Hospital of Agartala, Tripura. Ninety eight (98) medical students, including boys (57.14%) and girls (42.86%) participated in this present study. Fifty three (53) participants (54.08%) opted for the use of mixed of audiovisual aids in lecture classes. Among the participants who opted for the use of mixed of audio-visual aids, 88.68% (47) opined their views regarding the use of mixed audiovisual aids. Mixed aids were found to be easy and better for understanding by 55.32% of the participants. Therefore, the proper use of mixed aids may perhaps be of great help to enhance the excellence of lectures in classes.

**Key Words:** Audio-visual aids, Lecture, Medical students, Mixed aids.

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### I. Introduction

Teaching is an art<sup>1</sup> and a good teaching needs a good communication for exchanging ideas, feelings and informations.<sup>2</sup> By using the best teaching aid, a teacher can teach and make the students to understand remember and reproduce well which improves the academic performance of students.<sup>1</sup> Audiovisual aids in medical education technology are swiftly changing from black board to virtual stimulation.<sup>3</sup> Medical teachers have conventionally been using different teaching methods to educate medical students.<sup>4</sup> Lectures can be supplemented with audiovisual aids for better illustrations, clarity and learning.<sup>5</sup> A combination of teaching aids is the most satisfied teaching aid as the inherent deficiency of one aid is compensated by the other.<sup>1</sup> Literature reveals that, lectures delivered by using mix of audio-visual aids was more appreciated by the students. Hence, the present study was undertaken to evaluate views of the students on the use of mixed audiovisual aids in lecture classes.

### II. Materials & Methods

This cross-sectional, pre-structured, pre-tested, pre-coded questionnaire based study was conducted from the month of January to June 2011. Ninety eight (98) first year medical students including girls and boys of Tripura Medical College & Dr. B.R.A.M. Teaching Hospital, Hapania, Agartala, Tripura were chosen for the study. The students willing to participate were included with their consent. The questionnaire consists of Socio-Demographic Profile and was constructed to assess the views regarding mixed audiovisual aids used in this institution during lecture classes. The audio-visual aids used in the lecture halls were black/white board, overhead projector, power point and mixed aids. The questionnaire was based upon a review of literature and previous similar studies. The students were encouraged for their unbiased independent opinion to complete the questionnaires regarding this study. All of them completed the questionnaire. No personal identifying information was obtained. The collected data was verified by hand and was analyzed by using the Statistical Package for Social Sciences (SPSS), version 20.

### III. Results

The age of the participated first year M.B.B.S. students was found from 17 years to 21 years. Majority of the students (53.10%) was at 19 years of age. The study revealed that 57.14% of the participants were male and 42.86% were female (Table 1).

**Table 1 : Socio-demographic characteristics of participants.**

Bio-social characteristics		Number (n=98)	Percentage (%)
Age (in years)	17	2	2.04
	18	14	14.29
	19	52	53.06
	20	26	26.53
	21	4	4.08
Gender	Male	56	57.14
	Female	42	42.86
Schooling	Government School	43	43.9
	Private school	55	56.1
Medium of education in school	English	88	89.8
	Mother tongue	10	10.2

Among the total 98 participants, 53 (54.08%) participants opted for the use of mixed audio-visual aids and 45 (45.92%) participants opted for one particular audio-visual aids (Black or white board/Over-head projector/Power point) in lecture classes. Among the participants who opted for the use of mixed audio-visual aids, 88.68% (47) opined their views regarding the use of mixed audio-visual aids. 11.32% (06) of individuals had expressed no response of their views for the use of mixed of aids. The following table (Table 2) depicted the views of using mixed audiovisual aids in lecture classes.

**Table 2: Views among the participants in response to the use of mixed audiovisual aids.**

Views of students in using mixed audiovisual aids	Number (n=47)	Percentage (%)
Easy and better understanding	26	55.32
Better presentation	4	8.51
Informative	1	2.13
Interesting and exciting	4	8.51
Clarity of doubts can be removed	5	10.64
Easy to remember	1	2.13
Use depending on the topic	6	12.76
Total	47	100

#### IV. Discussion

Technological advancement of this era have revolutionised every field of life and teaching also has no exception.<sup>6</sup> A good teaching needs a good communication for exchanging ideas, feelings and information. For this complex process, the main components are sender (source/teacher), receiver (audience/students), message (contents/lectures), channels (medium) and feed back (effect). The use of various techniques makes the lecture effective.<sup>2</sup>

A well-organized lecture remains one of the most effective ways to integrate and present information from multiple sources on complex topics. Assistance from the audiovisual aids is essential to enhance the quality of lecture.<sup>7</sup> Better teaching aids allows the students to understand better and allows more time for further interaction and understanding.<sup>1</sup> Their use inspired them from in depth understanding of subjects.<sup>8</sup> Majority of the students preferred combination of teaching aids rather than individual teaching aids.<sup>1, 9</sup> Understanding the topic is best possible by combination of aids.<sup>10</sup> The present study revealed that the lecture topics were easy and better understanding by using mixed audiovisual aids among 55.32% of the participants.

**Table 3: Comparison of present study with other various studies.**

Parameter	Mixed aids Percentage (%)	Comparison of mixed audiovisual aids of present study with various authors' observations in percentage (%)					
	Present study	Mohan L et al. <sup>10</sup>	Hemalatha NR et al. <sup>7</sup>	Giri PA et al. <sup>11</sup>	Kumar A et al. <sup>12</sup>	Chaudhary R et al. <sup>13</sup>	Chavan SK et al. <sup>9</sup>
Preference of mixed audiovisual aid use during lecture classes	54.08	54.9	21.8	48.8	50.0	67.1	45.5
Easy and better understanding of lecture topics by of mixed audiovisual aid	55.32	42.4	11.5	51.2	41.1	-	-

Among the participants, 12.76% in the present study opined that the use of mixed audiovisual aids could be changed according to topic. The major limitation of the lectures is that, the listeners passively receives the material and feels bored and sleepy. By using visual aids, the lecture can be made more effective, clear and easily understandable.<sup>2</sup> Mixed aids could make the lectures interesting and exciting as opined by 8.15% of the students in present study. It also revealed that it was also informative, easy to remember and clarity of doubts can be removed.

## V. Conclusion

The views of medical students regarding the use of audiovisual aids during the lecture classes were favourable for mixed aids. These made the teaching-learning process more effective which provides insights for identifying expectations or requirements. This study will be very helpful for further studies in larger scales to develop more understanding of the relevance of mixed aids used in lecture classes.

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