

Brief Research Article

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A study on Medical students' opinions about faculty power point presentations during lecture.

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Abstract:

Background: With respect to a multimedia presentation, style refers both to the style of the writing and to the appearance of the slides. Nowadays many faculty members are using different varieties of presentations through power point to many students. Really what extent it is useful for improving their knowledge level, effectiveness of the method and suggestions for improvement. Hence, this study was designed to conduct among medical students. **Objectives:** 1. To find the opinions of medical students about faculty

presentations during lecture. **Materials and Methods:** The present institutional based cross sectional study was conducted at Alluri Sita Ramaraju Academy of Medical Sciences, Eluru, Andhra Pradesh, during the period from April 2016 to June 2016. A total of 125 individuals were selected from the one of the batch of Final MBBS, part-1 and randomly picked up this batch. Results were analysed and necessary statistical tests were applied. **Results:** Out of 125 study population, 58.4% were females and 41.6% were males. In the

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study population Only 46/125 (36.8%) students were opined faculty created interest during listening the class. Out of 125 students, 78 students opined that faculty members presented > 25 slides in their class. But there was no statistical difference was observed between number of slides and eye contact (P=0.32). About 90.4% students given opinion faculty taught relevant subject in their class. Very less proportion of faculty (25.6%) given

mental breaks in the class during lecture.

Conclusions: Based on the above study results, time taken by faculty is adequate, content delivered in the lecture is also good. But, only number of slides per class is more and mental breaks in the class is also less. In addition to regular practice, these changes also to be incorporated in their classes will give better output of the students in the areas of learning.

Key words: Age, Sex, duration of the class, eye contact, relevant subject, mental breaks.

Introduction: Medical teachers have conventionally been using different teaching methods to educate medical students that previously dominated by blackboard and slide projectors. Recently audiovisual aids such as videotapes and multimedia introduced ¹. Critics of multimedia feel that it is expensive, time consuming, and is not worth the time and effort. ² Two major problems confront medical educators now, the increased intake of medical students that is now under way, and the great expansion in postgraduate medical education. The number of teachers, at present are already inadequate, will lag further behind the requirements over the next decade. To cope with these problems institutions have started exploiting advances in educational technology. We as a faculty think that it may help to improve the quality of orthodox-conventional teaching methods

and which may, in the form of self instructional techniques, replace the teacher altogether. With AV aid, some feel that they can get away with practicing less, as they have words in front of them.

At present scenario, it has thus, slowly and steadily become a method to dissipate large number of facts, interspersed with illustrations and animations, all packed in allotted time span of lecture. ³ The audiovisual aids are the term used for devices that helps conventional teaching methods such as the lecture, clinical demonstration, or the textbook. In addition to that being a part of medical education technology department in our college taken a initiative to know the certain facts, we collected some opinions from the students like how much time spending during class hour, maintenance of eye contact by the faculty and understanding

of the student in the dimensions of cognitive, behavioural and psychomotor skills improvement following lectures by faculty.

Nowadays most lecture classes in various institutions conducted using advanced computer technologies, with the purpose to

Objectives:

To find the opinions of medical students about faculty presentations and Teaching learning methods during lecture.

Materials & Methods: The present institutional based cross sectional study was conducted at Alluri Sita Ramaraju Academy of Medical Sciences, Eluru, Andhra Pradesh, during the period from April 2016 to June 2016. Before conducting the study in our medical college, all the semester students are briefed about the importance of the study, purpose of the study and discussed about how to observe the lecture during class also explained in the class before collection of the data. After successful orientation of the programme, instructed them to give their

Results:

Out of 125 students, 52 were male and 73 were female. Most of the students (97.6%) stated that the faculty members used to take more than 30 minutes time in lecture classes.

enhance students learning and sustain interest in the topic. to assess the viewpoint of medical students of acceptance and preferences of methodology of teaching, in our institution the study was undertaken

valuable frank opinions about the faculty and this is exclusively utilized for further improvement of our teaching capabilities in the college. Student name and his opinions kept Confidential till the completion of the study. At present 5 batches availability, one batch selected randomly by lottery method. From that batch, a total of 125 individuals were selected from one of the batch of Final MBBS, Part-I and randomly selected this batch. Results were analysed and necessary statistical tests like proportions and chi square tests were applied.

Only 46 (36.8%) students opined that faculty had created interest in lecture classes to draw students' attention in listening. (Table-1)

Table 1: Opinion of students by gender in relation to duration & attracting attention in lecture classes

Aspects	Male (n=52)	Female (n=73)	Total(n=125)
Time taken			
< 30 Min	1 (33.3%)	2 (66.7%)	3 (100%)
> 30 Min	51 (41.8%)	71 (58.2%)	122 (100%)
Attention			
Yes	19 (41.3%)	27 (58.7%)	46 (100%)
No	33 (41.7%)	46 (58.3%)	79 (100%)

About 90.4% students gave opinion that faculty taught relevant subject in their classes. Only 42.4% of faculty used combination T/L method in addition to power point presentations. About 44%, 36% & 20% of the students preferred power point, chalk & talk and OHP teaching with transparencies

respectively as best teaching method in lecture classes. According to the opinion of 25.6% of students mental breaks were given in the classes during lecture. About 48% of the students stated that eye contact was maintained during lecture. (Table-2)

Table 2: Opinion of the students in relation to different aspects in lecture classes

(n=125)

Aspects	No of respondents	%
Relevant subject		
Yes	113	90.4%
No	12	9.65
Combination method practice		
Yes	53	42.4%
No	72	57.6%
Teaching method		
Chalk & talk method	45	36%

Power point method	55	44%
OHP with Transparency	25	20%
Mental breaks		
Yes	32	25.6%
No	93	74.4%
Eye contact		
Yes	60	48%
No	65	52%

Table 3: Eye contact versus number of slides in the presentation:

Eye contact	Slides > 25	Slides < 25	Total
Yes	36 (58%)	26 (42%)	62 (100%)
No	42 (66.7%)	21 (33.3%)	63 (100%)
Total	78 (62.4%)	47 (37.6%)	125 (100%)

$$\chi^2 = 0.986, \quad df = 1, \quad P = 0.32$$

Out of 125 students, 78 (62.4%) students opined that faculty members presented > 25 slides in the class. But there was no statistical

difference was observed between number slides and eye contact

Discussion:

The present institutional based cross sectional study was conducted at Alluri Sita Ramaraju Academy of Medical Sciences, Eluru, Andhra Pradesh, during the period from April 2016 to June 2016. In the study population, 58.4% were females and 41.6% were males. Only 42.4% of faculty used combination T/L method in addition to power point presentations. About 44% of the students opined that best teaching method as power point, 36% as chalk & talk and only 20%

people given opinion as OHP teaching with transparencies. The findings obtained may not be true for all subjects in medical curriculum. The preference of students for these two teaching aids may vary from subject to subject and also influenced by the commonest mode of teaching aid used in that department. The present study revealed that majority of the students feels AV-aids are essential for lecture delivery and suggested change of AV-aids according to topic.

Majority of students preferred mixed A-V aids followed by traditional chalkboard. Similarly, a study done by Giri PA et al. ⁶ found that use of a combination of audiovisual aids was more appreciated by the undergraduate medical students. Another study done by Kumar A et al. ⁷ also found that 50.0% students showed a preference for the use of a combination of audio-visual aids during the lecture delivery. A study by Mohan L et al.⁵ also found consistent results with our study-reporting majority of students in their study group preferred mixed A-V aids especially for understanding a particular topic. There was no gender difference found amongst study participants regarding perceptions of A-V aids use. While a study done by, Seth V et al. ⁴ at Jaipur revealed that majority of medical students (65.33%) have preferred Power point presentation (PPT) amongst their study participants. Another study done by Lalvarmawi F et al. ⁸ also revealed that postgraduate students preferred the use of PPT presentation as the mode of lecture delivery to the other modes.

The main reasons for preferring chalkboard were that the lectures contained natural pauses and breaks, allowing students to follow the material. While students perceived that lecture were informative, better summarized, and highlights important points with the use of PPT. That may be the reason the students given opinion about combination teaching method would be the effective in

learning rather than single method of teaching. Studies done by Seth V et al. ⁴ and Lalvarmawi F et al. ⁸ found similar results, which supports our study. However, they found their study participants reported that lectures are well organized with PPT and were clearly audible and informative with (Total over head projector) TOHP, which was not consistent with our study results. Over-all our study revealed that power point presentation as the most preferred A-V aid and also combination method by the study participants. Mohan L et al. ⁵ opined that in blackboard based teaching students are active participants and better able to cope with the teaching speed of the teacher. It motivates an interest in learning and helps in holding attention in the class.

The main reasons for liking power point presentations could be that it allows sufficient time to take down notes and visual impact does not interrupt the lecture and also no problem of hand writing. The main reasons for disliking PPT are that it takes longer to set up the projection, power failure interrupts the lecture and students find it difficult to take down the notes. Also the students could be more impressed by the way PPT is used as compared to chalkboard.

Several studies in the past have found chalkboard to be a better method of teaching. A questionnaire-based study carried out among 7th semester medical students in Delhi

rated chalkboard as best in allowing interaction and helping recall.⁹ A study conducted by Banerjee *et al.* Nepal in 2008-2009 reported that chalkboard methodology was found to be the best (60%) followed by LCD Slides (20%).¹⁰ Another study conducted in West Bengal in 2012 concluded that chalkboard was better than PPT according to the second year MBBS students.¹¹ A study conducted in 2012 in Goa Medical College to evaluate the learning environment of undergraduate medical students included 387 students from different semesters. Most of the students (66.9%) thought multimedia to be the most effective teaching tool followed by traditional blackboard.¹² But this study provided a general opinion on teaching methods of all medical subjects and not a specific field like Community Medicine.

Conclusions:

Based on the above study results, time taken by faculty is adequate, content delivered in the lecture is also good. But, only number of slides per class is more and mental breaks in the class is also less. While taking the class, faculty must maintain on eye contact, creation of some interest towards topic, as far as possible combination of teaching methods to be used for better understanding. The findings obtained may not be true for all

Some studies also support the use of PPT over chalkboard. A study conducted in USA on engineering students retained 15% less information delivered verbally by the lecturer during PowerPoint presentations, but they preferred PowerPoint presentations over traditional presentations¹³. But in our study more students preferred combination method and even the memory retention was better with this combination method and sometimes mental breaks and eye contact during lecture is also required for better grasping the content of material. A study conducted on 62 medical students in Jaipur India concluded that 65 % of medical students preferred the use of PPT presentations significantly over other methods¹⁴.

subjects in medical curriculum. The preference of students for these two teaching aids may vary from subject to subject and also influenced by the commonest mode of teaching aid used in that department. Strong attitudes of students with positive change towards increasing the learning phase of students. In addition, there may be need of training of teachers pertaining to use of these A-V aids and newer technologies.

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