

ORIGINAL ARTICLE AN EVALUATION OF AUDIO-VISUAL AIDS IN MEDICAL UNDER-GRADUATE CLINICAL TEACHING.**Dr. Lokesh. S***

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ABSTRACT

Introduction: we live in an era of uncontrolled and accelerating changes and an age in which technology has raced ahead. In these days with a shortage of teachers and patients with all classical manifestation of a given disease, use of Audio-Visual Aids (AVA) in clinical bedside teaching has made a big impact on undergraduate teaching. **Aims:** We evaluated the usefulness of audio-visual aids in undergraduate clinical teaching. **Material and Methods:** All the undergraduate students of various semester posted in the Department of General Medicine from 01st September 2014 to 30th December 2014 were enrolled in the study. The students were divided into two groups, one receiving traditional clinical teaching and the other assisted with audio visual aids. The learning outcome was assessed using simple questionnaires which included questions on the topic discussed. The Teaching Outcome forms and Feedback forms were collected from the students and analyzed. **The results:** The students who underwent

teaching assisted with audio visual aids had a better teaching outcome in terms of reproducibility. The feedbacks from students favor the utilization of audio visual aids in clinical instruction. **Conclusion:** Incorporating audio-visual aids in clinical teaching are a potential tool in delivering the medical knowledge and skills.

KEYWORDS: AVA – Audio-Visual Aids, Medical Knowledge, Teaching outcome, Reproducibility.

INTRODUCTION

There are various forms by which a lecture can be made simpler and understandable to the listeners. It started from an older generation and most familiar components such as charts,

maps, models and blackboard illustrations.^[1] These have been absorbed into the art of teaching and because they are so familiar that we tend to think them as a part of teaching itself and not as a teaching aid.

As the development advanced with the introduction of machines into communication and presentations, with the result, the great books of ideas became textbooks. Later the introduction of still photography, filmstrips, slides, radio and television,^[2,3] in the process of teaching and learning created a revolutionary change.

The present generation of media depends on communication between man and the machine. The advent of overhead projection, LCD projection and the use of power point had made the process of teaching clearer and easier for the teacher.

The usefulness of audio-visual aids in delivering lectures and seminar is already proven beyond doubt.^[4,5] But the usefulness of AVA in clinical teaching had not been assessed in big numbers. With the present day advent of newer diagnostic methods and effective treatment, it is unusual for us to see a classical full blown case with typical clinical sign's; hence clinical teaching sometime becomes more theoretical. Often students find it difficult to remember clinical signs hence the use of AVA to assist clinical teaching will be of great help.

Aim

- To assess the usefulness of audio-visual aids in undergraduate clinical teaching.

MATERIAL AND METHODS

Undergraduate students belonging to 3rd, 7th and 9th semester posted on the Department of General Medicine during the period of 01st September 2014 to 30th December 2014 were enrolled in the study.

The students were then divided into two groups.

Group A: Received the traditional bedside teaching and demonstration of clinical signs over a period of one hour.

Group B: Received the traditional bedside teaching and demonstration of clinical signs in addition to Audio-Visual Clips which were played at the end.

The topics covered in both the groups were same, but dealt on different occasions.

The 3rd semester students were thought about history taking on a particular symptom, its importance and physical findings pertaining to it.

The 7th semester students were thought about a particular clinical scenario and systemic examination pertaining to it.

The 9th semester students were thought about a common clinical illness, symptomatology, complication, systemic examination pertaining to it and its management.

The videos downloaded from youtube.com, NEJM and few indigenously generated ones were used with the help of LCD projection.

The Learning outcomes were assessed using 10 objectivized questions which were given to the students to answer at the end of the teaching session. A feedback was also obtained from the students and the data was analyzed.

RESULTS AND DISCUSSION

A total of 140 third semester students, 132 seventh semester students and 120 ninth semester students were enrolled in the study. They were randomly divided into two groups, i.e., Group A and Group B (Table: 01).

Table: 01 – showing randomization of students into groups

	Group A (Received traditional teaching)	Group B (Received traditional teaching and AVA)
3 rd semester	70	70
7 th semester	66	66
9 th semester	60	60

The number of students in both the group was equally matched.

Learning Outcome

The learning effect was measured at the conclusion of each teaching session among participants of both groups with a questionnaire which consisted of 10 objective questions.

Table: 02 – showing the learning outcome among both groups in percentage

	Group A	Group B
3 rd semester	72%	81%
7 th semester	74%	86%
9 th semester	78%	88%
Average	74.66%	85%

On studying the information on learning outcome which was based on reproducibility of the thought topic, the average scoring among Group B students was 85% as compared to 74.66% among Group A students.

The execution of the students under Group B was probably better due to demonstration of all the clinical parameters which were identified by using Audio-Visual Aids, some of which were not present in the patient studied. The execution of the students under Group A had difficulty in determining the parameters that were not present in the patient studied, but was described theoretically.

The reproducibility based on visual and auditory perception of certain parameters made the students among Group B to perform better than those in Group A. On analyzing the feedback forms from the students at the end of the teaching session, the majority of the students preferred to have an audio-visual aid in clinical teaching, the symptomatology and clinical presentations were better understood by the students.

CONCLUSION

The use of Audio-Visual Aids is not only effective in delivering seminars or theory lectures, but also make a big impact on the clinical bedside teaching. It assists the learners to examine each and every case in a systematic fashion. The AVA prove to be an effective tool in improving the learning event.

Drawback: The present project was undertaken on a small number of students and over a very limited time.

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