

Original Research Article

# A Questionnaire Based Evaluation of the Teaching-Learning Methods amongst the MBBS Students of Gauhati Medical College, Guwahati

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## ABSTRACT

**Background:** There has been evaluation of the medical curriculum by the experts from time to time. However, students' views and opinion regarding the teaching-learning methodology in an institute helps to modify or reform the existing methods thus ensuring improvement of medical education in future.

**Objectives:** To find out from the students' perspective the preferred methods of teaching and learning, teaching aids and also the qualities of the teacher influencing the students.

**Materials and Methods:** A detailed structured questionnaire was given to 100 students of 1<sup>st</sup> year in our institute. Descriptive statistics were used for analysis of data. Frequency was expressed as percentage.

**Results:** A total of 100 students (57% males and 43% females) participated in the study. The most preferred teaching aid was Chalk & Board (59%) followed by Power Point Presentation (22%). The students preferred Practical method of teaching-learning (34%) over Didactic lectures (26%) and Tutorials (22%). Among the evaluation methods for preparation for University examinations, theory assessment examinations were considered to be most useful (79%). The most influencing qualities of a teacher were the ability to teach (47%) and good knowledge of the subject (26%).

**Conclusion:** The results of our study indicate that the students favour student-teacher interaction by chalk & board teaching with emphasis on practical way of learning. They prefer teachers who are knowledgeable with an ability to teach. Thus, the use of teaching-learning methods approved by the students in an institute will undoubtedly make the entire teaching-learning process interesting, enjoyable as well as effective.

**Key words:** Evaluation, teaching-learning methods, medical students.

## INTRODUCTION

Medical education is a powerful tool for shaping the future of the medical professionals. The contemporary thinking in medical education lays emphasis on "teaching-learning", as opposed to the greater importance previously attached to "teaching" alone. Learning is a process

resulting in some changes or modifications in the learner's way of thinking, feeling and doing as a result of practice. The purpose of teaching is to facilitate learning and encourage the learners to learn more effectively. The purpose of teaching is not merely dispensing information, but to develop skills and attitudes also. <sup>[1]</sup>

The primary goal of medical education technology is to enhance learning and teaching by integrating various effective teaching methods into the medical curriculum. There is a need to produce reliable and competent doctors to cater to the ever increasing population. The focus should be on quality rather than quantity. This in turn requires improvement in the quality of teaching in the medical colleges.

The best way to assess and improve the teaching methodology is through the students' feedback. Students' perceptions and attitude regarding the different teaching-learning methods are important for further development of medical education in future. [2-4] For this evaluation is important.

Evaluation is a systematic process to assess how much of a predetermined objective of a course of a study has been achieved. [5] Evaluation of students' attitude and perception regarding teaching-learning methods offers an insight into the efficacy of the current teaching learning methods adopted in the institute.

Questionnaires offer an objective means of collecting information about people's knowledge, beliefs, attitudes and behaviour. [6,7] Questionnaires should be validated, reliable and should be standardized. A standardized questionnaire is one that is written and administered, so all participants are asked precisely the same questions in an identical format and responses are recorded in a uniform manner. Standardization increases the reliability. [8]

Teaching is an interaction between the teacher and student under the former's guidance in order to bring about expected changes in the latter's behaviour. Some teachers have an inborn gift of the art and skill of teaching, but most of them learn and develop the skills as they progress in their career. Meaningful and effective teaching should help the student acquire, retain and apply the knowledge. Most

teachers teach effectively and some may work towards an improvement in their methods. [1] Obtaining feedback about our own teaching is an inexpensive and invaluable way of improving the quality of our teaching.

Teacher evaluation has come to be known all over the world as a useful input to improve the quality of teaching. Heightened focus on the quality of teaching in medical college has led to increased use of student surveys as a means of evaluating teaching. [9]

There have been ever increasing developments and changes in medical education. The information and communication technology has revolutionized the teaching and learning. Large scale efforts are required with the continuous interventional feedback studies in the highly revolutionizing field of medical teaching and learning. [10]

#### ***Aims and Objectives:***

1. To find out the most and least preferred teaching aid among the students in our institute.
2. To find out what qualities are looked for by the students in a teacher.
3. To obtain views of the students regarding the different methods of learning and any suggestions regarding the same.

#### **MATERIALS AND METHODS**

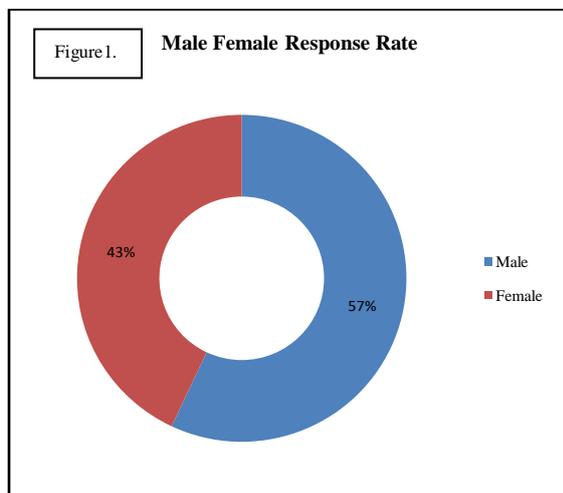
The present study was carried out on 100 1<sup>st</sup> year M.B.B.S. students of Gauhati Medical College, Guwahati, Assam, and India. All the students were in the age group of 18- 21 years. The students were not suffering from any major medical or psychiatric illness. The study was done by a pre-designed and self-administered questionnaire. The students were briefed about the purpose of the study and the questionnaire. Informed written consent was obtained from all participating students. The study was approved by the Institutional Ethics Committee. Assurance

was given regarding the anonymity and confidentiality of responses given by the students. The students were asked to respond freely, truthfully and without any fear. They were assured that the information gathered from them will be purely for research and evaluation. Data were collected at the end of first year as the students would be better equipped to provide answers after experiencing the different types of teaching and learning methods adopted in the institute.

**Statistical analysis:** Data collected were presented in graphical form. Descriptive statistics were used for analysis. The responses by the students were calculated in percentage.

## RESULT

Out of 100 students who were administered questionnaires, 100 completed questionnaires were returned giving a response rate of 100%. The mean age of the students was  $19.52 \pm 0.7314$  years. Male students (57%) were slightly higher than female students (43%) (Figure 1).

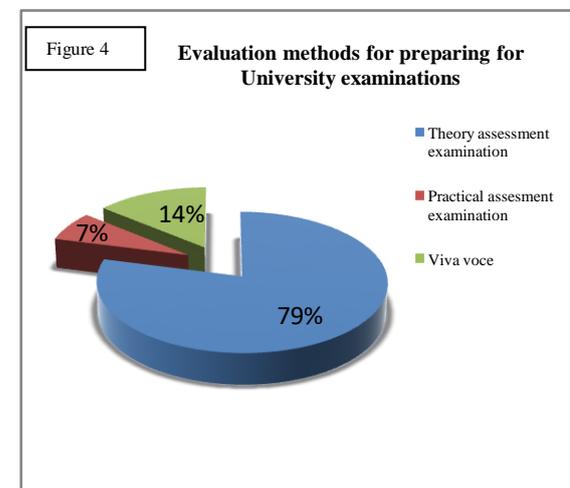
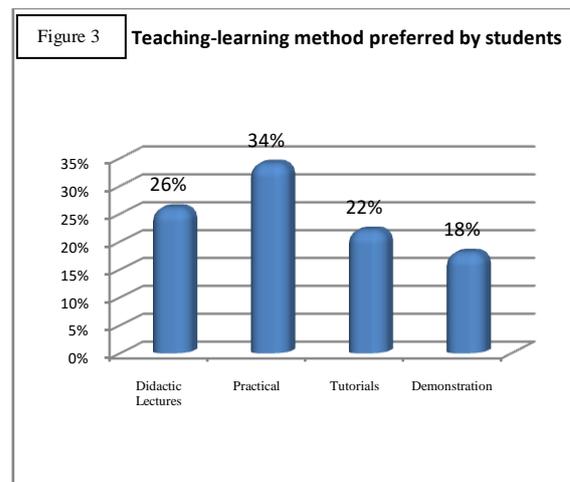
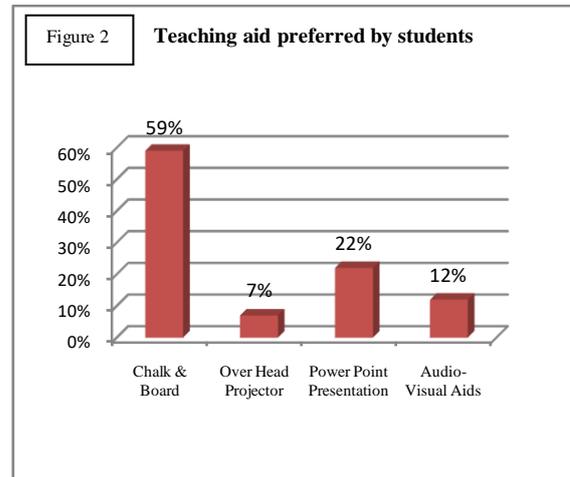


The most preferred teaching aid was chalk & board (59%) followed by power point presentation (22%) and audio-visual aids (12%) (Figure 2).

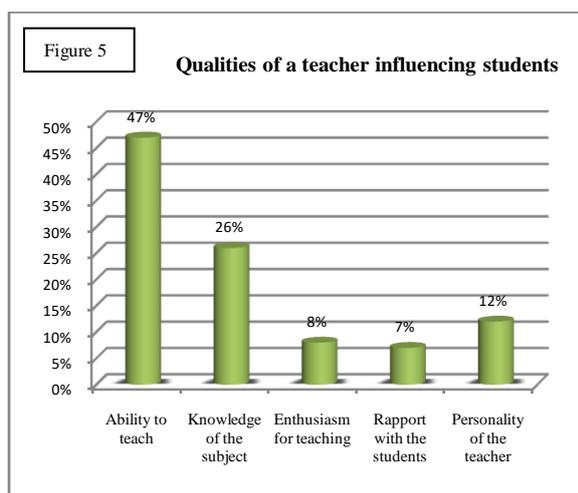
About the various teaching-learning methods in our institute, most of the students preferred practical method

(34%) over theory lectures (26%) and tutorials (22%) (Figure 3).

While preparing for the annual university examination, theory assessment examinations were rated as most useful (79%) by the students over viva-voice (14%) and practical assessment examinations (7%) (Figure 4).



Students were asked to give their opinion about the qualities of a teacher that most influence them. They preferred a teacher who had the art of teaching (47%) and a good knowledge of the subject (26%) than personality (12%), enthusiasm for teaching (8%) or rapport with the students (7%) (Figure 5).



## DISCUSSION

The necessity of reviewing the teaching programs from time to time and making appropriate modifications is important. This will not only help to keep pace with progress in the subject but also deal with the requirements of the students who are the beneficiaries of the teaching programs. As such, students' perceptions about the medical education methodology are of immense importance to modify or improve the teaching-learning methods in an institute. In this context, there was a need of such an evaluation in our institute.

In our survey, the teaching aid most preferred by the students was the Chalk & Board method. The reason for this is probably that while explaining a topic with chalk & board, the teacher-student co-ordination is better. Moreover, the students get time to note down the points and whatever the teacher says which leads to better understanding of the topic being taught. The same cannot be said of power point presentation, where more often than not, the lecture appears

monotonous with the teaching aid replacing the teacher. Similar results were also evident in other studies. [11,12]

Regarding the teaching-learning methods, the students favoured Practicals (33%) over Didactic Lectures/ Theory Class (29%). This may be due to the fact that practicals are more interesting than the theory classes as the students can apply the knowledge gained in theory.

Amongst the evaluation methods for preparing for annual university examination, Theory assessment examination received the highest score (79%) followed by Viva-voice (14%) and Practical assessment examination (7%).

Like other studies, [13] our study also found that students are most influenced by a teacher with art/ skill of teaching (70%) followed by a teacher who has a good grasp/knowledge of the subject (13%). Students also appreciate a teacher who has an enthusiasm for teaching. This reflects that students are more in favour of knowledge-oriented teaching.

The students were also asked to give their suggestions for improvement of the teaching-learning methods in our institute at the end of the questionnaire. 44 students commented. Some of the suggestions were not relevant to the topic. Most of the students wanted lectures to be more interactive and interesting with combination of chalk & board and power-point presentation. They wanted more stress to be given on important topics rather than covering the entire syllabus. They want the teachers to be interactive, co-operative with better communication skills. A few were in favour of analytical & reasoning-based MCQs in place of theory assessment examinations while a few others wanted lectures to be of less than one hour duration.

## CONCLUSION

From our study we found that the students preferred the time tested chalk & board method among the teaching aids.

They were in favour of application of the knowledge practically rather than simply learning the topics theoretically. The students also preferred knowledgeable teacher having good skill of teaching. Thus, students' perception about teaching-learning methods in an institute would help in planning the curriculum and improve upon it so as to make learning more interesting and practicable.

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