

RESEARCH ARTICLE

FEEDBACK OF MEDICAL STUDENTS ON TEACHING AND EVALUATION METHODOLOGY IN PHYSIOLOGY

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Key Words

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Background: Feedback from the students on adopted teaching and evaluation methodology is considered to be the best method to bridge the gap between teachers and students. It is an inexpensive and valuable tool to improve the quality of teaching. Feedback from the students could then be used to modify the mode of imparting knowledge according to the students' perceived learning needs.

Aims & Objective: To obtain feedback on teaching and evaluation methods in the subject of Physiology from the students of three successive batches after passing their first professional undergraduate medical examination.

Materials and Methods: A written questionnaire covering various topics on teaching and evaluation methods was used to get feedback from the students.

Results: Majority of the students preferred revision cum self-study, tutorials, and terminal exams. Practical demonstrations were found to be very useful. Almost all the students feel that there should be more time for revision cum self-study.

Conclusion: Feedback from the students on teaching and evaluation methodology is considered to be the best method to bridge the communication gap between teachers and the students. It is evident from the feedback obtained that the students were satisfied with all the teaching methods adopted in our college.

INTRODUCTION

It is generally agreed that reviewing the teaching and evaluation methods at regular intervals and modifying methodologies are a must for the improvement in undergraduate teaching. Feedback help the faculty to identify the strengths and weaknesses of their teaching and evaluation methods.^[1-3] It is important for the teachers to obtain feedback that allows them to modify their methods to meet the needs of their students. One important form of feedback comes from evaluation of various teaching/learning methods followed by students.^[4] Feedback from the students on adopted teaching and evaluation methodology is considered to be the best method to bridge the gap between teachers and students.^[5] It is an inexpensive and valuable tool to improve the quality of teaching. This study was undertaken to elicit the perception of the students regarding the utility of the prevailing system of teaching or learning methods and to evaluate the extent to which the students are benefited by these methodologies. It was perceived that this feedback from the students could then be used to modify the mode of imparting knowledge according to the students' perceived learning needs.

MATERIALS AND METHODS

The study was conducted at the Department of Physiology, Regional Institute of Medical Sciences (RIMS), Imphal, Manipur, India. The structured questionnaire on teaching and evaluation methods was distributed among the students of three successive batches after completing their first professional undergraduate medical examination ($N = 220$). The study was carried out in the subject of Physiology. The students were asked to use an alphabet scoring system or tick the option that they considered was the best. The students were also given a chance to offer their own suggestions/remarks and were not allowed to discuss among themselves. The data collected were then analyzed.

RESULTS

Of the 220 questionnaires distributed, 92.72% were completed sufficiently for data analysis. We observed that a few students did not attempt some of the questions, whereas in some cases, more than one option were ticked.

In this study, tutorials, practical demonstrations, and

lectures were accepted as very good or good by most of the students. Students found revision cum self-study and demonstrations to be the best form of learning.

Table 1: Certain suggestion/comments of the students on various aspects of teaching and evaluation methodology

No.	Suggestions/Comments
1	More use of PowerPoint, microphones, and sound system; summarizing important concepts at the end of lectures
2	Frequent seminar on important topics
3	Syllabus should be covered at least 1 month before university examinations
4	Frequent assessment of the students should be held
5	Inclusion of more tutorials and practical demonstrations, and decreasing the number of lectures
6	Revision class on important topics
7	Help understand the concepts rather than merely giving notes in lectures

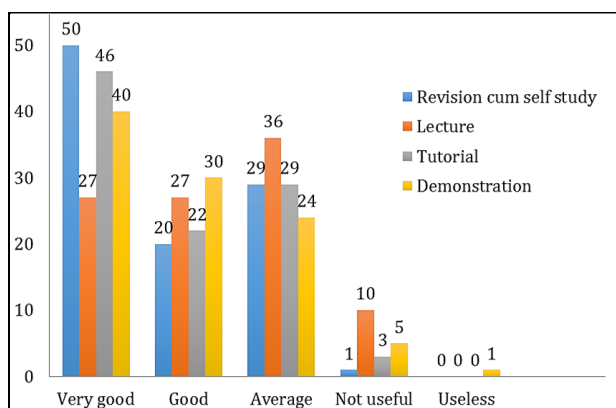


Figure 1: Students' feedback on usefulness of various teaching methods

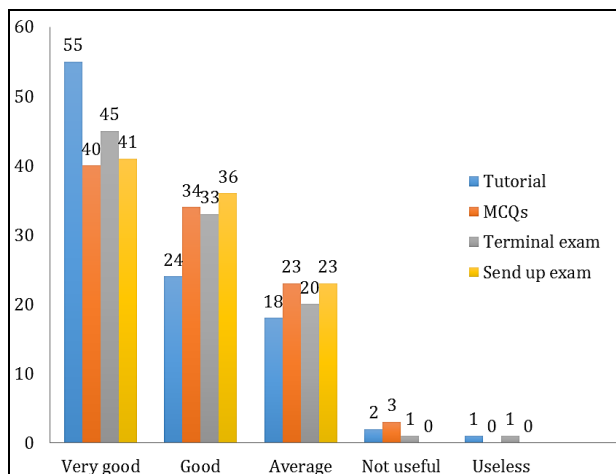


Figure 2: Students' feedback on usefulness of various evaluation methods

In the evaluation methodology, tutorials held once a week were found to be the most useful method (79%) in preparing for their final university examination followed by terminal examination (78%), send-up examination (77%), and multiple choice questions (MCQ; 74%).

Majority of the students (60%) felt that one and half year was enough to cover the first professional MBBS syllabus. A time schedule of 8:30 am to 4:30 pm with

1-hour break in between was preferred by majority of the students (64%).

The best sequence to study system in Physiology as suggested by the students is blood, nerve and muscle physiology, gastrointestinal tract, respiratory system, cardiovascular system, kidney, central nervous system, special senses, endocrine system, and reproduction.

Practical demonstrations given by the teachers followed by the practical work done by the students themselves was found to be the best form of learning practical skills by majority (53%) of the students. However, 34% of the students preferred demonstrations of the practical work by the teachers followed by the assessment, 74% found demonstrations very helpful or helpful, and majority of the students (69%) felt that most of their queries were clarified during practical demonstrations (Figures 1 and 2; Table 1).

DISCUSSION

The results of this study reveal that majority of the students are satisfied with the present teaching methodology consisting of revision cum self-study, lectures, tutorials, and demonstrations, but 70% of the students demanded more time for revision cum self-study as well as demonstrations.

With regard to evaluation methods, the students found that tutorials held once a week and examinations held at the end of each semester are most useful in preparing for their final examination. The examination held at the end of each semester in Physiology in our college includes long questions, short notes, MCQ, as well as viva voce examination. Evaluation tools preferred by the students were MCQ, and short answer questions rather than long questions as observed in other studies.^[6,7]

The best sequence to study system in Physiology as indicated by the students was blood, nerve and muscle physiology, gastrointestinal tract, respiratory system, cardiovascular system, kidney, central nervous system, special senses, endocrinology, and reproduction. The present pattern being followed in our college is nerve and muscle physiology, blood, respiratory system, cardiovascular system, gastrointestinal tract, kidney, central nervous system, special senses, endocrinology, and reproduction.

The majority of students (60%) felt that one and half

year is enough to cover the physiology course and also there is ample time for revision cum self-study. Earlier the first professional course was of 18 months and then it was reduced to 1 year; this was not appreciated by majority of the students. It is a great challenge for the teachers to plan such curriculum so as to help the students to gain maximum knowledge about the subject in 1-year course.

For the students, the preferred method to learn practical skills was demonstration of practical by the teachers followed by practical work carried out by the students themselves. This indicates that students were satisfied with the way practical demonstrations were conducted.

With regard to timings in college, the students were satisfied with the pattern followed, that is, from 8:30 am to 4:30 pm with 1-hour break in between.

The students were also encouraged to put in their own suggestions for improvement in any existing teaching and evaluation methodology. Majority of the students (60%) appreciated the existing teaching and evaluation methods in general; they have simultaneously pointed out several lacunae in the existing process, which provided scope for further improvement. This includes monotonous one-way communication, inaudibility of lectures, and injudicious use of projection. The students also provided useful suggestions such as making the lecture more interactive along with inclusion of more seminars on important topics. Similar finding has also been reported by other studies.^[8,9] Further suggestion includes the use of microphone in lectures, frequent assessment, more tutorials, and practical demonstrations.

CONCLUSION

It is important to know what our students need and whether they feel comfortable with the ever-expanding course with limited duration. The students are in the best position to comment on the effectiveness of any teaching and evaluation system. Frequent feedback from the students may help the teachers to plan the curriculum and improve upon the teaching and evaluation methodologies adopted.

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