

Impact of Seminars By and For Medical Students

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Abstract: Background: The undergraduate medical program is a 5 year academic course wherein Physiology is taught in the first professional year. Physiology is nowadays a subject of clinical interest. It provides the basis to understand physiological processes and phenomena and thus the pathophysiology of disease. It also helps the students understand the basis for therapeutics and the management of diseases. The faculty of the Physiology department has a greater responsibility in making the study of the subject innovative, interesting and participatory, for the students. One such method we have adopted is organizing seminars by the students and for the students. **Aim & objectives:** This study aims to gauge the impact of student seminars on students who participated as well as on those who were spectators. **Materials and methods:** Students were encouraged to volunteer for taking seminars. They were given help by faculty to study and present small subtopics for about 10 minutes each. Later they were analyzed and statistical tests were done. **Results:** There was a positive response from both the participants and the spectators for the use of student seminars as a method of teaching/learning. **Conclusions:** Student seminars were discovered to be a good method of teaching learning which improved the depth of learning, teacher-student and student-student interactions and communication skills amongst the students participating. This was evident from the feedback obtained from the students. [Bahmed F et al NJIRM 2014; 5(2):103-106]

Keywords: Student seminars, feedback, student-student interactions, communication

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Introduction: Medical students have a difficult time when they enter medical school as there is a tremendous increase in the content of the subject. The atmosphere, the culture and the type of learning expected from them changes. While they are getting adjusted, they need to also cope with learning modules which rely heavily on self-learning¹. There is a definite need to help these students develop study skills including self-study. They also need to develop communication skills. The Medical Council of India in their vision document has envisaged a three month foundation course to teach such skills in the first year². In order to help students acquire self-learning skills and to enhance their learning experience³, the Department of Physiology organized 4 student seminars in a year in the subject of Physiology. Some faculty from the department chose volunteers and gave them specific topics and subtopics to study and prepare presentations. The students then presented the seminars to the entire batch of 150. This was designed with following objectives:

1. To enable the students have an in-depth understanding of a chapter in the subject.
2. To help them develop communication skills.
3. Students would learn to present their research in public to a general audience.
4. Students would receive regular feedback and advice on their research projects. The progress of our students would be regularly monitored and they would receive formal, regular feedback.
5. A high rate of participation in such a visible research-oriented activity could help build the intellectual "atmosphere" of the department.
6. Increased knowledge of one another's research would facilitate intergroup interactions.
7. The students would be able to hear an overview of each laboratory's ongoing research directly from the faculty member.
8. The students and faculty would be able to meet on a regular basis, thereby encouraging more student-faculty interactions.
9. Students will receive academic credit for registration in the course⁴.

Materials and Methods: This study was conducted for the first year medical students of the batch of 2012 in a private medical college in Hyderabad, South India. A series of four seminars in the subject of Physiology were conducted. A total of 97 students participated in this study: 24 students participated in seminar presentation; the

remaining 63 students remained as spectators. The topics included those which were already covered during theory lectures. The participatory number for each seminar was restricted to 6. Every seminar had a topic further sub-divided into 6 sub-topics which were given to each of the participants to present. This selection was done by lot. Before each seminar the participants interacted and got help from faculty members regarding the topic and the presentation styles they have to adopt. They were encouraged to rehearse a few times before others to overcome stage fear. At the end of each topic they were called separately and a debriefing session was held for them. There they were asked for their own assessment and the faculty also shared his/her assessment in a constructive manner to enhance their presentation skills.

Questionnaires each containing ten questions were designed and administered separately to participants and spectators. Each question was to be given a score between 1 to 5, where 1 was 'Unsatisfactory', 2 was 'Satisfactory', 3 was 'Good', 4 was 'Excellent' and 5 was 'Outstanding' performance. The number of responses for each score against each question was tabulated. These questions were all amenable to qualitative analysis i.e. frequency statistics was done to calculate the maximum percentage of response obtained for every question.

Results: Result are tabulated in table 1 & 2

Table 1: Percentage responses of participant students

S. No.	Question	Maximum response received for	% of Response
1.	Your enthusiasm about the presentation was	Excellent	50
2.	The faculty guides' help to you while preparing for this seminar was	Excellent	42.8
3.	The respect shown by the faculty for your idea was	Good	42.8
4.	The way you developed analytical and synthesis skills was	Good	50
5.	Your coverage of the given topic was	Excellent	50
6.	Your outline of the seminar was	Good	71.4
7.	The audio-visual aids you used were	Excellent	35.7
8.	The way you organized and timed your presentation was	Excellent	35.7
9.	On the whole the seminar was	Good	42.8
10.	At the end of the seminar your self-esteem was	Excellent	42.8

Table 2: Percentage responses of spectator students

S.No.	Question	Maximum response received for	Percentage of responses
1.	The learning objectives of the seminar were	Good	58.7
2.	The outline for the seminar was	Good	53.9
3.	The use of audio-visual aids was	Good	39.7
4.	The pace of the presentation was	Good	47.6
5.	The communication skills of the presenter were	Good	44.4
6.	The audio-visual co-ordination of the presenters was	Good	46
7.	The eye-contact of the presenters with the audience was	Satisfactory	38.1
8.	The body language and non-verbal communication of the presenters were	Good	41.3
9.	Your ability to understand the presentation was	Good	50.8
10.	The idea of replacing lectures with student seminars is	Unsatisfactory	26.9

Discussion: Primarily a seminar presentation trains students to concentrate on an assigned topic and to organize and present data according to conventional outlines within a limited time period. Further it gives an opportunity to communicate and respond to an audience.

In many instances, particularly with new students, seminars give an opportunity for them to get to know other students in a learning environment.

Meetings concerned with seminar evaluation were also an excellent opportunity for informal discussion on current departmental issues and matters between students and staff which could not be raised in any other departmental forum⁵.

Conducting student seminars provided an opportunity for students to give constructive feedback and also make them aware of the criteria for effective presentations⁶.

Complex concepts in physiology are difficult to understand in a given time-frame. Seminars given by their peers with difficult topics help all students to understand better: both presenters and spectators⁷.

All the participants have responded very positively about the impact participating in the seminars had on them. They have learnt practically skills such as designing outlines; and analysis and synthesis of topics. They also learned to cover the whole topic well within the time frame.

Seventeen students out of the 63 spectators felt that replacing theory lectures with student seminars is not a good idea. Perhaps because all students are conditioned for the past 12 years of schooling to just listen and grasp from superiors.

Medical students commonly tend to memorize their subject; but it fails to develop an interest for lifelong learning. This is due to the fact that memorizing discourages the deep thinking process of the students. If learning is made fun, only then their thinking process will be encouraged. And conducting student seminars is one step towards relieving them from becoming totally dependent on their ability to memorize⁸.

Conclusion: This study concludes that student seminars are of benefit to medical students as it helps them to improve their communication skills, knowledge in the particular subject and interaction with faculty members. It allows for a change in the routine method of didactic lecture process. And most importantly, it permits for self-learning. However, not all objectives with which the study was designed could be achieved. Though the participants had an enriching experience, the non-participants were merely reduced to mute spectators. Hence, the overall impact of seminars on students can be observed only when the non-participants were also allowed to involve in discussion to clarify their doubts.

Limitation of this study: The main drawback of this study was time constraint. Since it had to be conducted during physiology lecture hours, the allotted time could not be exceeded; hence the topics could not be made open for discussion at the end of presentations.

However, the organization of student seminars was an experience, first of its kind, both for faculty members and students of physiology. This study can be extended to other pre-, para- and clinical subjects in future, so that a comprehensive understanding of medical concepts can be achieved.

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