

# Insight on Seminar Effectiveness in I MBBS students in a Private Medical College

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#### **Abstract**

Background: The foundation stone of future competent doctors is a strong clinical knowledge which can come only through a student centered teaching approach which calls for multiple variations in traditional teaching methods. To that end, various such variations that range from small group teaching to simulation labs to skill labs. In this study we have tried to evaluate the effectiveness of students' seminar in teaching learning process. Materials and Methods: A suitable topic was selected for students' seminar presentation. A multiple choice question pretest was conducted for the students who volunteered. High achievers of the pretest participated and presented a seminar to the faculty and fellow students. Post presentation an anonymous feedback about the students' seminar was taken from the students attending the seminar and analyzed. **Results**: In our study, 82.41% students found the seminar interesting, 63.18% opined about seminar being a better way of learning and 64.83% wanted seminar to be a part of routine teaching. 77.47% students would like to have more students' seminars in the academic year. 69.78% students felt they acquired additional information on the topic and 78.57% felt stimulated to read the topic. 65.38% opined students' seminars to be continued at higher levels of education too. Conclusion: Students found the seminar interesting, interactive and opined in favour of conducting more students' seminar in an academic year. Since a group of students present the seminar, it boosts student interaction, brain storming within the group, planning and activity management. Students can assess their understanding of the topic and enhance it even more by presenting it to their peers. Seminar breaks the monotone of didactic lectures and gives opportunity to learn topics with renewed interest. Dissemination of knowledge in the seminar was also carried out in the form of storytelling and skit performance also aided in expressing creativity by the students, building stage courage and confidence, fun learning and better understanding of the concepts in the budding Indian Medical Graduates.

Keywords: Seminar, First MBBS students, Private medical college

**Introduction:** The focus of medical education is shifting from didactic to student centered teaching learning methods to aid comprehension of concepts by MBBS students. In contrast to lecturing a large group of students, teaching small groups by conducting tutorials, students' seminars, group discussion, flip classes, problem based learning are desirable and encouraged. Conducting students' seminars has been practised since long and has various advantages over traditional teaching learning methods. In this study, students participated and presented a seminar to the faculty and fellow students and we assessed the feedback responses to get an overview of their perceptions about the activity.

**Objectives**: To assess the perception of I MBBS students on seminar presentation as an effective teaching learning method.

## **Materials and Methods**

The study was conducted by Department of Physiology, Dr D Y Patil Medical College, Pimpri, Pune in the volunteering first MBBS students. Announcement of students' seminar on 'Regulation of Respiration' for I year MBBS students was made a month in advance. Student volunteers were solicited to present the seminar. As the response for voluntary participation was enormous, a pre-test was conducted and high achievers of the pretest were selected to present a seminar to the faculty and fellow students. The topic was subdivided, prepared, practiced and rehearsed by the students under mentorship of faculty. There was optimum use of chalk and board and audiovisual aids in the presentation. During the seminar, knowledge dissemination of knowledge was carried out in the form of storytelling, making optimum use of fun learning to connect to the students, with the aim to relate and understand the topic better. A skit was performed by students to explain the pathophysiology of Ondine's curse, providing scope for understanding physiology through creativity. Post presentation an anonymous feedback was collected from the students and analysed. Out of the 250 first MBBS strength total of 182 students attended the seminar, hence our sample size is 182 students. Students remaining absent in the seminar presentation were excluded from the study. Responses to the questions in the questionnaire were tabulated in Microsoft Excel. Only completed questionnaires were analyzed for statistics.

**Statistical Analysis:** Data was analyzed using WINPEPI software (version 2.62 copyright J.H. Abramson, 2004-2013). Descriptive statistics was employed in terms of percentages and exact 95% confidence interval (95% C.I) was presented.

## **Results**

In our study, 82.41% students found the seminar interesting, 63.18% opined about seminar being a better way of learning and 64.83% wanted seminar to be a part of routine teaching. About seminar activity replacing revision class, there was a mixed response with 50.54% in favour, 38.46% not in favour and indecision in 10.98% of the students. 77.47% students would like to have more students' seminar in the academic year. 69.78% students felt they acquired additional information on the topic and 78.57% felt stimulated to read the topic.

65.38% opined students' seminar to be continued even at the higher levels of education. Assessment of the effectiveness of the seminar in understanding the concepts of theory and practical revealed that it was helpful in understanding the theory point of view for 24.72%, practical point of view 8.24%, from both for 51.09% students with 15.93% participants remaining indecisive.

Table 1: Questionnaire

| Sr. | Question                             | Yes No (%)            |       | Cannot  |
|-----|--------------------------------------|-----------------------|-------|---------|
| No. | -                                    | (%) 95% CI            |       | Say (%) |
| 1.  | Was the programme interesting?       | 82.41 (0.7637 to 8.24 |       | 9.34    |
|     |                                      | 0.8744)               |       |         |
| 2.  | Is students' seminar a better method | 63.18 (0.5600 to      | 13.18 | 23.62   |
|     | of learning?                         | 0.6996)               |       |         |
| 3.  | Should students' seminar be a part   | 64.83 (0.5769 to      | 19.23 | 15.93   |
|     | of routine teaching?                 | 0.7151)               |       |         |
| 4.  | Can students' seminar replace        | 50.54 (0.4331 to      | 38.46 | 10.98   |
|     | revision class?                      | 0.5778)               |       |         |
| 5.  | Would you like to have more          | 77.47 (0.7098 to      | 8.24  | 14.28   |
|     | students' seminar in the academic    | 0.8310)               |       |         |
|     | year?                                |                       |       |         |
| 6.  | Have you acquired additional         | 69.78 (0.6281 to      | 16.48 | 13.73   |
|     | information on the topic today?      | 0.7612)               |       |         |
| 7.  | Do you feel stimulated to read the   | 78.57 (0.7216 to      | 10.43 | 10.98   |
|     | topic?                               | 0.8408)               |       |         |
| 8.  | Should this programme be continued   | 65.38 (0.5825 to      | 13.73 | 20.87   |
|     | at higher level of education?        | 0.7203)               |       |         |

**Table 2:** From which point of view is the programme helpful?

| Sl. | Question                                  | Theory | Practic | <b>Both</b> (%) | Cannot  |
|-----|---|--------|---------|-----------------|---------|
| No  |   | (%)    | al (%)  | 95% CI          | say (%) |
| 1.  | From which point of view is the programme | 24.72  | 8.24    | 51.09           | 15.93   |
|     | helpful?                                  |        |         | (0.4385 to      |         |
|     |   |        |         | 0.5832)         |         |

### **Discussion**

An Indian Medical Graduate is expected to have good communication skills apart from being a good clinician and leader. To inculcate these qualities, attitude and medical ethics, efforts are made right from the first MBBS. In order to overcome fear of stage and develop effective communication students are encouraged to participate in various seminars, quizzes other co-curricular and extracurricular activities. The foundation of quality health care lies in the effectiveness of various teaching learning methods in enhancing critical thinking in medical students. In view of this, teaching learning methods in medical education ranging from lectures to simulation have been studied for their effectiveness. In our study, 82.41% students found the seminar interesting, 63.18% opined about seminar being a better way of learning and 64.83% wanted seminar to be a part of routine teaching. Similar studies on evaluation of students perspective on seminar have concluded decisiveness of students attitude towards the seminar and its promotion in routine practice. Seminar based learning has also been studied in comparison with group discussion wherein group discussion was a better teaching learning method than a conventional seminar in Community Medicine topics. In Group discussion

questions can be raised, analyzed, discussed, and perhaps answered during interplay of personal relationships.<sup>2</sup> We assessed the seminar effectiveness in understanding theory concepts, practical concepts or benefitted both and obtained the following results. The programme was helpful from theory point of view for 24.72%, practical 8.24%, from both theory and practical point of view for 51.09% whereas 15.93% cannot opine. Studies by Diwanshu Sharma et. al have opined about the helpfulness of seminar in the long run as it involves three major domains of teaching i.e., cognitive, affective and psychomotor skills.<sup>3</sup> Malaysian study on determination of clinical undergraduate medical students preferred teaching methods provided by the medical educators include bedside teaching was the most preferred (76.4%) one followed by lectures (14.6%), tutorials (7.9%) and seminars (1.1%).<sup>4</sup> In addition to traditional teaching-learning methods incorporation and implementation of newer methods are being encouraged in view of professional skill development in future medical practitioners. In view of this, Skills labs and simulation techniques are new methodologies in medical education which are of an immense importance in transformation from subject-centred to centralized integrated curriculum.<sup>5</sup>

During the seminar, knowledge dissemination in form of storytelling was demonstrated. Since the physiological concept was explained in a story telling format students could connect to, relate and understand the complex topic better. To explain the pathophysiology of Ondine's curse a skit was performed by students providing scope for understanding physiological mechanisms through creativity. Students appreciated both storytelling and skit performance and experienced fun learning during presentation. A cross-sectional study conducted by V. Harika et. al. on perception of student-led seminars among undergraduate students has concluded the effectiveness of seminar in deep understanding of the subject and critical thinking than didactic lectures and helps the students to improve self confidence and communication skills.<sup>6</sup>

Students were asked to suggest other system for future seminar presentation. Maximum students suggested seminar on Cardiovascular system and Central Nervous system as it would aid them in understanding the mechanisms and correlating in a better way.

#### Conclusion

Students' seminar is a student centred teaching learning method with the active role played by student and facilitation carried out by the faculty. Students found the seminar interesting, interactive and opined in favour of conducting more students' seminars in an academic year. Since a group of students present the seminar it boosts student interaction, brain storming within the group, planning and activity management. Students can assess their understanding of the topic and enhance it even more by presenting it to their peers. Seminar breaks the monotone in lecture and gives opportunity to learn topics with renewed interest. Since knowledge dissemination in our seminar presentation was also done in form of storytelling and skit performance, it aided in expressing creativity by the students, building stage courage and confidence boosted fun learning in better understanding of physiological concepts in the budding Indian Medical Graduate.

## **Conflicts of Interest: Nil**

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