

PERCEPTION OF MEDICAL STUDENTS TOWARDS STUDENT-LED SEMINARS AS A TEACHING-LEARNING TOOL IN FORENSIC MEDICINE AND TOXICOLOGY

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ABSTRACT

Background: Teacher centered classrooms are still the basic modality of teaching in India where the students receive information from teachers and internalize it through memorization. Seminar is an effective tool to enhance the students' self learning skills in which, a small group of students are engaged under a member of faculty. **Aims & Objectives:** To evaluate effectiveness of seminars through perception of students to facilitate learning process in Forensic Medicine and Toxicology. **Material and Method:** A questionnaire-based study was carried out in randomly selected 148 students studying in II MBBS in FMT department. They were given the topics for seminars already covered in lectures. Seminars were conducted during practical hours in 2 batches. The students presented seminar in group of 4-5 for each topic. Questionnaires were distributed after taking written consent from them. **Results:** Out of 148, 129 students who consented were included in study (87.2%). Out of 129 students, students 116(89.92%) agreed that seminars stimulated them to think critically about the subject and seminars assisted their learning 121(93.79%). Majority of students 126 (97.67%) appreciated the method as it was different from routine lectures and found it interactive, interesting, improving their presentation and communication skills. Majority 124(96.12%) opined that the facilitator who summarized at the end of seminar was a positive aspect of seminars. **Conclusion:** Interventions in the form of student-led seminars can be taken up to break the monotony of traditional seminars.

Keywords: Student led seminar, Perception, Medical students, Forensic Medicine and Toxicology

INTRODUCTION:

Different teaching methodologies ranging from large group didactic lectures to small group teaching such as tutorials, seminars, and group discussions are being adopted in medical education. The conventional lecturing is still, the predominant form of teaching in health care professional education (1), but has been futile to convey concepts to students as effectively as active learning approaches. Concepts such as independent learning, flexibility in learning, critical thinking and problem solving are least recognized by lectures. Also, the typical lecture form of teaching

lacks student and teacher interchange and poorly encourages active learning and different learning styles (2). Medical students need to learn the skills of problem solving and decision making in addition to receiving information and knowledge. Nowadays, the idea of 'active learning' is gaining much thrust, especially in the field of Medicine (3). Hence it is recommended that every effort should be made to encourage the use of active methods. One of the small group teaching-learning methods is seminar which includes the discussion of participants under the

guidance of a mentor. The mentor, the students, groundwork, content, group dynamics, course rationality, and amenities are the key factors in seminar learning (4). Compared to the traditional teacher centered classroom method of teaching where responsibility is on one side, seminar involves bidirectional participation where there is discussion of the topic from speaker side as well as the audience. The students eventually develop competencies like recognition of information, its reclamation from the sources, its organization and the art of communicating with their fellows in a time bound presentation (5). With this in mind, the present study was carried out to assess the perception of medical students towards student-led seminars as a teaching-learning tool.

The 'student led seminar (SLS)' is one where the students prepared and presented selected topics by researching from multiple sources with the help and guidance from the facilitators. The present study was aimed to assess the perception of medical students towards student-led seminars as a teaching-learning tool in Forensic Medicine and Toxicology.

MATERIAL AND METHOD

After the approval from Institutional Ethics Committee, a questionnaire-based study was carried out in Department of Forensic Medicine and Toxicology department, NKP Salve Institute of Medical Sciences and Research Centre & Lata Mangeshkar Hospital, Nagpur. The study period was 2 months from July 2018 to September 2018. Randomly selected 148 Second MBBS students of the third term i.e. fifth-semester students formed the sample population. Validated questionnaires by pilot testing among 5 students who were excluded from the study were used as study tools.

The purpose and importance of the study was explained to students before obtaining the informed consent. After obtaining written consent, the students were allotted SLS topics which were already covered in lectures along with dates of presentation, the faculty facilitator, at the beginning of fourth term. The students met the faculty facilitator and then proceeded to research the topic allotted to them and prepared for the seminar with guidance from the facilitator. The students were encouraged to prepare seminars on allotted topics based on the guidelines provided by the

facilitators. The facilitators' responsibility was to guide the students. The student led seminar presentations on the allotted topics were held during practical hours in 2 batches. The students presented seminar in group of 4-5 for each topic using audio-visual aids, PowerPoint presentations, white board, models and video clips. At the end, the fellow students who did not present the seminar had a chance to ask questions and clarify doubts if any. All faculty members of Forensic Medicine attended SLS, participated in the discussions, gave feedback and assessed the students.

Questionnaires were distributed to the students and the responses were recorded based on 5-point Likert scale where 1 was strongly agree and 5 was strongly disagree. The responses were tabulated and analyzed using SPSS 20.0 for frequencies and percentage.

RESULTS

Out of 148 medical students, 129 (87.2%) students consented to be a part of the study.

Out of 129 students, students 116 (89.92%) agreed that seminars stimulated them to think critically about the subject and seminars assisted their learning 121(93.79%). Majority of students 126(97.67%) appreciated the method as it was different from routine lectures and found it interactive, interesting, improving their presentation and communication skills. Majority 124 (96.12%) opined that the facilitator who summarized at the end of seminar was a positive aspect of seminars. We observed that the students felt that seminars improved teacher-student relationship. Assessment that was made by the teachers created more interest, commitment among the students and increased intellectual challenge. Students got well versed with the subject by the feedback they got from the teachers.

DISCUSSION:

According to Medical Council of India under "Regulations on Medical Education 1997, there is a scope for trying innovative approaches (6). Hence it is recommended that every effort should be made to encourage the use of active methods. Newer methods like problem-based learning, group discussions, case-based learning, interactive video disc units etc have been employed successfully to teach majority of the

topics in the pre-clinical years (7, 8, 9). However, there are very few studies of using seminar as a method of teaching/ learning for undergraduate medical students.

The findings of the present study are consistent with the previous studies that seminars were an effective educational tool in the medical field (10, 11, 12). Also the most important component in our study was interaction between presenter, mentor, and audience which is in agreement with the study by Sharma D et al (13). We observed that students felt that seminars improved teacher-student relationship which is in concordance with the findings of Sharma D et al (13).

CONCLUSION

Teaching by way of seminar could be an effective learning method as it involves the three major domains of teaching. The students found the seminars to be very interesting and useful learning tool. Such interventions can be inculcated along with traditional teaching methods to promote peer interaction, active participation, self-directed learning and teamwork to enhance collaborative learning and critical thinking among medical students.

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Table 1: Perception of medical students towards student-led seminars

Sr. No.	Questions	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	Seminars ensured maximum preparation for topic	93 (72.09%)	32(24.80%)	01(0.77%)	01(0.77%)	02(1.55%)
2	Seminar stimulated to think critically at the subject	95(73.64%)	21(16.27%)	03(2.32%)	06(4.65%)	04(3.10%)
3	Seminars provided means of elaborating on developing material supplied in lectures	76(58.91%)	45(34.88%)	01(0.77%)	02(1.55%)	05(3.87%)
4	Seminars assisted learning in the subject	69(53.48%)	52(40.31%)	02(1.55%)	03(2.32%)	03(2.32%)
5	Good academic activity	71(55.03%)	52(40.31%)	02(1.55%)	03(2.32%)	01(0.77%)
6	Sufficient time duration	54(41.86%)	29(22.48%)	11(8.52%)	23(17.82%)	12(9.30%)
7	Helpful in learning	68(52.71%)	56(43.41%)	00	02(1.55%)	03(2.32%)
8	Quality of discussion in seminar was good	42(32.55%)	84(65.11%)	01(0.77%)	01(0.77%)	01(0.77%)
9	Seminars were interactive	114(88.37%)	12(9.30%)	01(0.77%)	00	02(1.55%)
10	Presenting seminar has improved communication skills	99(76.74%)	16(12.40%)	03(2.32%)	06(4.65%)	05(3.87%)
11	I have gained self-confidence after presenting seminar	87(67.44%)	39(30.23%)	00	01(0.77%)	02(1.55%)
12	Participating in seminars has helped me to use audiovisual aids more effectively	76(58.91%)	22(17.05%)	00	11(8.52%)	20(15.50%)
13	Seminars improve student-teacher relationship	90(69.76%)	21(16.27%)	01(0.77%)	13(10.07%)	04(3.10%)

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