Original Research Article

Undergraduate medical students’ feedback and perceptions on teaching learning methodology in Pathology at Government Medical College

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Abstract

Introduction: For medical students, second year is crucial, as they enter the clinical postings for the first time and are taught about the pathogenesis of disease, which will enable the students understand medicine with better concept. It is an agreed fact that regular reviewing of teaching learning methods of the teachers is necessary for improvement. Hence to find out the perception regarding the didactic lecture method being followed, the present study was conducted using feedback in form of questionnaire from students.

Materials and methods: 197 II year MBBS students appearing for their Part II final university exams were asked to fill up the structured pre-validated feedback questionnaire regarding the didactic lecture method of teaching being followed at pathology department. Questionnaire included set of questions on T/L methods and on the changes recommended. Descriptive statistics were used in the form of frequency distribution and percentages were used to analyze the data.

Results: Study showed female preponderance. Majority of the students found the subject to be interesting and agreed that knowledge about pathology helps in clinical posting. 35.53% of the students found general pathology to be difficult subject. Students were satisfied with clinical correlation, content and explanation given to clarify the subject during the lectures. Most of the students agreed that they were encouraged to asked questions and give answers during lectures, and were satisfied with the delivery and pace of lecture. Readability, usefulness and innovative methods
during lecture presentation were found to be satisfactory. 56.33% of students agreed that didactic lecture is a very effective teaching learning method. Majority of the students felt the strong need for introduction of integrated teaching, case based and group discussion.

**Conclusion:** Taking feedbacks from the students is one of the accepted and reliable methods of assessment. Majority of the students were satisfied with the present teaching learning method. Introduction of integrated teaching and case based and group based discussion was favored by majority of the students.

**Key words**
Feedback, Perceptions, Pathology, Teaching learning methods, Undergraduate medical students.

**Introduction**

It is an accepted fact that periodical reviewing the teaching program being followed at regular intervals will help in improving the teaching learning methods being followed with the aim of improving the educational standard of the medical education. Hence, the present study was conducted to determine the students’ perception and feedback of teaching/learning method and assessment using a pre-validated questionnaire among 2nd M.B.B.S. students by Department of Pathology at Gandhi medical College. Opinion of the students as regards to lectures and introduction of integrated teaching, cased based and group discussions were also taken in the feedback questionnaire.

**Objectives**

- To evaluate the effectiveness of the present didactic teaching learning method being followed in pathology using students’ feedback in form of questionnaire.
- To analyze students feedback regarding the mode of assessment being followed for exams in the pathology.
- To analyze the results of the student’s feedback/suggestions for changes in improving the teaching learning methods.

**Materials and methods**

197/205 II year MBBS students who were going to appear for their Part II final university exams were asked to fill up the structured pre-validated feedback questionnaire (Table – 1) regarding the didactic lecture teaching learning method and assessment method being followed at pathology department. Questionnaire included 19 set of questions on T/L methods and 5 on the changes recommended. Statistical analysis of the data was analyzed using Microsoft Excel/Epi Info. Descriptive statistics were used in the form of frequency distribution and percentages were used to analyze the data.

**Results**

A total of 197 students were participated in the study. Gender distribution showed female preponderance (65.5%). Subject perception was as per Graph - 1. 45.68% of the students found the subject to be interesting. 65.48% students agreed that knowledge about pathology helps in clinical posting. 67.51% students felt that integration of pathology with clinical postings will definitely help in better understanding of subject. 35.53% of the students were neutral as regards to the perception that general pathology is a difficult subject.

**Teaching methodology**

**A. Content** (Graph - 2a): 41.62%, 36.30% of the students were satisfied with clinical correlation and content of the lectures. 53.8% and 42.64% of the students felt that important points of subject were highlighted properly and explanation given to clarify the subject contents to be satisfactory.

**B. Quality** (Graph - 2b): 40.1% students strongly agreed that they were encouraged to asked questions and give answers during

lectures. 30.96% were satisfied with the delivery and pace of lecture.

**C. Teaching Tools (Graph - 2c):** As regards to the readability and usefulness of lecture presentation-45.68%, 54.82% respectively of the students were satisfied. Only 29.94% students were satisfied with the innovative methods being followed

**Graph - 1:** Subject perception.

**Graph - 2a:** Content.

**Graph - 2b:** Quality.
Graph - 2c: Teaching tools.

Methods of teaching (Graph - 3): 39.08% of students agreed that didactic lecture is a very effective teaching learning method and 47.02% of students felt power point presentation as satisfactory.

Changes Recommended (Graph - 4): Majority (above 75%) of the students felt the strong need for introduction of integrated teaching, case based discussion and group discussion.

Graph – 3: Methods of teaching.

Graph – 4: Changes recommended.
Mode of assessment (Graph – 5): 24.36% of students strongly agree with the assessments conducted in the form of written examinations and 21.83% of students agreed with the viva voce examination, which helped them to improve your subject knowledge and application skills.

Graph – 5: Mode of assessment.

Discussion
Students’ feedback has been shown to be a relatively reliable and consistent method of assessing teaching learning process and its effectiveness [1]. It is also very convenient, inexpensive and easy to obtain. In the present study, out of 205 medical students, 197 students (96.09%) responded to the questionnaire, while in the study by MK Anand, et al. [2], 99% of the students responded to the questionnaire.

Majority of the students in our study were girls (64.5%) and similar observation was seen in the study done by Dr. NA Shaik, et al. [3] and Mustafa AMR, et al. [4], 51.5% which also concentrated on students’ opinion and feedback.

With respect to the subject perception 45.68% of the students found that the Pathology subject as interesting and 68.48% of the students opined that knowledge of pathology will help in clinical posting, as compared to the study by Amar R. Shah, et al. [5], which was observed to be 68.5% and 86.6%. In the study by Goel, et al. [6] 43% of the students found pathology as an interesting subject.

As regard to the content, 41.62%, 36.30% of the students were satisfied with clinical correlation and content of the lectures. In the study by MK Anand, et al. [2], 35% of the students were satisfied with the content of the lectures.

Majority of the students felt that important points of subject were highlighted properly and explanation given to clarify the subject contents to be satisfactory. But in the study by MK Anand, et al. [2] students were dissatisfied with the method of explanation and highlighting of important points.

40.1% students strongly agreed that they were encouraged to asked questions and give answers during lectures. 30.96% were satisfied with the delivery and pace of lecture.

As regards to the readability and usefulness of lecture presentation 45.68%, 54.82% respectively of the students were satisfied. Only 29.94% students were satisfied with the innovative methods being followed.

39.08% of students agreed that didactic lecture is a very effective teaching learning method and 47.02% of students felt power point presentation as satisfactory. Didactic lecture was found to be satisfactory by 60% and as regarding power point
presentation, 85.8% in in study by Amar R Shah, et al. [5] found it to be satisfactory.

As regard to the number and duration of lectures they were found to be adequate 55.84% and 63.95%, respectively. Nagar [7] also showed that majority of the students believe that the lectures taken by the teachers were adequate.

Majority (above 75%) of the students felt the strong need for introduction of integrated teaching, case based discussion and group discussion. Suggestions/changes recommended: 76.64% students strongly favored the need for introduction of integrated teaching in curriculum. Similar findings were observed in the study by Amar R Shah [5] (84.2%) and Goyal, et al. [6].

**Conclusion**
Taking feedbacks from the students is one of the accepted and reliable methods of assessment. Majority of the students were satisfied with teaching learning method. Introduction of integrated teaching and case based and group based discussion was strongly favored by majority of the students.

**Acknowledgements**
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**References**

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<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
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<td>1. Is pathology an interesting subject.</td>
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<td>2. Knowledge of pathology helps in</td>
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### Teaching methodology

#### Content: Do you feel that:-

| 5 | Teaching of clinical correlation wherever relevant is been done in pathology lectures |
| 6 | Flow of lectures clearly explained the content which helped you to understand the topic well |
| 7 | Highlighting of important points during lectures that helped you for further study in each topic. |
| 8 | Explanation given to clarify the subject contents is satisfactory |

#### Quality:

| 9 | Encouraged students to ask questions and give answers during lectures. |
| 10 | Delivery and pace of lectures was suitable to the level of your understanding in the class. |
| 11 | Lectures and demonstrations were taken in a way that stimulated interest in the subject |

#### Teaching tools:

| 12 | Readability and easy to follow concepts and facts from displayed lecture material. |
| 13 | Usefulness of displayed teaching material like photographs in relation to content of lectures. |
| 14 | Innovative methods like clinical case presentations or videos were included in lectures to help provide understanding of the topic. |
| 15 | Readability and easy to follow concepts and facts from displayed lecture material. |

#### Mode of assessment:

| 16 | Assessments conducted in the form of written examinations served the purpose to make you aware of your grasp of the subject. |
| 17 | Assessment conducted in the form of viva voce examination helped you to improve your subject knowledge and application skills. |

### Methods:
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<td>Is diadactic lecture a very effective teaching method in pathology.</td>
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<td>Is powerpoint presentation of teaching an ideal teaching learning media in pathology.</td>
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<td><strong>Opinion about changes recommended</strong></td>
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<td>Duration of lectures</td>
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<td>Introduce integrated teaching method</td>
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<td>Introduce Case based learning</td>
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<td>Introduce group discussions</td>
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**ANY OTHER FEEDBACK** – (for improving teaching and learning in pathology)