

## Student's Feedback on Pharmacology Curriculum for MBBS and Teaching Learning Methods in a Medical College of Madhya Pradesh- A Questionnaire Based Study

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### Abstract:

**Background:** Pharmacology is one of the important subjects of MBBS and it is necessary to know the student's perception on current curriculum and their learning experience in current setting. The teaching programme needs to be frequently reviewed in order to make the pharmacology curriculum more interesting and understanding by incorporating necessary adjustments in teaching learning methods. Feedback helps the educators to revise their teaching methods so that students can easily understand the concepts they are taught in the class. So, the present study was conducted to obtain feedback on pharmacology curriculum and teaching learning methods from the second year MBBS students.

**Methodology:** This was a cross sectional questionnaire-based study. A total of 118 students participated in this study. The feedback from the students was obtained by providing them questions related to the curriculum and the teaching learning methods used to implement the present curriculum.

**Results:** Most of the students in this study rated the depth, extent and applicability of present curriculum to real life situations as good to very good. The present teaching learning methods like small group discussions and use of audiovisual aids in teaching were rated as good to very good by most of the participants. Students suggested to add more case-based discussions, MCQs at the end of lecture, audiovisual aids and small group discussions for the better understanding of the subject.

**Conclusion:** In the present study the general perception of students regarding current teaching learning methods in pharmacology was positive. The results from our study can help as feedback for the educators to modify the teaching learning methods to improve the understanding of the subject.

**Keywords:** Feedback, Teaching Learning, Pharmacology.

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### Introduction

Pharmacology is one of important subject for the MBBS students who are going to practice medicine in future. So, it is necessary to know the student's perception on current curriculum and their learning experience in current setting. [1-2]

In educational programmes, taking student feedback is a well-accepted method to review and develop teaching methodologies. Newer methods of teaching like audiovisual aids, small group discussion, case-based teaching etc are being introduced into pharmacology teaching as a part of CBME curriculum.[3] The teaching programme needs to be frequently reviewed in order to make the pharmacology curriculum more interesting and understanding by incorporating necessary adjustments in teaching learning methods. Feedback from students will help the teachers to identify their strengths and weaknesses. Feedback

helps the educators to revise their teaching methods so that students can easily understand the concepts they are taught in the class. Feedback can bridge the communication gap between teachers & learners.[4-6]

The quality of teaching can be improved by implementing suggestions & feedback obtained from students.[2,7-8] The studies on student feedback help in improving curriculum review processes, help in forming learner-centred teaching methods and improving implementation of newer teaching methods in pharmacology.[2,9-12] There are limited number of studies on student's feedback on pharmacology curriculum and teaching methods. So, this study was conducted with following objectives:

1. To obtain feedback on pharmacology curriculum and teaching learning methods from the second year MBBS students.
2. To analyse the feedback obtained from second year MBBS students.

### Material and Methods

This was a cross sectional questionnaire-based study. The study was carried in November, 2023 among second year MBBS exam going students of R.D Gardi Medical College, Ujjain. The students were first informed about the details and importance of this study. There were 11 questions in our questionnaire. Three questions were regarding the pharmacology curriculum and eight questions were regarding the teaching learning methods which also included two open ended questions.

The following open-ended questions were asked in the questionnaire:

1. What was good about your pharmacology teaching learning sessions?
2. How teaching learning activities of the subject could have been made better?

The students who gave informed consent for this study were asked to honestly fill the questionnaire without any pressure. The students were given 30 minutes to fill the questionnaire and then responses were collected. The collected data was analysed as per descriptive statistics using MS Excel.

### Results

A total of 118 second MBBS students participated in the study. The results are shown in table 1 & 2. The depth and extent of pharmacology course was rated as very good and good by 37.28% & 44.91% of students respectively whereas 17.8% students rated it as satisfactory. The applicability of current pharmacology curriculum to the real-life situations was rated to be very good and good by 28.81% & 49.15% of students respectively whereas 22.03% students found it to be satisfactory. The learning value of present pharmacology curriculum in terms of knowledge, concepts, manual skills, analytical

skills, & broadening perspectives was rated as very good and good by 34.75% & 51.7% of students respectively whereas 13.56% students rated it as satisfactory.

The clarity and relevance of textual reading material provided by teachers was rated as very good and good by 32.20% & 51.7% of students respectively whereas 16.10% students found it to be just satisfactory. The additional resource materials suggested to the students for study like books and journals from library were rated as very good, good & satisfactory by 30.51%, 47.46% & 18.64% of students respectively whereas 3.39% of students rated it as unsatisfactory.

The use of audio-visual aids in teaching learning sessions was rated as very good, good & satisfactory by 19.49%, 47.46% & 30.5% of students respectively whereas 2.54% of students found them to be unsatisfactory. To the question that whether the specific teaching objectives told in the beginning of teaching session were achieved, 32.20% of the participants strongly agreed, 46.61% agreed and 21.19% rated as somewhat achieved. To the question that whether your active participation was elicited during teaching learning sessions, 29.67% strongly agreed, 56.78% agreed and 13.5% rated it as somewhat elicited. The SDL (self-directed learning) & SGD (short group discussion) sessions were rated to be very good, good and satisfactory by 24.58%, 48.31% & 25.42% respectively whereas 1.69% students rated them as unsatisfactory.

In the response to open ended question that what was good about your pharmacology teaching learning sessions, most of the students replied that they liked interactive teaching, clinical correlation and power point presentations during the course period. In response to the second open ended question that how teaching learning activities of the subject could have been made better, students suggested to include MCQs at the end of lecture, more case scenario-based questions and audio-visual aids wherever necessary to improve understanding of the students.

**Table 1: Analysis of Student feedback on Pharmacology Curriculum for MBBS**

Question	Very Good	Good	Satisfactory	Unsatisfactory
Depth and Extent of Course	44 (37.28%)	53 (44.91%)	21 (17.8%)	0
Applicability to real life situations	34 (28.81%)	58 (49.15%)	26 (22.03%)	0
Learning value in terms of knowledge, concepts, manual skills, analytical skills, & broadening perspectives	41 (34.75%)	61 (51.7%)	16 (13.56%)	0

**Table 2: Analysis of Student feedback on Teaching Learning Methods for Pharmacology**

Question	Very Good	Good	Satisfactory	Unsatisfactory
Clarity and relevance of textual reading material	38 (32.20%)	61 (51.7%)	19 (16.10%)	0
Relevance of additional source material (library)	36 (30.51%)	56 (47.46%)	22 (18.64%)	04 (3.39%)
Use of audio-visual aids in teaching learning sessions	23 (19.49%)	56 (47.46%)	36 (30.51%)	03 (2.54%)
How were the self-directed learning & small group discussion session?	29 (24.58%)	57 (48.31%)	30 (25.42%)	02 (1.69%)
Question	Strongly Agree	Agree	Somewhat	Disagree
Were the specific learning objectives told in the beginning of classes & achieved?	38 (32.20%)	55 (46.61%)	25 (21.19%)	0
Was your active participation elicited during teaching learning sessions?	35 (29.67%)	67 (56.78%)	16 (13.56%)	0

### Discussion

The feedback of students on current teaching learning methods of pharmacology is necessary to modify the teaching methods for their better understanding of subject. The new CBME curriculum for pharmacology was implemented from the year 2021. The curriculum seeks to step away from the previous content based traditional curriculum to a more practical based holistic one.[13] In the present study most of the students rated the depth and extent of new CBME curriculum of pharmacology to be good and very good. This may be due to the fact that new curriculum is more clinically oriented as most of the students rated its applicability to real life situations and its learning value in terms of knowledge, concepts, manual skills, analytical skills, & broadening perspectives as good or very good.

In the present study most of the students rated the clarity and relevance of textual material provided to them during lectures to be good or very good. Most of the students agreed that the specific learning objectives told in the beginning of teaching sessions were achieved. Most of the students in present study agreed that their active participation was elicited during teaching learning sessions and they also suggested the need of more of interactive sessions for better understanding of concepts.

In our study most of the students rated small group discussion sessions to be good or very good. In a study by Manjunath et al, 82% of students wanted small group discussions to be part of regular teaching.[14] This may be due to the reason that students find small group discussions to be more interactive. In our study students suggested that teaching can be improved by using clinical case-oriented discussions, small group discussion and use of audio visual aids for better understanding of the topics. Similarly in a study by Prasad et al, students found audio visual aided lectures to be more useful and suggested to introduce more small

group discussions and clinical oriented lectures.[15]

In present study many students suggested to include MCQs at the end of lectures as it will help them in understanding of concepts and in their preparation for PG entrance exams. Similarly in a study by Eshwar et al, 79% of students felt that MCQs should be the part of assessment.[16] The major limitation of our study was that it was carried out at a single centre. Similar studies can help the educators to effectively modify their teaching learning strategies for their students.

### Conclusion

In the present study the general perception of students regarding teaching learning methods in pharmacology was positive. In our study, the students suggested the addition of more case-based learning, using audiovisual aids, MCQs at the end of lecture and small group discussions as some strategies to improve teaching learning experience. The results from our study can help as feedback for the educators to modify the teaching learning methods to improve the understanding of the subject.

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