



Evaluation of student's Opinion regarding pharmacology teaching in Mamata Medical College

KEYWORDS

Medical curriculum, opinion, Pharmacology, questionnaire, Teaching.

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ABSTRACT

This study was conducted in the Department of Pharmacology, Mamata Medical College, Khammam. Fourth & fifth semester of II MBBS students were included in the study (n=147). A structured validated questionnaire, which consists of 12 questions with 3–10 options was given to each of them. They were asked to select the options which they felt was/were the best. Students were instructed not to reveal their identity in the questionnaire. The completed questionnaires was collected and assessed with the help of faculty. The students' opinion revealed important information. Many students wanted the use of audiovisual aids and introduction of group discussions. Most of the students are aware that pharmacology as one of the most important subjects in the medical curriculum. They opined that practical classes are more interesting than lectures. The teaching should be problem based and clinically oriented.

Introduction

Teaching in Pharmacology takes place by way of didactic lectures with audiovisual aids, teaching problem based learning methods using common important clinical problems. The practical curriculum includes animal experiments, prescription writing, and solving the clinical problems, including tutorials, group discussions and conducting quiz programs. Pharmacology curriculum plays an integral role in medical education. Learning pharmacology to choose and prescribe drugs is a major challenge encountered by students. [1]Traditional pharmacology teaching does not prepare well the students for rational selection of drugs. [2] In recent times many attempts have been made to improve the teaching of pharmacology and therapeutics. In animal experiments introduction of alternate methods like computer assisted learning, which can teach the receptor pharmacology and demonstrate action of drugs on animal tissues. [3,4] have come in to existence. Our aim of teaching pharmacology is to impart basic knowledge of the drugs and capability of selecting appropriate ones for a particular disease. The aim is student should develop transferable skills, which would help not only for undergraduate education but to learn throughout the medical career. [5]

Methods and Materials

The study was conducted in the Department of Pharmacology, Mamata Medical College, Khammam in the month of January 2013. Fourth & fifth semester of II MBBS students were included in the study (n=147). Institutional Ethics committee permission was taken prior to the study. A structured validated questionnaire was prepared which consists of 12 questions with 3–10 options and was given to each of them. They were asked to select the options which they felt was/were the best. Students were allowed to give their own suggestions or remarks wherever necessary. Students were instructed not to reveal their identity in the questionnaire. The completed questionnaires was collected and assessed with the help of faculty.

The questionnaire

- Did you know about Pharmacology before it was introduced to you in II MBBS?
 - No
 - Somewhat
 - Yes, many things
- What is your opinion about Pharmacology?
 - Useful but boring
 - Useful and interesting
 - Very useful, practical and important
 - Interesting but cramming

- Useful and interesting
 - Useless and cramming
 - Very useful, practical and important
- Which topics did you find interesting?
 - General Pharmacology
 - Cardiovascular /
 - GIT Autonomic Nervous system
 - Chemotherapy
 - Endocrines
 - Respiratory System
 - Autacoids
 - All
 - Miscellaneous. (Specify): _____
 - Which topics do you think will be useful in future?
 - General Pharmacology
 - Cardiovascular /
 - GIT Autonomic Nervous system
 - Chemotherapy
 - Endocrines
 - Respiratory System
 - Autacoids
 - All
 - Miscellaneous. (Specify): _____
 - Which of the following was most interesting?
 - Lectures
 - Pharmacology practical's
 - Tutorials
 - Student Seminars
 - Which of these do you think is of no use?
 - Lectures
 - Pharmacology practical's
 - Tutorials
 - Student Seminars
 - Would you like any of the following reforms to be made?
 - Decrease the number of lectures
 - Increase the number of lectures
 - Include more Student seminars
 - Introduce Group Discussions
 - Make use of audiovisual aids
 - Miscellaneous. (Specify): _____
 - From where did you prefer studying Pharmacology?
 - Lecture notes only
 - Text books only
 - Lecture notes and Text books combined,
 - Own notes after referring lecture notes, text books, seniors' notes, etc.
 - What is your pattern of study in Pharmacology?
 - Regular because of interest in it
 - Regular because of tests/ viva/ tutorials
 - Regular for gaining more knowledge
 - shall study only for final exams.
 - How do you rate Pharmacology lectures?
 - Always boring
 - Some interesting, some boring
 - Always interesting
 - Most interesting, some boring
 - most boring, few interesting.
 - How do you rate Pharmacology in comparison to other II MBBS subjects?

- a) Useless, not important b) At par with others c) Above others in all respects
12. Do you think Pharmacologists are respected as expert therapeuticians?
- a) No c) ought to have
b) Yes d) Do not know

Results

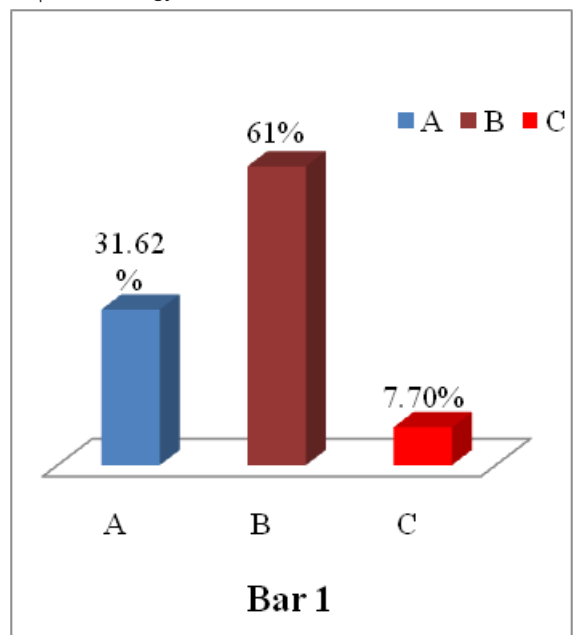
Answering the first question, 31.62% of students opined that they do not know about Pharmacology before it was introduced to them in II MBBS, whereas 61% students said that they know pharmacology somewhat before it was introduced to them in II MBBS. Remaining 7.70% opined that they know many things before it was introduced to them in II MBBS as shown in Bar diagram 1. Regarding their opinion about Pharmacology 37.67% expressed that the subject is very useful, practical and important and 29.9% of them opined that the subject is useful but boring, but 17.95 % expressed that the subject is useful and interesting, only 0.85% students expressed that pharmacology is useless and cramming as shown in Bar diagram 2. Regarding topics of interest in pharmacology, 24.64 % and 23.91% students opined that they are interested in General Pharmacology and Cardiovascular /Autonomic Nervous system respectively. Further 22.46% of them said that all the topics in pharmacology are interesting. Whereas 12.31% are interested in Central Nervous System, 7.10% in Respiratory System, 5.79 % in Chemotherapy, 2.89% in GIT as shown in Bar diagram 3. Most of the students that is 70.87% expressed that all the topics will be useful in future; only 9.4%opined that General Pharmacology will be useful in future. Remaining small percentage of them said that Chemotherapy, Endocrines, Central Nervous System, Respiratory System, GIT, Autacoids, topics will be useful in future as shown in Bar diagram 4. Answering the fifth question 39.49 % students opined that Pharmacology practicals were most interesting. Out of remaining students 30.70 % and 14.96 % opined that Tutorials and Student Seminars were most interesting as shown in Bar diagram 5, but 45.5% students said that Student Seminars are of no use, whereas 29.92 % expressed that tutorials are of no use and 10.24%, 8.66 % opined that Pharmacology practical's and lectures are of no use as shown in Bar diagram 6. Regarding the reforms to be made in the curriculum, 33.08% students opined that group discussions should be introduced, 23.08% students suggested that audiovisual aids should be used in class rooms. Increase in number of lecturers suggested by 20 % of students, where as 11.54% asked for inclusion of more Student seminars as shown in Bar diagram 7. About studying Pharmacology 44.4% of the students prefer reading lecture notes and text books combined together, text books are preferred by 35.9 % of students. While 17.95% students prefer own notes after referring lecture notes, text books, seniors' notes, etc. But most of the students [70%] prefer lecture notes only as shown in Bar diagram 8. Regarding pattern of study in Pharmacology 45.83 % said that it was regular because of tests/ viva/ tutorials .The students who study only for final exams are 23.33 % the students who study Pharmacology regularly for gaining more knowledge are 20.83 %, only 10 % students are regular because of interest in it as shown in Bar diagram 9. Regarding rating of Pharmacology lectures 56.1% students opined that some topics are interesting and some topics are boring, where as 19.0% of students said that most interesting, some boring, 13.25% expressed as most interesting, some boring as shown in Bar diagram 10. Regarding rating of Pharmacology in comparison to other II MBBS subjects, 72.03% of students opined that Pharmacology is at par with others. About 27.97 % opined that Pharmacology is above others in all respects as shown in Bar diagram 11. Regarding respecting pharmacologists as expert therapeuticians, 55.46% of students said yes, whereas 28.60% said they do not know. 10.92% of them opined that they ought to be respected as expert therapeuticians. 5.05 % of them said no as shown in Bar diagram 12.

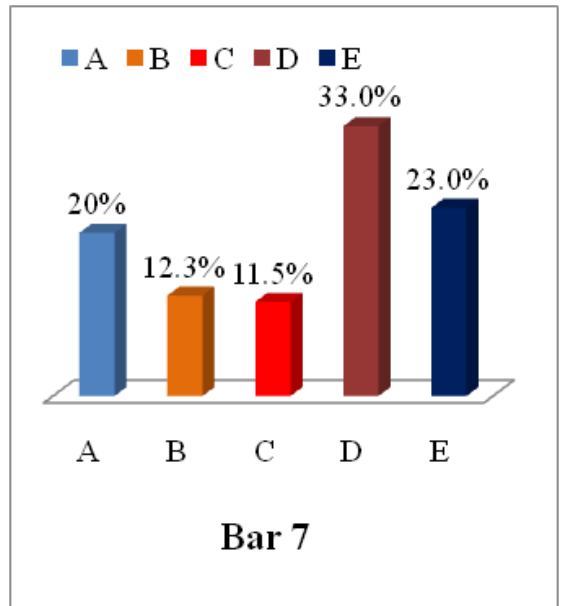
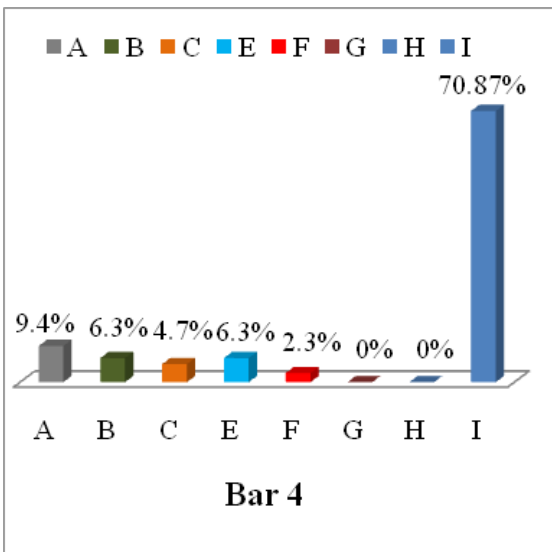
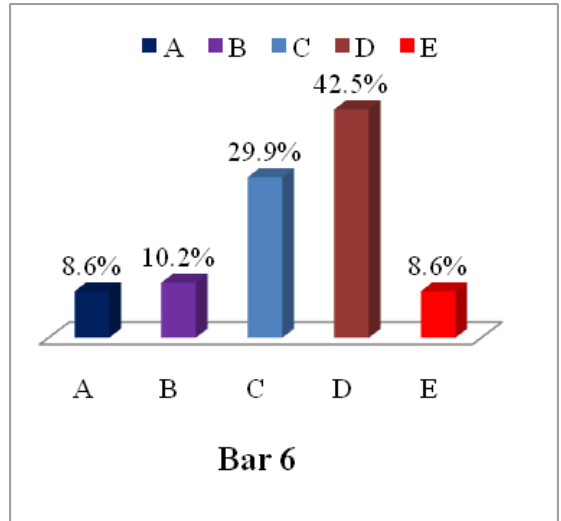
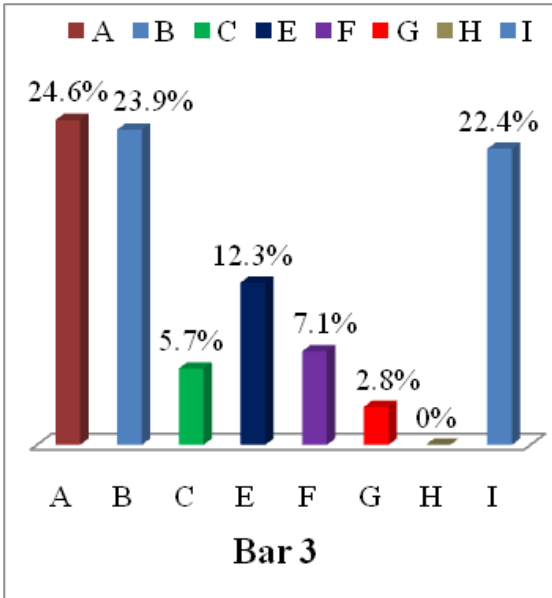
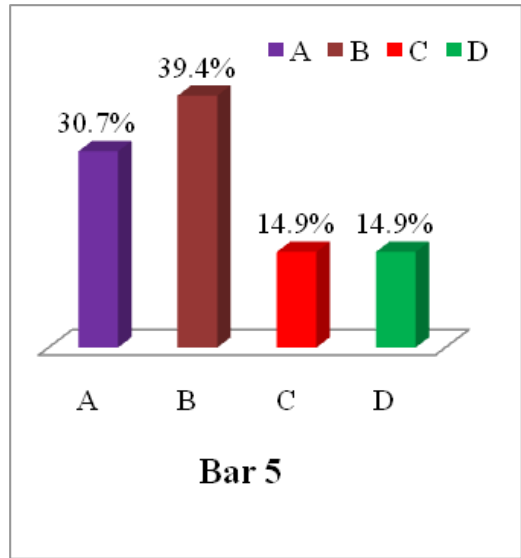
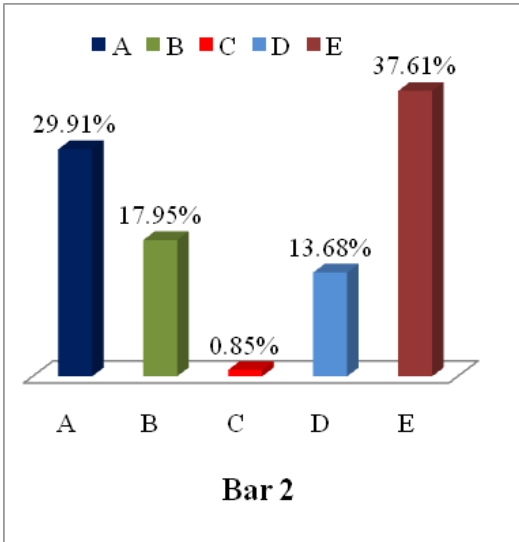
Discussion

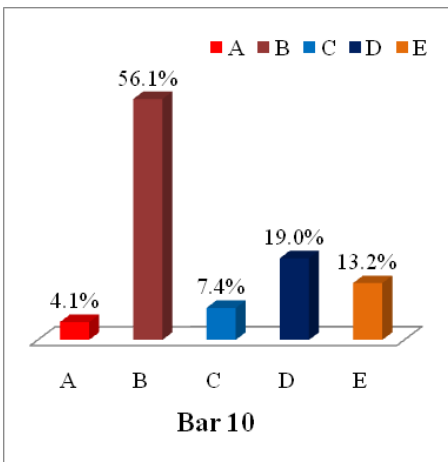
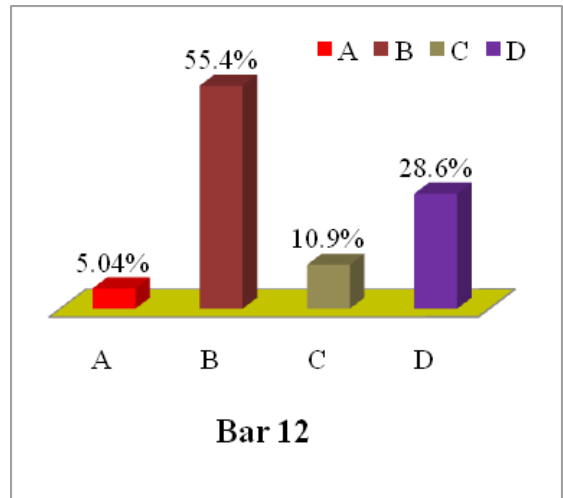
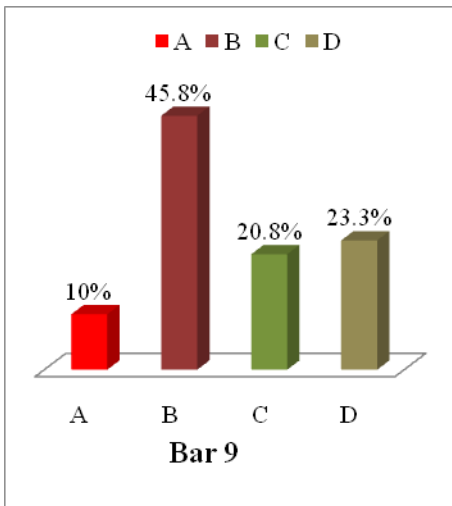
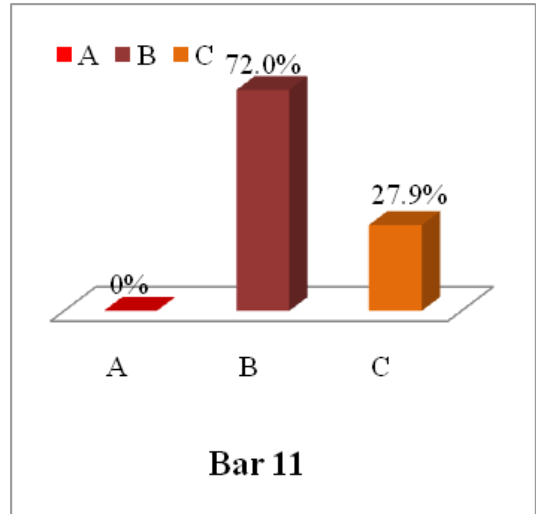
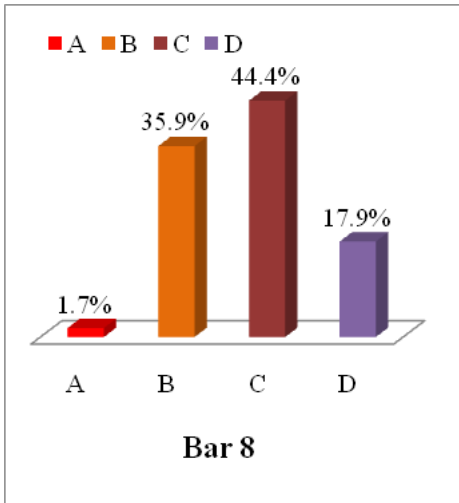
This evaluation of pharmacology teaching is important because we have to know the pulse of the students, their interest and their opinion of methods of teaching in pharmacology and their perception regarding pharmacology. This type of student's feedback represents the primary means used by most programs to assess their methodology [6, 7]. The present day pharmacology course in China consists of a combination of lectures, problem based learning sessions, clinic-correlated lectures and small group discussions.[8] In Malaysia, pharmacology learning is of more clinical reasoning, from laboratory based medicine teaching to more patient oriented approach.[9] The problem based learning curriculum is integrated across organ systems, spanning population and behavior related perspectives, rather than being based on discrete disciplinary areas at the Mc Master University in Canada [10]. The main purpose of teaching pharmacology is that student should develop transferable skills, which would help not only for undergraduate education but to learn throughout the medical career.[5] Animal experiments in undergraduate pharmacology are banned and these are substituted by methods like computer assisted learning, which can teach the receptor pharmacology and demonstrate action of drugs on animal tissues.[3,4]. In our study students' opinion revealed important information. Many students wanted the use of audiovisual aids and introduction of group discussions. Most of the students are aware that pharmacology, as one of the most important subjects in the medical curriculum. They opined that practical classes are more interesting than lectures. Most of the students felt that all topics in pharmacology are useful in future. They use combined lecture notes and text books for reading pharmacology further 31% of students are not aware of the subject before 2nd year. Many students are not in favour of student's seminars. They respect pharmacologists as expert therapeuticians. In our college teachers make use of audiovisual aids during didactic lectures. Students' seminars, group discussions and practical classes on therapeutic problems are already been introduced.

Conclusion

This study revealed us important information in knowing the student preferences regarding pharmacology teaching which can help in modifying undergraduate pharmacology teaching pattern mostly towards Pharmacotherapeutics and clinical pharmacology.







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