Volume : 2 | Issue : 12 | December 2013 • ISSN No 2277 - 8179

Research Paper

Medical Science

KEYWORDS : Evaluation, Interaction, relationship, questionnaire

Evaluation of Student and Teacher Interaction in Medical Education

Dr. Jayasree Tirumalasetty	Professor and Head, Department of pharmacology, Mamata Medical College, Khammam-507002, Andhra Pradesh, India
Dr. Harini K	Post graduate, Department of pharmacology, Mamata Medical College, Khammam-507002
Dr. Shankar. J	Post graduate, Department of pharmacology, Mamata Medical College, Khammam-507002
Dr. Prakash. M	Post graduate, Department of pharmacology, Mamata Medical College, Khammam-507002

ABSTRACT

Aim: To determine the best way of student-teacher interaction and preferences of the students to improve student-teacher interaction and performance. Materials and Methods: Second year medical students of Mamata Medical College, Khammam, A.P,were instructed to fill a structured questionnaire consisting of 10 questions according to the options given ,They were also free to express their own opinions at various places. Students were instructed not to reveal their identity. The completed questionnaire forms were collected and analyzed. Result: This study shows that students do prefer good student-teacher relationship.They believe that good interaction with teachers is effective, improves their learning skills and overall knowledge.

Introduction:

Medical education is one of the most challenging courses in the world as it deals with the life of human beings. To understand and retain the medical subjects, it needs lot of hard work and proper knowledge of the basic concepts which is possible only through good teaching methods. Interaction between student and teacher in medical education means a dynamic communication and team work between a student and teacher to improve educational quality, academic success and to produce successful doctors.(1) Interaction between student and teacher plays a pivotal role in medical education to improve understanding the subject, academic success, quality of medical education student skills, more opportunities to clear the students doubts and to give the lectures to reach every student.Pharmacology being a para-clinical subject involves mainly student-teacher interaction than with the patients. It is evident that proper student-teacher interaction at this stage is necessary not only to impart proper knowledge but also to develop proper communication skills in the students as it is very important for this profession.

Materials and Methods:

Second year medical students of Mamata Medical College were included in the study (n=136). A structured validated questionnaire was prepared which consists of 10 questions with 2–4 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.

Interaction between Student and Teacher in Medical Education

Do you think good interactions between student and teachers are important to improve educational quality?

a) Yes b) No

What do you feel as a good quality in your teacher?

a) good teaching skills
b) Friendly nature and easily approachable
c) Well mannered and good disciplined
d) Strict

Do you require discussion with teacher at the end of each lecture?

a) Yes b) No

How do you think to maximize the educational efficiency of student-faculty interaction?[2]

a) By conducting tutorials
b) Mentorship guidance (Individual guidance)
c) By giving assignment work to students
d) All of the above

What type of teaching do you expect ?

a) Lecture followed by question and answer session
b) Assignment work with discussion
c) Interaction through e-learning [3]
d) Quiz competitions

To draw the attention of students what the teacher can do?

a) Asking questions in between
b) Talking other relevant topics
c) Giving clinical examples
d) All of the above

What do you prefer in teaching?

a) Black board with chalk
b) OHP and Black board with chalk
c) Power point presentation and Black board with chalk
d) OHP and PowerPoint

Which one is better in teaching?

a) Whole chapter should be taken by a particular teacher
b) Different topics in a same chapter should be taken by different teachers

Can fluency of language of a teacher affect teaching? [4]

a) Yes b) No

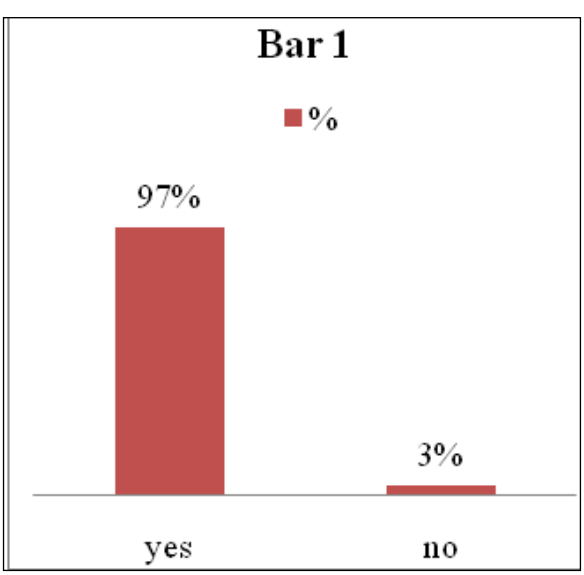
Do you think any new modifications are required in present teaching modalities?

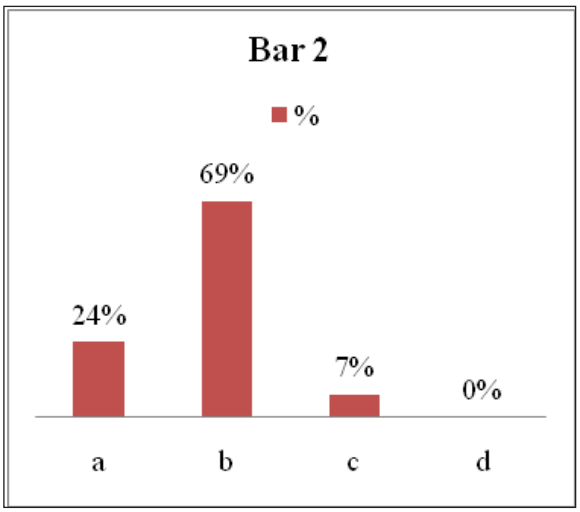
a)Yes b) No If Yes specify

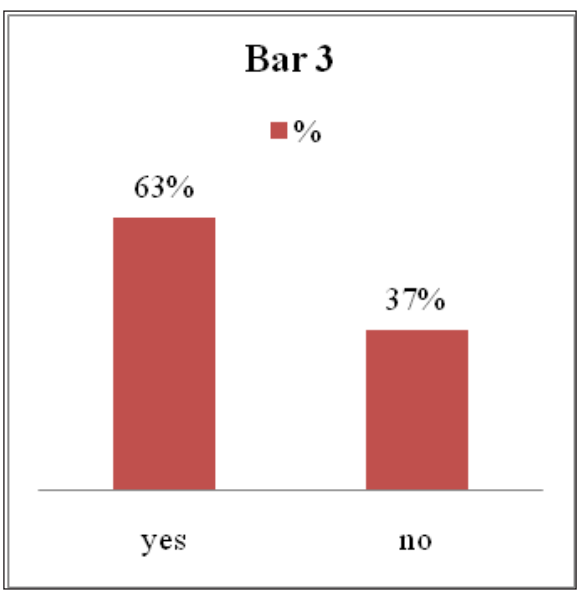
Volume : 2 | Issue : 12 | December 2013 • ISSN No 2277 - 8179

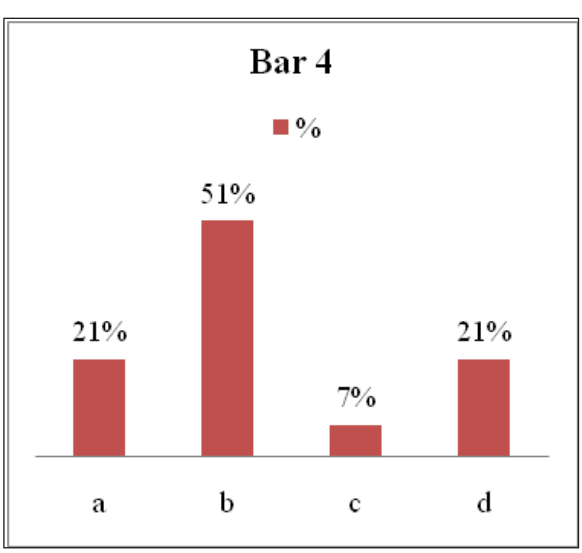
Results:

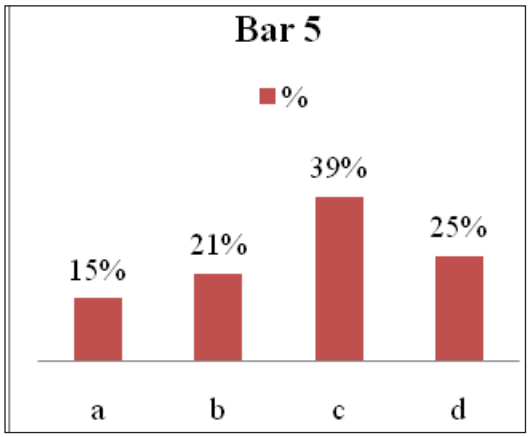
Regarding the first question, 97%of students opined that good interactions between student and teachers are important to improve educational quality, as shown in Bar diagram 1. Whereas 69%of students felt that friendly nature and easily approachability as a good quality in their teacher and 24% of them feel that good teaching skills as a good quality in their teacher, remaining 7% opined that well mannered behaviour and good discipline as a good quality in their teacher as shown in Bar diagram 2. Answering third question 63% opined that they require discussion with teacher at the end of each lecture, whereas, 37% of them said no as shown in Bar diagram 3.Inreference ,to maximise the educational efficiency of student-faculty interaction 51% of the students opined that mentorship guidance (individual guidance) is most important method, 21% of them felt that by conducting tutorials and another 21% opined that by giving singnments work to students,remaining 7% opined that all of the above methods should be adopted to maximise the educational efficiency of student-faculty interaction as shown in Bar diagram 4,answering the type of teaching they expect 39% of them opined that they want teaching with interaction through e-learning,25% of them expect quiz competitions whereas 21% expect teaching followed by assignment work with discussion.Rest of the 15% students opined that lecture followed by question and answer session as shown in Bar diagram 5.To draw the attention of students the teacher,53% of the students opined that the teacher should give clinical examples related to the topic,16% of them said that the teacher shoud talk other relevant topics,whereas 1% of them feel that teacher should asking questions in between the lecture,remainig 30% opined that all of the above methods should be adapted as shown in Bar diagram 6.Answering the type of teaching methodology 86% of students that they prefer power point presentation and Black board with chalk,10% of them prefer black board with chalk,2% said they prefer black board with chalk and remaining 2% prefer OHP and Power point as shown in Bar diagram 7. Regarding teaching of whole chapter or system by a particular teacher 76% of the students said yes,remainig 24% of them opined that different topics in a same chapter should be taken by different teachers as shown in Bar diagram 8.Answering the question of fluency of language of a teacher affecting teaching 85% of students said yes,restof the 14% of them said no as shown in Bar diagram 9.Regarding new modifications required in present teaching modalities 50% of them opined that they need new modifications and 50% of the students that they do not need any modifications as shown in Bar diagram 10.

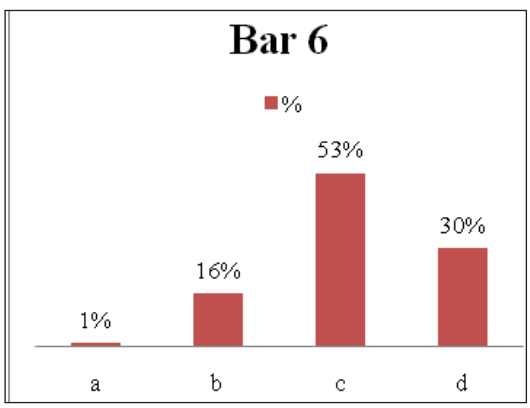


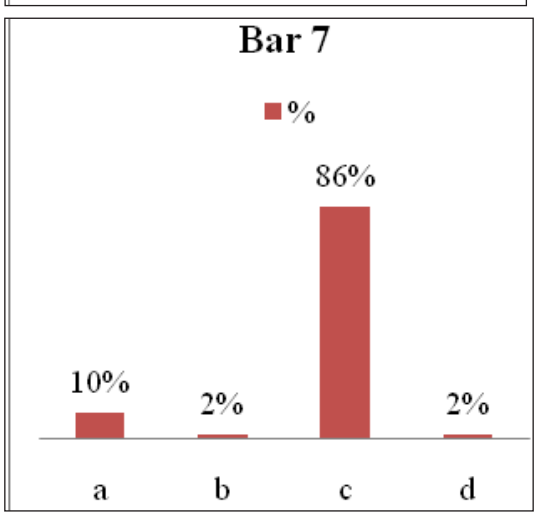


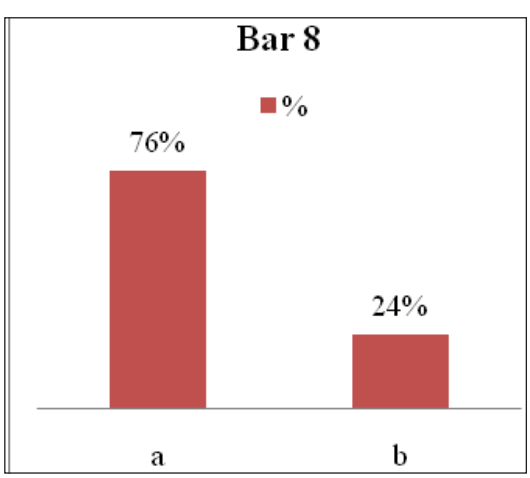


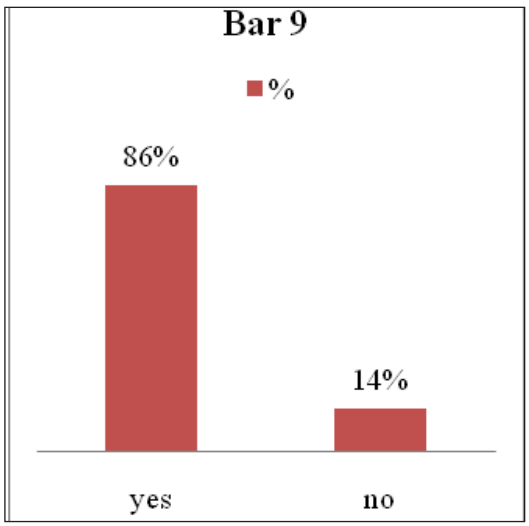


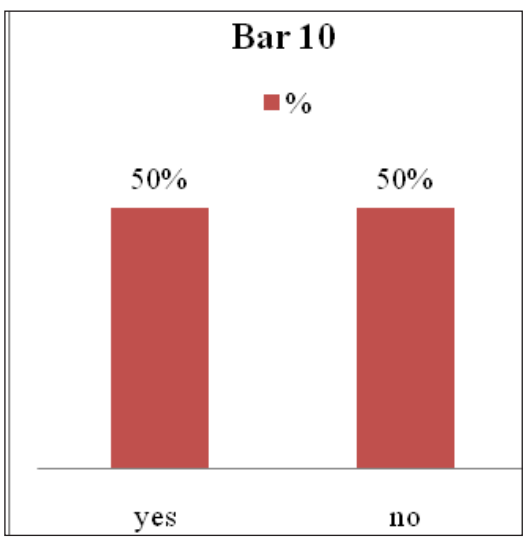












Discussion

Student-teacher interactions are crucial in developing a student's academic self, motivation and achievement at all stages of their academic career [5]. Faculty members and teaching assistants taking a genuine interest in their student's academic progress can increase their own intellectual and professional development in the process [6]. According to one study [7], positive student-teacher relationships are characterized by open communication, as well as emotional and academic support that exist between students and teachers. A major factor affecting students' development, school engagement and academic motivation, teacher–student relationships form the basis of the social context in which learning takes place [8][9] [10] The purpose of teaching is to making easier the progress or improvement of learning and encourage the learners to learn more effectively. Interactive teaching is a two-way interaction between the teacher and the students. It encourages the learners to participate actively in learning. Students who are actively involved in the learning activity will learn more than students who are passive recipients of knowledge [11 [12]. Some of the students are often stimulated by questions asked in class. Interactions allows teachers to receive feedback on student needs, defects of their teaching methodology and also improve their teaching abilities and learnings.Students can also get feedback on their own performance.

This study shows that good interaction between students and teachers is necessary to improve educational quality, thereby optimizing the education of medical students and ensuring the safety and proper care of patients in educational settings. The final aim is to ensure quality teaching and to bring up efficient

professionals for the best patient care and treatment of patients. Professionalism, which includes demonstration of compassion, service, altruism, and trustworthiness, is essential in all interactions in the educational environment in order to provide the best quality care to patients.[4] Another study[13] identifies quality teaching as "the major factor in students' educational success". Teacher's classroom practices and their interactions with their students are seen to have the greatest effect on student learning outcomes [14].In our study most of the students think that friendly nature and easy approachability with good teaching skills as a good quality in a teacher. Majority of the students want discussion with teacher at the end of each lecture. In our study students opined that, to increase the educational efficacy of student-teacher interaction mentorship guidance (Individual guidance) and tutorials are required. The learners provided useful suggestions regarding making the lecture sessions more interactive along with inclusion of group discussions. A similar finding has also been reported in one study [15] where 34.92 % of the respondents opted for introduction of group discussion in the teaching programme.

Most of the students like teaching through e-learning and some want quiz competitions. In one study on the use of CAL [16] it was pointed out by the authors that a large number of students expressed the advantages of CAL and that if properly introduced, CALcan go a long way in teaching undergraduate medical students in future

To draw the attention of students – they want lecture along with clinical examples. A similar report showed attention and high students' attendance on introducing changes to teaching methods such as introducing clinically oriented topics, independent learning etc [17].The findings of the present study suggest that it may be possible to enhance students' perception of the value of a teaching session by modifying the session in the light of student's based evaluation. Students feel power point presentation and black board with chalk to be the best teaching tool. Many of students want that the whole chapter should be taken by a particular teacher. A majority of the students preferred that each section be completely taught by a single teacher, one of the principal reasons for the same may be ascribed to a lack of continuity between each lecture session**.** Fluency of language of a teacher plays an important role in teaching because the teacher can communicate well with their students and enhance their student's communicative skills. [18]

SUGGESTIONS BY THE STUDENTS

The students suggested, to conduct weekly seminars and quizzing competitions, questions to be asked in the beginning of the lectures which keeps the attention of students throughout the lecture. MCQS should be given so that self analysis will be easier. Taking periodic feedback from the students is necessary.

Conclusion

This study shows that students do prefer good student-teacher relationship. They believe that good interaction with teachers is effective, improves their learning skills and overall knowledge. Teaching methodology must be given more and more importance, especially in Medical education.

REFERENCE

1) Emily Frank, Student-Professor Interactions in Spanish vs. American Classrooms, UW-L Journal of Undergraduate Research XII (2009) | 2) Kaushik Bhowmick1, Mousumi Mukhopadhyay2, Sandip Chakraborty3, Pradyut K Sen2, Indranil Chakraborty4. Assessment of perception of first professional MBBS students in India about a teaching learning activity in Biochemistry. | 3) Eric B. Dent, Doctoral Professor Deborah Wharff, Doctoral Student Jacqueline Blackwell, Doctoral Student, University of Maryland University College The Individualized Interaction between Professor and Student in an Online Course. | 4)http://www.ctl.uga.edu/print/teachingassistant/handbook/studentteacherinteractions. | 5] Komarraju, M., S. Musulkin., G. Bhattacharya. 2010. Role of student-faculty interactions in developing college students' academic self-concept, motivation, and achievement. Journal of College Student Development 51. 332-343. | 6] Anaya, G., and D.G. Cole. 2001. Latino/a student achievement: Exploring the influence of student-faculty interactions on college grades. Journal of College Student Development 42. 3-14. | [7]Pianta, Robert C., Enhancing Relationships between Children and Teachers. Washington, D.C.: American Psychological Assn., 1999. | [8] Hughes, J.N. & Chen, Q. (2011). 'Reciprocal effects of student–teacher and student–peer relatedness: Effects on academic self efficacy'. Journal of Applied Developmental Psychology, 32 (5), 278–287. | [9] Roorda, D.L., Koomen, H.M.Y., Spilt, J.L. & Oort, F.J. (2011). 'The influence of affective teacher–student relationships on students' school engagement and achievement: A meta-analytic approach'. Review of Educational Research, 81 (4), 493–529. | [10] Spilt J., Koomen, H.M. & Thijs, J. (2011). 'Teacher wellbeing: The importance of Teacher–student relationships'. Educational Psychology Review, 23 (4), 457– 477. | [11] Butler, JA (1992). Use of teaching methods within the lecture format, Medical Teacher, 14, 11-25. | [12] Feden, P.D (1994). About instruction. Powerful new strategies worth knowing, Educational Horizons, 73, 18-24 | | [13] Hammond, J. (2008). 'Intellectual challenge and ESL students: Implications of quality | Teaching initiatives'. Australian Journal of Language and Literacy, 31 (2), 128–154. | | | [14] Hayes, D., Mills, M., Christie, P. & Lingard, B. (2006). Teachers and Schooling | Making a Difference: Productive pedagogies, assessment and performance. Crows Nest, NSW: Allen & Unwin. | [15] Garg, A., Rataboli, P.V., & Mulchandi, K. (2004) Students' opinion on the prevailing teaching methods in pharmacology and changes recommended, Indian Journal of Pharmacology, 35(3), pp. 155-158. | [16] Bhavsar, V.H., Vajpayee, S.K., Joshi, N.J.,Mistry, S.D., Kantharia, N.D., Sharma, A.K., etal. (1993) Training during practical pharmacology sessions for undergraduate medical students: An experience with a modified teaching programme, Indian Journal of Pharmacology, 31, pp. 176-186 | [17] McMillan, D.E. & Wenger, G.R. (1987) Effects of curriculum and format changes in a medical pharmacology course, Academic Medicine, 62, pp. 836-341. | [18] HARMER, Jeremy. The Practice of English Language Teaching. Essex: Longman 1991, 296p. ISBN: 0-582- 046564 | |