Original Research Article

DOI: https://dx.doi.org/10.18203/2320-6012.ijrms20213208

Perceptions regarding an 'effective medical teacher' among undergraduate students of a medical college in Puducherry

Arulkavi Arumugam, Velavan Anandan*, Anil J. Purty

Department of Community Medicine, Pondicherry Institute of Medical Sciences, Puducherry, India

Received: 11 July 2021 Accepted: 05 August 2021

*Correspondence:

Dr. Velavan Anandan,

E-mail: velu.anand13@gmail.com

Copyright: © the author(s), publisher and licensee Medip Academy. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

ABSTRACT

Background: To find the characteristics of an effective medical teacher, as perceived by the under graduate medical students who are at different stages of the MBBS course.

Methods: A cross sectional study was done among all the undergraduate medical students studying in a medical college and hospital in Puducherry. The undergraduate students were visited in batches and students were explained regarding objectives and those who consented for the study were administered with a validated and pretested questionnaire in line with the objective of the study. The results are expressed in the form of proportions and percentages and the chi-squaretest was used to test the significance of difference observed between different batches of student

Results: The most important qualities perceived by the students for being an effective medical teacher are creating interest in the subject, having good communication skills, providing good resource material, inspiring and motivating students, being easily approachable, respecting students/ patients / other staff, being enthusiastic, energetic and good listener. There is a significant difference in the perceived importance among different batch of students in the domain of teaching skills of a medical teacher

Conclusions: This study identified qualities of medical teachers related to their teaching skills, usage of teaching learning methods, approach towards students and their personal qualities that are perceived to be more important by medical students.

Keywords: Effective medical teacher, Perceptions, Medical education

INTRODUCTION

Medical education is an ever evolving field with many changes daily with new discoveries and inventions every day. With the development of core subjects, more systematic curriculum planning has been advocated nowadays for the welfare of the students. The great majority of medical teachers have had no formal training as teachers which makes the field of medical education is somewhat unusual. Most of them begin their teaching careers with the hope that they might impart something of value through having a combination of clinical experience and interest in the welfare of the student. Most of the medical faculty learns to teach by observing their mentors

or their teachers. The subject of a constant concern and which continues to generate passionate discussion among the people of medical field is the question, "What makes a good teacher in medicine?".²

A medical teacher is now considered as an assessor, planner, mentor and a role model no longer considered only as an information provider.³ As stated by other researchers, the duty of the medical faculty is to instill within the medical students, the requisite ethical standards includes the framing of personal and professional growth among their medical students, as well as developing among them, a sense of responsibility for themselves, their patients, and the whole community.⁴ The multiple roles

that a teacher is expected to play in the educational environment makes the task of describing what it means to be a good teacher, quite difficult.⁵ The responsibilities of teachers include: encouraging critical thinking; fostering self-directed learning and curiosity; monitoring group progress; and creating a learning environment that stimulates all members in the group, generates deep understanding, and promotes teamwork.⁶

Newer technological development has replaced the use of traditional methods of education to digital teaching. Alternatives to traditional didactic teaching, integrated teaching, problem-based learning are also being increasingly implemented. With these changes in the medical curriculum, the role and attributes required of a medical teacher have also changed.

Henceforth, with all the technological development and the changing mentality of students, with no formal teaching experience, it is vital that the teachers are aware of the important qualities that an effective teacher should possess in order to create future doctors who are well empathized compassionate and skillful. Studies probing the qualities of a good teacher from the perspective of medical students, though done already are new to our setting. This study attempts to find the characteristics of an effective medical teacher, as perceived by the undergraduate medical students who are at different stages of the MBBS course and this would enable the teachers to understand the expectation of students and if there is any difference among the batches.

METHODS

A cross sectional study was done among all the undergraduate medical students studying in a medical college and hospital, Puducherry over a period of 3 months from May 2018 to July 2018. A total of 420 students from I MMBS, II MBBS, Pre-final and final years were included in the study. The undergraduate students were visited in batches and students were explained regarding objectives of the study and those who consented for the study were administered with a validated and pretested questionnaire in line with the objective of the study. Identity of the student was not sought in the questionnaire and participation was purely on voluntary basis. The questionnaire assessed the importance of qualities (including teaching skills, teaching learning methods adopted, attitude towards students and personal qualities) expected from the medical teachers from the perspective of the medical students and responses were based on a 5 point Likert-scale i.e. 1 being least important and 5 being most important.

Ethical considerations

The study was done after obtaining the permission of the college authorities and the process of approval by the Institute research and institute ethics committees. Informed written consent was obtained from all the student participants and confidentiality was maintained.

Data analysis

The data were entered in Microsoft excel and analyzed using Statistical package for social sciences (SPSS) version 20.0. The results are expressed in the form of proportions and percentages and the chi-square-test was used to test the significance of difference observed between different batches of student.

RESULTS

The Perceptions of under graduate students regarding teaching skills of an effective medical teacher is given in Table 1.

Table 1: Perceptions of medical students regarding characteristics of a medical teacher related to their teaching skills.

Characteristics	Less important N (%)	More important N (%)	Total N (%)
Good communi- cation skills	39 (7.9)	387 (92.1)	420 (100.0)
Creates interest in the subject	32 (7.6)	388 (92.4)	420 (100.0)
Maintaining discipline in the class room	152 (36.2)	268 (63.8)	420 (100.0)
Interacts with students/Encou rages student participation	88 (21)	332 (79)	420 (100.0)
Adequate knowledge of the subject	89 (21.2)	331 (78.8)	420 (100.0)

Regarding perceptions of medical students based on characteristics related to the teaching learning methods followed by the teachers are developing good learning resource materials for students 336 (80%) followed by using innovative methods to teach 325 (77.4%). Using appropriate audio-visual aids in teaching were considered more important by 301 (71.6%) students while 308 (73.4%) students felt that time management skill is important.

Table 2 provides the perceptions of students regarding teacher's attitude towards them.

Personal qualities expected from an effective teacher in student's view are given in Table 3 and Table 4 provides the differences in perception among different batches of students regarding the teaching skills expected from an effective medical teacher.

Table 2: Perceptions of medical students related to teacher's attitude towards students.

Sr.	Characteristics	Less important N (%)	More important N (%)	Total N (%)
1	Knows strengths and weaknesses of individual students	129 (30.7)	291 (69.3)	420 (100.0)
2	Easily approachable	60 (14.3)	358 (85.7)	420 (100.0)
3	Gives generous mark to all students	214 (51)	206 (49)	420 (100.0)
4	Inspire and motivate the students	57 (13.6)	363 (86.4)	420 (100.0)
5	Should be aware of needs of students	88 (20.9)	332 (79.1)	420 (100.0)
6	Non-judgmental/ Open minded	68 (16.2)	352 (83.8)	420 (100.0)
7	Provides appropriate and timely feedback	143 (34.1)	277 (65.9)	420 (100.0)

Table 3: Perceptions of medical students related to the personal qualities expected from a teacher.

Sr. no.	Characteristics	Less important N (%)	More important N (%)	Total N (%)
1	Good listener	82 (19.6)	338 (80.4)	420 (100.0)
2	Problem solver	88 (21.2)	331 (78.8)	420 (100.0)
3	Sense of humor	142 (33.8)	278 (66.2)	420 (100.0)
4	Be a role model to students	92 (21.9)	328 (78.1)	420 (100.0)
5	Stresses on moral values	173 (41.2)	247 (58.8)	420 (100.0)
6	Well dressed	178 (42.4)	242 (57.6)	420 (100.0
7	Respects students/patients/other staff	61 (14.5)	359 (85.5)	420 (100.0)
8	Enthusiastic and energetic	66 (15.9)	354 (84.1)	420 (100.0)

Table 4: Batch wise distribution of perceived importance of teaching skills of a medical teacher.

Question	Batch	Less important	More important	P value
Good communication skills	14-15	9 (12.3)	64 (87.7)	
	15-16	12 (12.1)	87 (87.9)	0.147
	16-17	4 (2.9)	134 (97.1)	0.147
	17-18	8 (7.3)	102 (92.7)	
	14-15	12(16.4)	61 (83.6)	
Creates interest in the subject	15-16	5 (5)	94 (95)	- 0.161
Creates interest in the subject	16-17	6(4.3)	132 (95.7)	0.101
	17-18	9(8.1)	101 (91.9)	
	14-15	29 (39.7)	44 (60.3)	0.0150
Maintaining discipline in the classroom	15-16	47 (47.5)	52 (52.5)	
	16-17	38 (27.5)	100 (82.5)	
	17-18	38 (34.5)	72 (65.5)	
T. 4 4	14-15	14 (19.2)	59 (80.8)	0.002*
Interacts with students or	15-16	36 (36.3)	63 (63.7)	
Encourages student participation	16-17	19 (13.7)	119 (86.3)	
	17-18	19 (17.2)	91(82.8)	
	14-15	15 (20.5)	58 (79.5)	0.004
Adequate knowledge of the	15-16	9 (9)	90 (91)	
subject	16-17	9 (6.5)	129 (93.5)	U.UU 4
	17-18	7 (6.3)	103(93.7)	

^{*}Statistically significant.

DISCUSSION

The most important qualities for being an effective medical teacher as perceived by the students in order of priority are creating interest in the subject, good communication skills, inspiring and motivating students, being easily approachable, respecting students/patients/ other staff and being enthusiastic and energetic. The least important qualities for an effective teacher as perceived by the students are maintaining discipline in the class room,

giving generous mark to all students, being well dressed up, stressing upon moral values, providing appropriate and timely feedback and knowing the strengths and weaknesses of individual students.

The observations regarding the communication skill and creating interest in subject are similar to study by Sutkin et al on what makes a good clinical teacher in medicine.² He has observed that teaching is characterized by inspiring, supporting, actively involving, and communicating with student and creating interest in the subject.

One of best mark of great teacher is to create interest in the subject they teach. Teaching profession is often satisfying to people who love to teach. The foundation that is built upon a doctors life is to a great extent based on the knowledge he gets from his teacher. The good medical teacher who is also a doctor has a unique opportunity to share some of the magic of the subject with the students. It is the great art of the teacher to awaken creative knowledge of the student. Creating interest is the key to captivating a student. Ability to communicate well is considered a core competency for every teacher. Effective communicators are adored by students and often rated best among their teachers. The best medical teacher who establishes great communication in the learning system is usually able to achieve most of the learning goals in completeness.

Azer et al in 2005 have described that yet another important quality perceived by the students is that teacher should be a role model to students.⁶ In our study one of the most important quality of a teacher as perceived by students is inspiring and motivating students. It is an accepted fact that medical education is a stressful experience and encouragement provided by teachers will make a difference. The findings are common with previous report by Sutkin et al that identify effective teacher is one who is supportive to the students.² Easily approachable quality is also considered as an important quality by the students. A good teacher is sensitive to their student's needs. A great teacher is patient, understanding and available to the students.

Showing respect to students, peers and patients figured among first five attributes in the opinion of students belonging to the clinical batch. This finding is similar to that of study done by Buchel et al.⁷ Their study state that an effective teacher should give due respect to students, peers and patients suggesting that it is not only the expertise that students value but also the way they interact with the patients and subordinates. Providing good learning resource materials for students has been felt as an important requisite of an effective teacher. Kiewrac et al have also reported that students belonging to para-clinical batch felt that the practice of providing notes, handouts and study guides are important for considering a medical teacher to be effective. Thus, it is evident that providing notes and handouts does make a positive impact on the student.

Some of the qualities of teacher which were not well appreciated by the present generation students were stressing upon moral values by the teachers, actions taken to maintain discipline in the class room. A junk of students didn't like to get appropriate feedback by the teachers and they did not want the teachers to know about their strengths and weakness. This implies lack of confidence upon teachers by such students to share their problems and was scared of criticism.

Analyzing the data, batch wise differences in the perception was found among students in perceived importance of characters such as interacting with students, maintaining discipline in the class room, adequate knowledge of the subject and time management skills. The senior students felt that these are relatively more important for a teacher to have such qualities compared to the junior students. This can be attributed to the maturity component that evolve over a period in senior students.

Thus this study was able to document the more important qualities of an effective medical teacher and differences in perceptions by senior and junior medical students.

CONCLUSION

This study identified qualities of medical teachers related to their teaching skills, usage of teaching learning methods, approach towards students and their personal qualities that are perceived to be more important by medical students which is vital for a teacher to be aware of those characteristics and inculcate such qualities in them.

ACKNOWLEDGEMENTS

The authors acknowledge the undergraduate medical students for participating in this study. This study was conducted as a part of Institute's short term student's ship (STS) project.

Funding: No funding sources Conflict of interest: None declared

Ethical approval: The study was approved by the

Institutional Ethics Committee

REFERENCES

- 1. Biehn JT. Characteristics of an Effective Medical Teacher. Can Fam Phy.1976;22:1325.
- 2. Sutkin G, Wagner E, Harris I, Schiffer R. What Makes a Good Clinical Teacher in Medicine? Acad Med. 2008;83:5.
- 3. Harden RM, Crosby J. AMEE Guide No 20: The good teacher is more than a lecturer the twelve roles of the teacher. J Med Teach. 2009;22:334-47.
- 4. Hasan T, Bani I, Ageely H, Fauzi M. An ideal medical teacher. Ideal Med Teachnol Educ Med J Educ Med J. 2011;3:54-9.
- Ciraj AM, Abraham RR, Pallath V, Ramnarayan K, Kamath A, Kamath R. Exploring attributes of

- effective teachers student perspectives from an Indian medical school. South-East Asian J Med Edu. 2013;7(1):8-13.
- 6. Azeri SA. The qualities of a good teacher: how can they be acquired and sustained? J R Soc Med. 2005;98(2):67-9.
- 7. Buchel TL, Edwards FD. Characteristics of effective clinical teachers. Fam Med. 2005;37:30-5.
- 8. Kiewra KA, DuBois NF, Christian D, McShane A. Providing study notes:comparison of three types of notes for review. JEduc Psychol. 1988;80:595-7.

Cite this article as: Arumugam A, Anandan V, Purty AJ. Perceptions regarding an 'effective medical teacher' among undergraduate students of a medical college in Puducherry. Int J Res Med Sci 2021;9:2601-5.