Original article:

Barriers to asking question by the first MBBS student during didactic lectures in physiology

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Abstract:

Introduction: It is generally seen that many a students are not able to clarify their doubts by asking questions during a didactic lecture. The habit of clarifying the doubts is expected to go a long way in accomplishing the objectives of a lecture. This study looked at the nature of self-reported barriers to asking questions by the first MBBS students, in an attempt to analyze these and suggest interventions.

Methods: Self perceived barriers to asking questions during didactic lectures were collected from the students who volunteered to participate in the study and these were subsequently analyzed.

Observations: Fifty eight percent participants admitted not having asked questions. 41% preferred not to respond to the question. One hundred five responses were received. Most respondents revealed a solitary barrier.

Results: Most of the barriers brought forth related to anxiety of public-speaking issues, students being tired in the class & peer pressure.

Conclusion: The barriers are surmountable with some effort on the part of the teacher & the students. Plausible remedial interventions have been suggested.

Key words: Didactic lecture, barriers, public-speaking.

Introduction:

Whenever a student encounters a gap in understanding of the topic being taught, being able to ask a question helps getting targeted information while being most receptive. However it has been observed that students are hesitant to ask questions during didactic lectures (lectures) [1]. Understanding the nature of barriers to asking questions would go a long way in improving the teaching - learning experience.

Aims & objectives:

This study was undertaken to identify & analyze the barriers to first MBBS student asking question during lectures in physiology. Plausible interventions were planned to be suggested.

Materials & methods:

One hundred fifty one first MBBS students consented to participate in the study. A targeted question: 'What inhibits you from asking questions during lectures in physiology?' was put to the participants. To circumvent the issue of leading answers, the responses were sought to have been open ended. To assure a non-threatening environment, the responses were allowed to remain anonymous. The responses supplied by the participants were collected, tabulated, classified & analyzed.

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Observations & results:

One hundred ten (73%) participants came forth with response(s). 23 (15%) participants responded they do ask questions whenever the need to do so was perceived. 87 (58%) of the participants revealed barrier(s). As some of the participants supplied more than one barrier, 105 responses regarding barriers to their asking questions came forth. Results of extensive & tedious analysis of the open ended responses revealed are detailed here. Each class of barriers reported by our participants has been described and plausible remedial interventions have been laid out alongside.

Table 1. Response of the participants		
Did not respond to the question	41	(27%)
Admitted having asked question when a need was felt	23	(15%)
Admitted not having asked questions	87	(58%)
Total	151	(100%)

Table 2. Number of barriers reported by the respondents who admitted not having asked questions	
Solitary barrier	70 (81%)
Two barriers	16 (18%)
Three barriers	01 (01%)
Total	87 (100%)

Table 3. Analysis of the barriers reported			
Sr. No.	**Barrier (issue)**	**Frequency**	**Frequency %**
1	Anxiety of public-speaking	33	31
2	The 'tired in the class'	29	28
3	The intellectual public image	13	12
4	The peer pressure issues	10	10
5	The 'have-no-doubt' situation	09	09
6	The impression on the teacher	03	03
7	The language	03	03
8	The social concern	03	03
9	The teachers' attributes	01	<01
10	The propriety	01	<01
	Total	105	100

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Discussion:

The barriers to first MBBS student asking question during lectures in physiology that came forth from this study are detailed along with the possible interventions:

a) Anxiety of public-speaking issues:

This was found to have been the single largest group (31%) of the responses. The participants who reported this issue were shy, inhibited on account of the fact that they had never asked a question in a class so far, too embarrassed to ask, scared to ask, conscious of 'many people in the class' or lacked confidence to ask a question. Few felt the entire class would stare at them if they were to ask a question. Frank anxiety & fear of public speaking were also reported.

At least to begin with, most people do have problems with public speaking [2, 3]. If they do not get out of their comfort zone & attempt public speaking, they may remain unable to do so even later [4, 5]. Pre-clinical teachers can play a crucial role of initiating the students in the habit of asking their doubts during small group teachings or practical classes. If a particular student is still unable to initiate, questions can be directed to him/her so that the habit of public speaking begins at least as brief answers. If there are a large number of students unable to initiate, teacher may play the dual role of the student as well as the teacher, posing questions as a student & answering the same as a teacher. Such interaction will also develop the rapport between the students and the teachers. These practices will make the students more confident of asking during a larger gathering of lectures.

b) The 'tired in the class' issues:

The second largest group of responses (28%) related to student being tired in the class. Some students admitted they did simply not understand the topic in hand. Six responses were found irrelevant. Some simply did not know why they would not ask questions. A few felt they were not well prepared for the class. Some of the responses related to insufficient time available to ask questions. A couple of responses were candid admission that the lectures were boring with little thinking & discussion involved, to the extent that these induced sleep. Lack of sleep, not being able to concentrate in lecture because of sleeping off due to air-conditioning, inability to correlate the topics, doubt not being strong enough, not being sure about basis of the doubt were also reported. Some students reported being tired of the one hour class & just wanted it to be over.

The phenomenon of inadequately rested students is evident from the admittedly sleepy or tired students & the fact that there were six irrelevant responses to the question posed. The contemporary student culture involves going to bed late in the night due to work or leisure [6, 7]. Various sources of distraction include internet, telephone, social media & social gatherings [8-10]. Inability to have adequate sleep may be the real reason for the issue of being tired in the class. It is important to emphasize the habit of having adequate sleep before arriving for the classes [11]. Students must prepare for the classes in advance. These issues can be addressed by students' counseling on admission and later on periodically, by the mentors. Disciplinary measures in the hostels could also be helpful.

Teachers must strive to make the lectures interesting & interactive. Induction using a picture or a real life case related to the topic will help raising the level of interest. The current level of knowledge of the group about the topic in hand should be assessed & built

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upon during the session. This will help them understand the topic in hand better. It is well known that lectures may not stimulate higher order thinking [1]. To encourage thinking on the topic, the classes must be interactive with active participation by the students to maintain their interest. Conscious effort on the part of the teacher is desirable to help students relate the topic in hand with the other topics already taught in the same or the other pre medical department. The current practice of one hours lecture needs a relook as the attention span is only twenty minutes [12]. However, pending policy decisions, it is worthwhile considering introduction of interactivity at every twenty minutes to renew the attention span. Alternatively or even better would be breaking the one hour lecture into three segments of twenty minutes each to cover subtopics by three different teachers, a practice followed by many universities word wide. Medical council mandated compulsion of teachers having to undergo teacher training program periodically is a welcome measure [13].

c) The intellectual public image issues:

Twelve percent responses related to concerns about public image of the student. The issues reported were concerns about the question being silly, dumb, irrelevant, invalid, or not worth asking & that the answer may be obvious. There were also concerns of being judged for the quality of question asked.

Student effort of asking clarification must be rewarded at the outset to encourage the group & removing the misgivings about the quality of question. It must be conveyed that whatever may be the doubt, it is worth clarifying for the sake of further understanding of the topic.

d) The peer pressure issues:

Ten percent issues reported belonged to this category. The students were conscious of the possible reaction of the peers, possibility of embarrassing comments and turning into a joke in the immediate future. Teacher may help this issue by appreciation of the student's effort in asking question & discouraging adverse reactions by the peers. Mentors may contribute by helping inculcate the habit of not being cowed down by peer pressure.

e) The 'have –no- doubt' situation:

Nine percent of the responses belonged to this tricky situation. It is difficult indeed to assess whether the students have understood everything or nothing at all. The later situation would necessitate effort on the part of the teacher to explore the reasons for failure & change in the teaching strategy [14]. The response of the group to teacher questioning on the topic may resolve the dilemma.

f) The impression on the teacher issue:

Three percent responses related to concerns about possible cross questioning by the teacher & whether asking doubts will be taken in a positive spirit by the teacher. Students are concerned about their impression on the teachers for the simple reason of holding them in high regard or there may also be concerns about the teachers being the judges of student performance as examiners. The students' fear of being subjected to cross-questioning may be dispelled by being gentle in cross-questioning, if at all necessary. Establishment of rapport between the students & teachers will automatically put an end to these concerns.

g) The language issue:

Three percent responses were related to issues about not being able to understand the medium of instruction. Some students join medical college after having passed schools with vernacular medium of instruction. To help this situation, the teacher may like to instruct the difficult concepts in more than one

language. The art can be easily picked up by listening to radio jockeys who constantly use three or more languages almost seamlessly. A practical solution is to encourage students to listen to or read the news in English & vernacular so that slowly they start understanding English easily. Some institutes do have the policy of training the vernacular medium students in use of English language in the first semester of MBBS.

h) The social concern issue:

Three percent of the issues related to 'not wishing to disturb the classes'. A noble concern indeed but might as well be a subconscious cover for many other groups of issues.

i) The teachers' attributes issue:

Some responses related to teachers not being cheerful. Teachers must develop rapport and remain unthreatening, approachable, empathetic & supportive to the students.

j) The propriety issue:

There was a concern that the question may be inappropriate for public discussion. This valid concern necessitates possibility of one-on-one interaction with the student concerned. It is a difficult preposition given the busy routine of the students during the working hours. Teachers may like to keep themselves free during students' tea or lunch break to provide for one-on-one interaction.

Conclusions:

The first MBBS students do perceive barriers to their asking question during lectures in physiology. However the same can be overcome with some imagination on the part of teachers & effort on the part of teachers & the students as well. Overcoming the barriers is likely to improve the teaching- learning experience dramatically.

References:

1. Cantillon P. Teaching large groups. BMJ. 2003; 326(7386):437.

2. Pull CB. Current status of knowledge on public-speaking anxiety. Curr Opin Psychiatry. 2012; 25(1):32-8.

3. Blöte AW, Kint MJ, Miers AC, Westenberg PM. The relation between public speaking anxiety and social anxiety: a review. J Anxiety Disord. 2009;23(3):305-13.

4. Murden RA, Way DP, Hudson A, Westman JA. Professionalism deficiencies in a first-quarter doctor-patient relationship course predict poor clinical performance in medical school. Acad Med. 2004;79(10 Suppl):S46-8.

5. Gotlib Conn L, Young A, Rotstein OD, Schemitsch E. "I've never asked one question." Understanding the barriers among orthopedic surgery residents to screening female patients for intimate partner violence. Can J Surg. 2014 Dec;57(6):371-8.

6. Giri P, Baviskar M, Phalke D. Study of sleep habits and sleep problems among medical students of pravara institute of medical sciences loni, Western maharashtra, India. Ann Med Health Sci Res. 2013; 3(1):51-4.

7. Azad MC, Fraser K, Rumana N, Abdullah AF, Shahana N, Hanly PJ et al. Sleep disturbances among medical students: a global perspective. J Clin Sleep Med. 2015; 11(1):69-74.

8. Farooqi H, Patel H, Aslam HM, Ansari IQ, Khan M, Iqbal N et al. Effect of Facebook on the life of Medical University students. Int Arch Med. 2013; 6(1):40.

9. Jawaid M, Khan MH, Bhutto SN. Social network utilization (Facebook) & e-Professionalism among medical students. Pak J Med Sci. 2015; 31(1):209-13.

10. Jha RK, Shah DK, Basnet S, Paudel KR, Sah P, Sah AK et al. Facebook use and its effects on the life of health science students in a private medical college of Nepal. BMC Res Notes. 2016; 9(1):378.

11. Mandal A, Ghosh A, Sengupta G, Bera T, Das N, Mukherjee S. Factors Affecting the Performance of Undergraduate Medical Students: A Perspective. Indian J Community Med. 2012; 37(2): 126–9.

12. Brad Vander Zanden. Preparing an Effective Presentation. The University of Tennessee, Knoxville, Tennessee. Available at URL: http://web.eecs.utk.edu/~bvz/presentation.html. Retrieved 01 July 2016.

13. Zodpey S, Sharma A, Zahiruddin QS, Gaidhane A, Shrikhande S. Faculty development programs for medical teachers in India. J Adv Med Educ Prof. 2016; 4(2):97-101.

14. Steinert Y, Mann K, Centeno A, Dolmans D, Spencer J, Gelula M et al. A systematic review of faculty development initiatives designed to improve teaching effectiveness in medical education: BEME Guide No. 8. Med Teach. 2006; 28(6):497-526.